GREAT LAKES & MID-ATLANTIC
GLMA VIOLENCE & INJURY PREVENTION
REGIONAL NETWORK

The Truth about Opioids: Treating Pain in the United States.

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Objectives

- Participants will understand the relative effectiveness of opioid pain medication compared to ibuprofen and acetaminophen.
- Participants will understand why so many people are becoming addicted to opioid pain medications.
- Participants will understand why medication is usually necessary to treat the addiction to opioids.
- Participants will have a better understanding of how policy decisions will affect the treatment of pain and the prevention of addiction.

Common Opioids

- Morphine
- Oxycodone
  - OxyContin
  - Percocet
- Hydrocodone
  - Vicodin
  - Zohydro
- Dilaudid
- fentanyl

Poppy plant

Pain

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

International Association for the Treatment of Pain

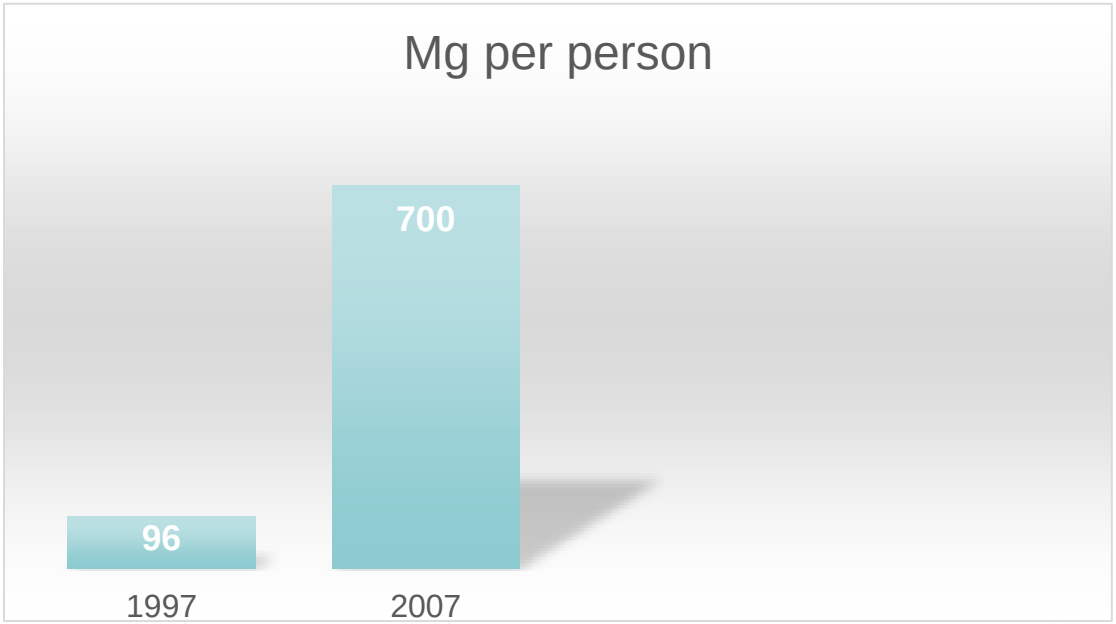
Pain

- Acute pain: Pain < 3 months
- Chronic pain: Pain > 3 months

Opioid increase

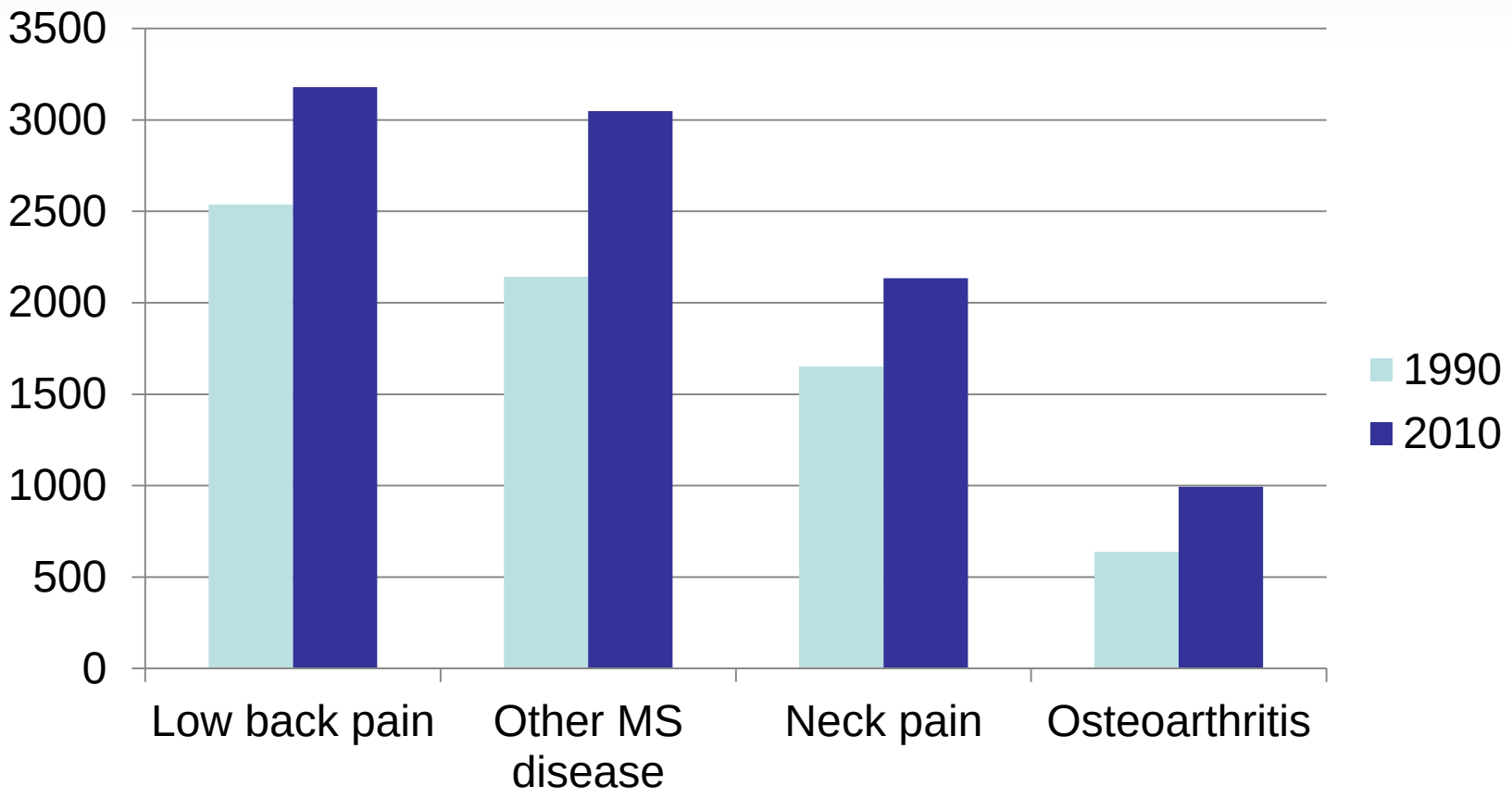
Drug distribution through the pharmaceutical supply chain was the equivalent of 96 mg of morphine per person in 1997

and approximately 700 mg per person in 2007, an increase of >600%.[2]



The State of US Health

Years lived with disability (in thousands)[3]

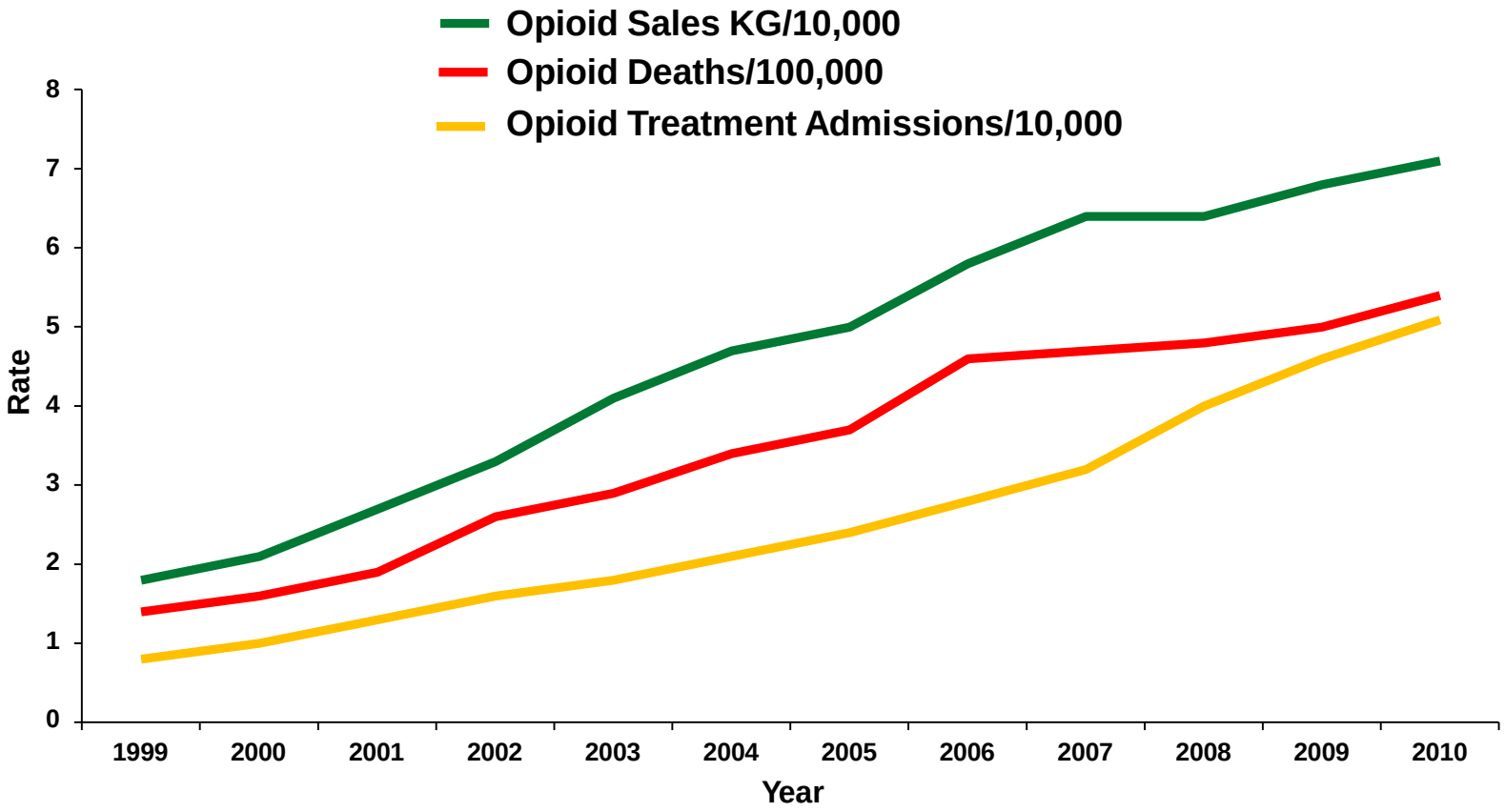


Institute of Medicine
Relieving Pain in America 2011

"Pain affects millions of Americans; contributes greatly to national rates of morbidity, mortality, and disability; and is rising in prevalence."

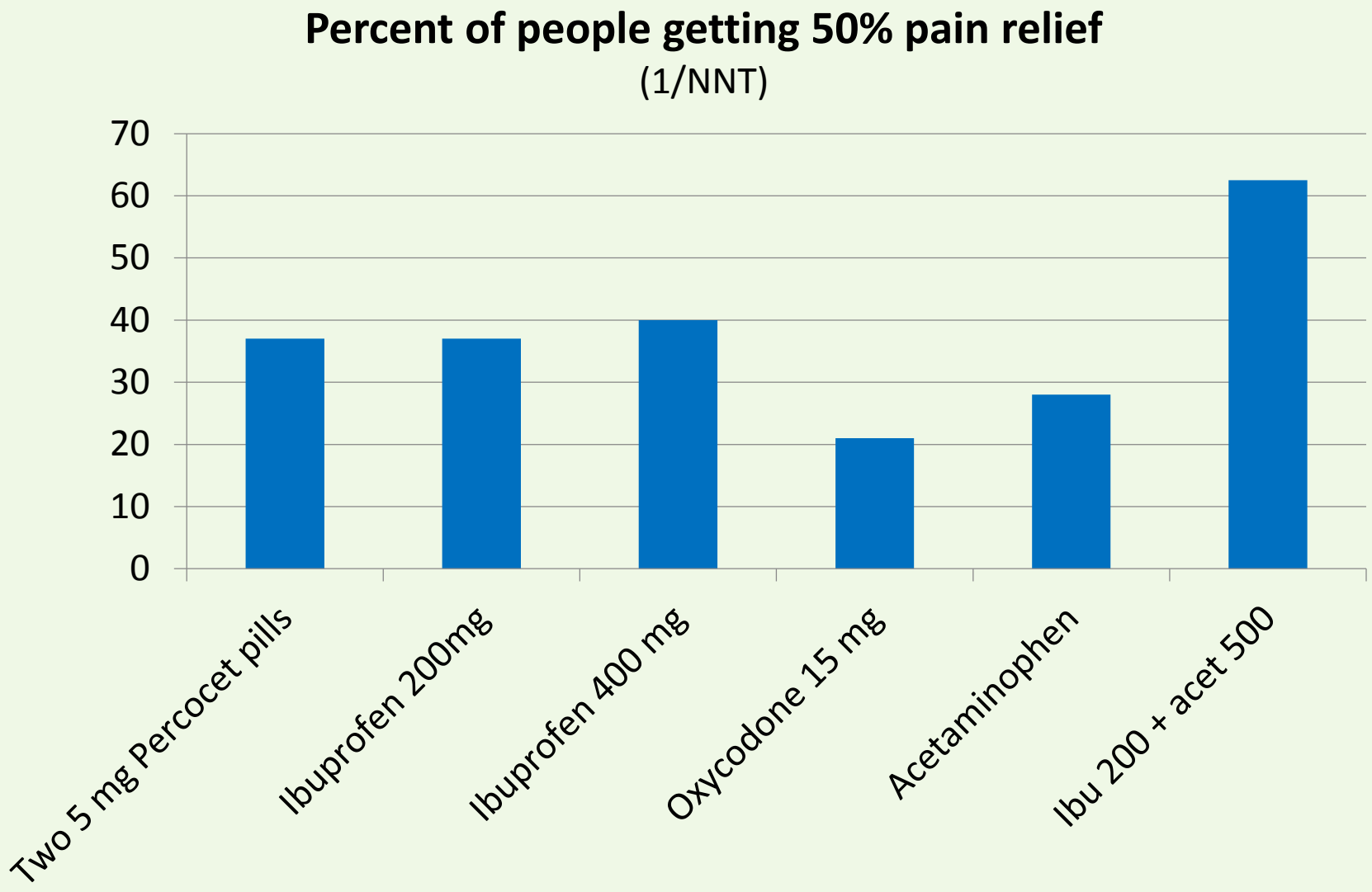
IOM (Institute of Medicine). 2011. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington, DC: The National Academies Press.

Rates of opioid overdose deaths, sales and treatment admissions, US, 1999-2010[1]



Effectiveness of pain meds
(from Cochrane reviews)

(References 17,18,19,20)



Renal colic

A 2005 Cochran review concluded:

NSAID medications and opioids have equal effectiveness in treatment of acute renal colic…

but opioids have more side-effects.[21]

Acute prescriptions

- Approximately 30% of ALL ER visits end with a prescription for a opioid.
- Approximately 60% of patients going to the ER with back pain will get an opioid prescription.
  - Primary care doctors give opioids to about 35% of their patients presenting with back pain.
- Pain is the most common reason for people to go to the ER or to their primary care doctor.

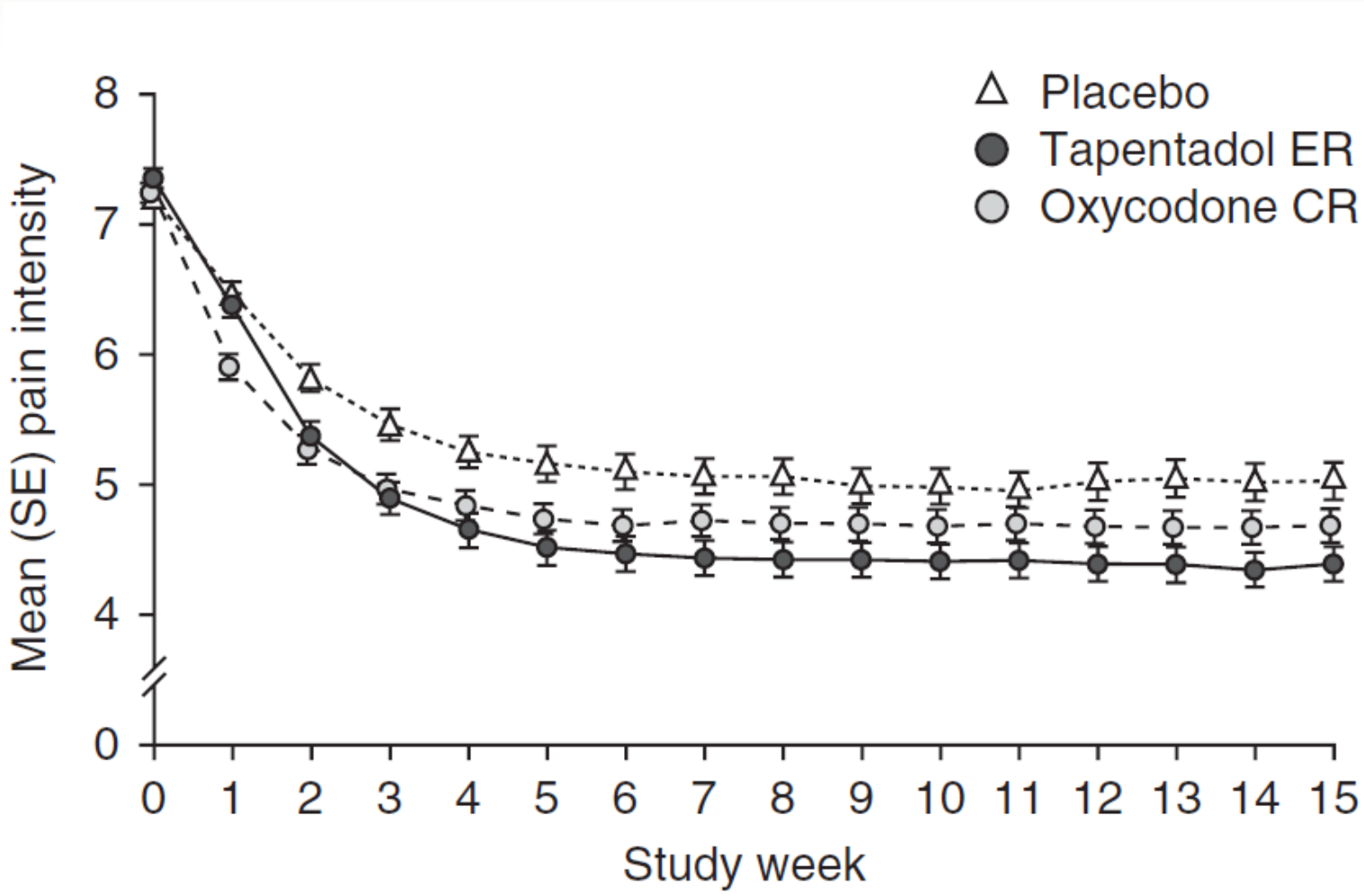
<u>One</u> opioid prescription after an injury:

- Increases medical costs by 30%
- Increases the risk of surgery by 33%
- Doubles the risk of being disabled at one year

Webster BS, Verma SK, Gatchel RJ. Relationship between early opioid prescribing for acute occupational low back pain and disability duration, medical costs, subsequent surgery and late opioid use. Spine (Phila Pa 1976). 2007;32(19):2127-2132. doi:10.1097/BRS.0b013e318145a731.

Franklin GM, Stover BD, Turner J a, Fulton-Kehoe D, Wickizer TM. Early opioid prescription and subsequent disability among workers with back injuries: the Disability Risk Identification Study Cohort. Spine (Phila Pa 1976). 2008;33(2):199-204. doi:10.1097/BRS.0b013e318160455c.

Tapentadol study



Opioid side effects

- Mentally impairing[6]
- Treat depression and anxiety
- Delay recovery[7,8]
- Increase medical costs[9]
- Opioid hyperalgesia[10]
- Double the chance of disability[11,12]
- Increase falls[13]
- Cardiac[14]
- GI[14]
- Addiction[15]
- Neurobiologic changes[16]
- Increase all-cause mortality[14]

Brain changes

"A quick and robust return to pre-opioid volume levels would suggest that opioid effects are transient, and easily negated by simple cessation of the drug. In our analyses, however, we found no evidence that morphine-induced volumetric changes reverse after opioid cessation."

Younger JW, Chu LF, D'Arcy NT, Trott KE, Jastrzab LE, Mackey SC. Prescription opioid analgesics rapidly change the human brain. Pain. 2011;152(8):1803-1810. doi:10.1016/j.pain.2011.03.028.

Tapering opioids

- Opioid taper in people on COT resulted in average pain decrease from 7.1 to 5.4. A 24% decrease in pain. About ½ of patients ended up going back on opioids but their pain was not improved on the opioids.
- Taper off of COT reduces pain in all ages. Approximate 20% reduction. Also reduction in depression and pain catastrophizing.

1. Krumova EK, Bennemann P, Kindler D, Schwarzer A, Zenz M, Maier C. Low pain intensity after opioid withdrawal as a first step of a comprehensive pain rehabilitation program predicts long-term nonuse of opioids in chronic noncancer pain. Clin J Pain. 2013;29(9):760-769. doi:10.1097/AJP.0b013e31827c7cf6.

2. Darchuk KM, Townsend CO, Rome JD, Bruce BK, Hooten WM. Longitudinal treatment outcomes for geriatric patients with chronic non-cancer pain at an interdisciplinary pain rehabilitation program. Pain Med. 2010;11(9):1352-1364. doi:10.1111/j.1526-4637.2010.00937.x.

Why are so many addicted?

- Family history
- Opioid receptors
- Dopamine
- Excess exposure

Who is at risk of addiction from these medications?

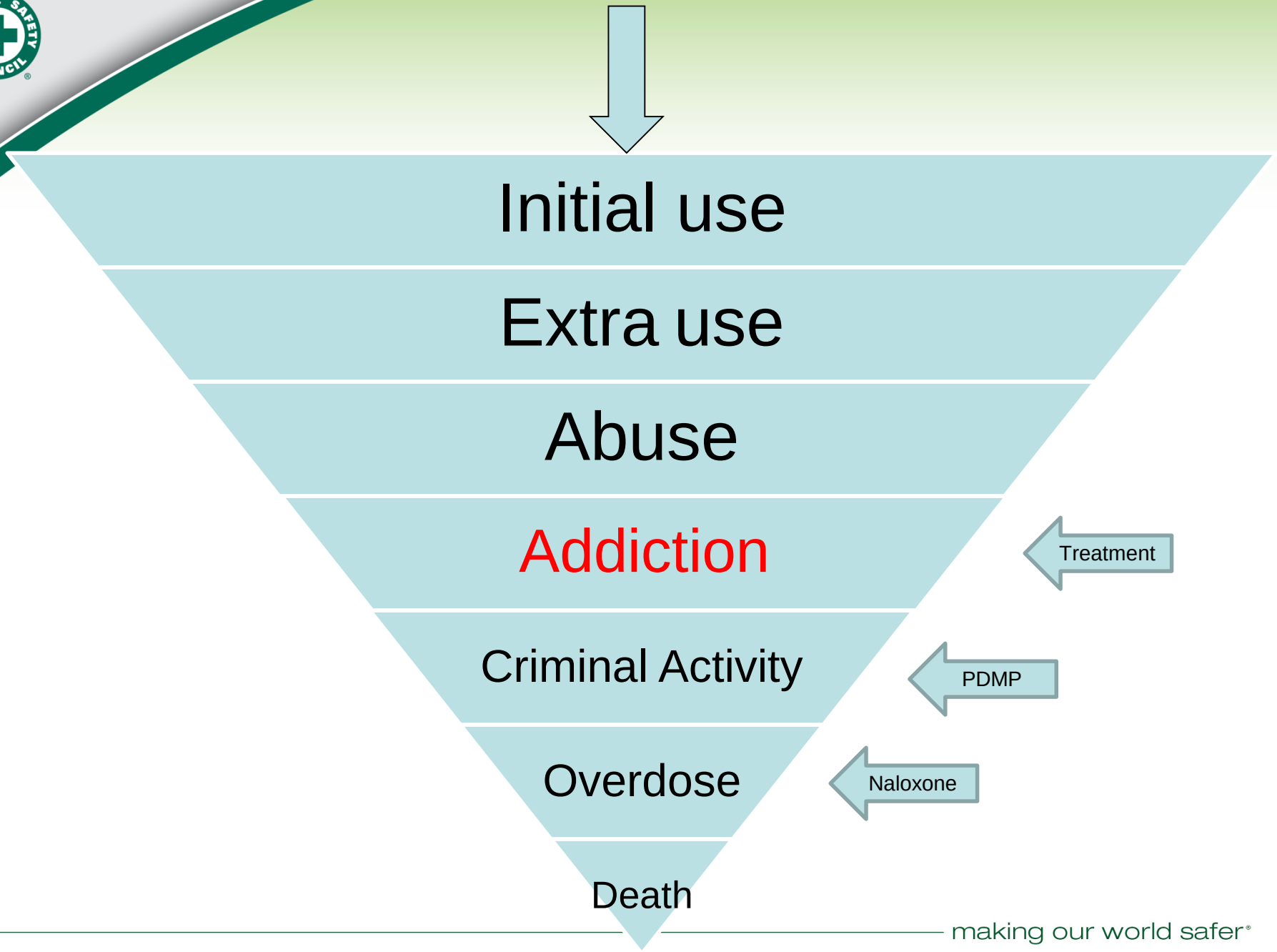
- Family history
- Personal history of addiction
- Mental health diagnosis
- Adverse childhood events
- Stress
- Prolonged prescription
- Diagnosis of:
  - Back pain
  - Headaches
  - Fibromyalgia

Does one of these apply to you?

Treatment of opioid addiction

- Abstinence
- Methadone
- Buprenorphine
- Vivitrol

Prescriber behavior



Disconnnect

Summary

- Opioids are not “powerful painkillers”.
  - Ibuprofen is better.
- Opioids have many side effects that are much worse than NSAIDs and acetaminophen
- Opioids cause brain changes
- By reducing the prescribing of opioids, we improve pain treatment
- Most people on chronic opioid therapy do better when weaned off
- Addiction is a disease and most people with addiction to opioids need methadone or buprenorphine.

Policy ideas

- Mandate prescriber education about pain and addiction for all who prescribe opioids
- 3 day limit on acute opioid prescriptions
- Everyone on chronic opioid therapy should wean off every 2 years
- All primary care doctors who prescribe should be certified to prescribe buprenorphine
- Prescribe buprenorphine through health departments (without limit)
- Require universal prevention measures in schools

CDC Pain Guidelines

1. Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Providers should only consider adding opioid therapy if expected benefits for both pain and function are anticipated to outweigh risks to the patient (recommendation category: A, evidence type 3).

** Note that there is NO scientific evidence of benefit for chronic opioid treatment of chronic noncancer pain.*

CDC Pain Guidelines

- 5. When opioids are started, providers should prescribe the lowest effective dosage. Providers should use caution when prescribing opioids at any dosage, should implement additional precautions when increasing dosage to ≥50 morphine milligram equivalents (MME)/day, and should generally avoid increasing dosage to ≥90 MME/ day
- 6. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, providers 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 or fewer days usually will be sufficient for most nontraumatic pain not related to major surgery

See the whole proposed guideline at:
http://www.cdc.gov/drugoverdose/prescribing/guideline.html

NSC white papers

- Employer toolkit: nsc.org/rxemployerpolicy
- Evidence on the efficacy of pain medications: nsc.org/painmedevidence
- The Psychological and Physical Side Effects of Pain Medications: safety.nsc.org/sideeffects
- Other resources: nsc.org/rxpainkillers

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