

# Responding to the Prescription Opioid and Heroin Crisis: *An Epidemic of Addiction*

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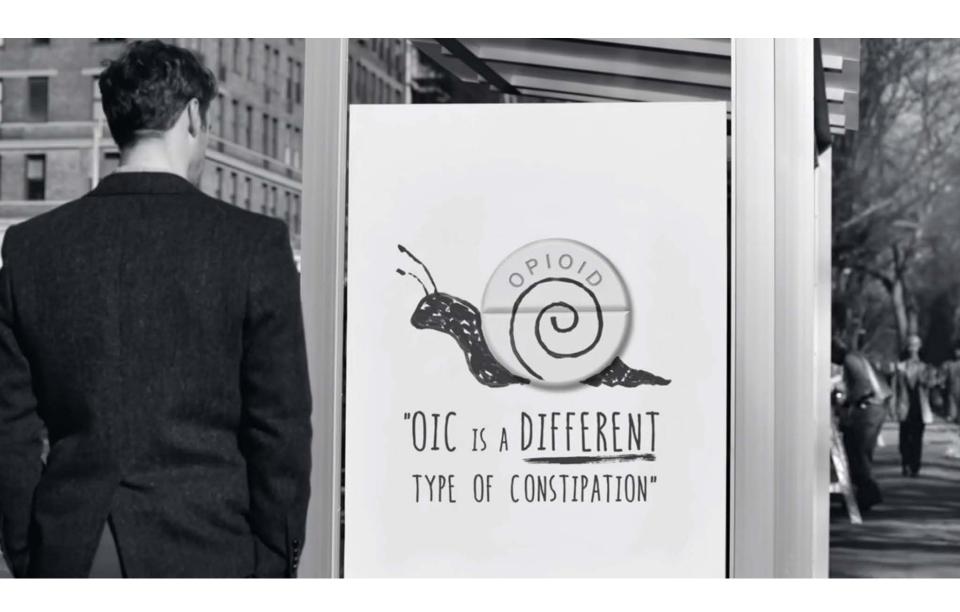


### Conflict of Interests

I have no relevant financial relationships to disclose.

# Opium

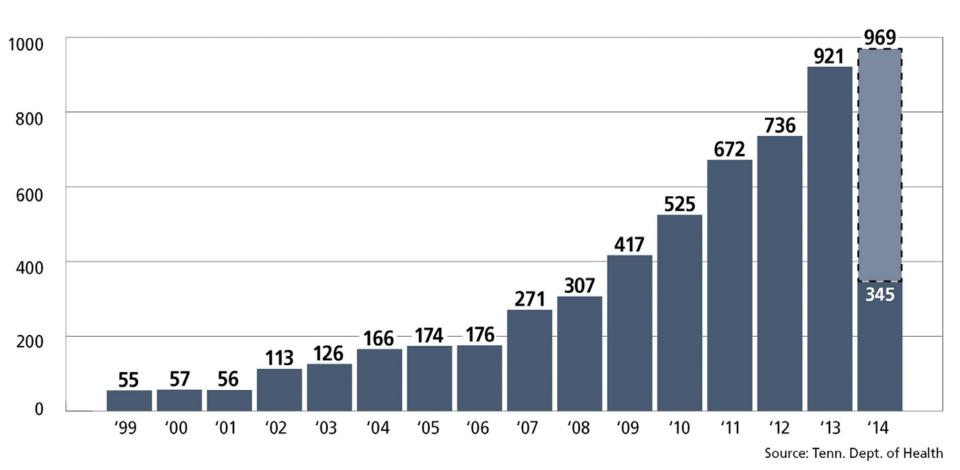




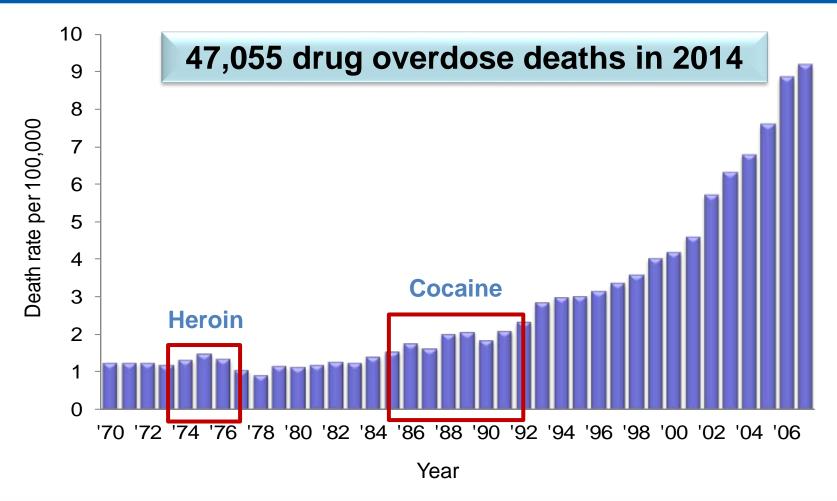


#### Rapid rise of infant drug dependency

In a decade, Tennessee has seen a tenfold increase in babies born dependent on drugs. Here's a tally of the number of hospitalizations since 1999. There are 345 cases logged in Tennessee as of the beginning of June 2014. Experts estimate that number will rise closer to 969 by the end of the year.

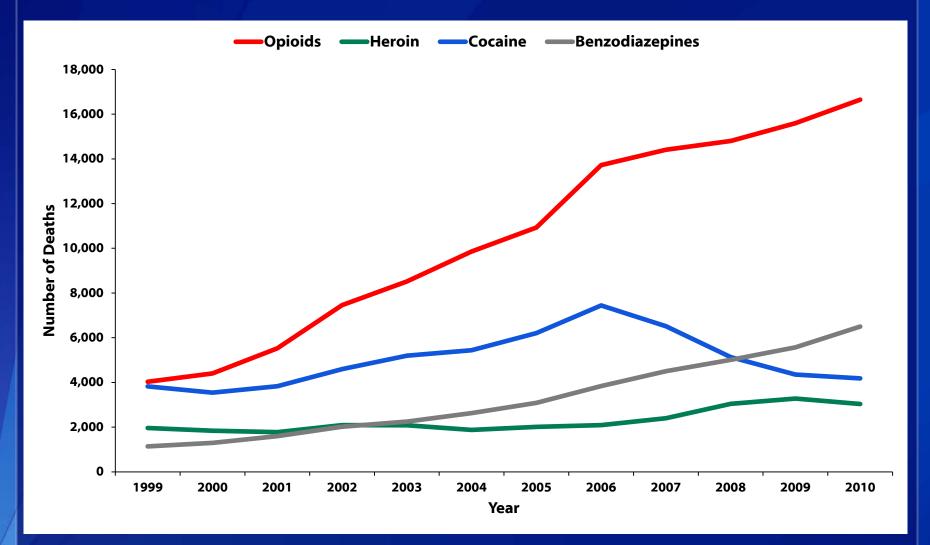


# Unintentional Drug Overdose Deaths United States, 1970–2007

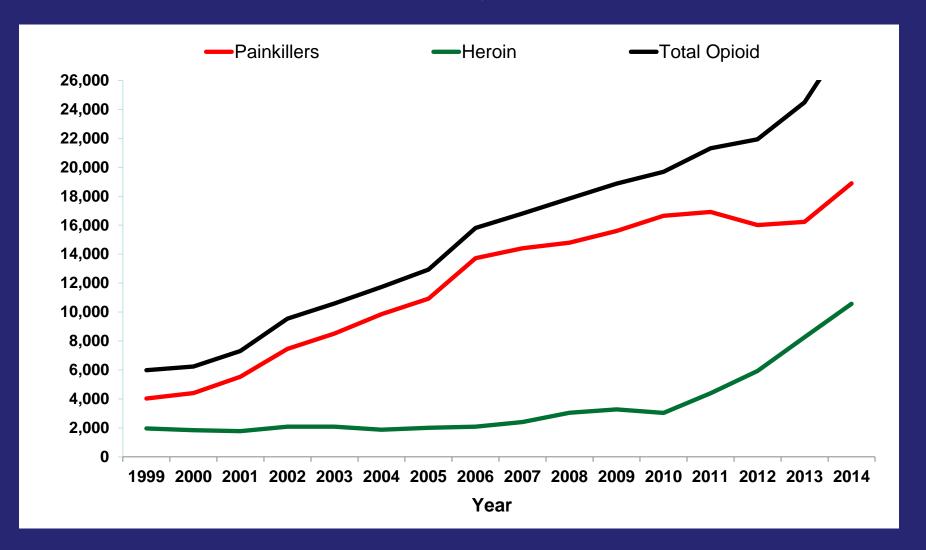




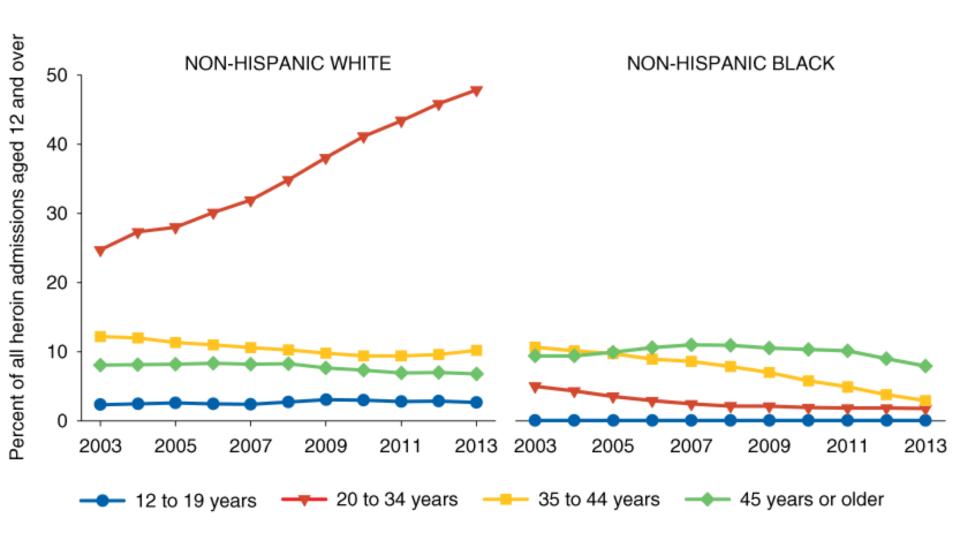
### Drug Overdose Deaths by Major Drug Type, United States, 1999–2010



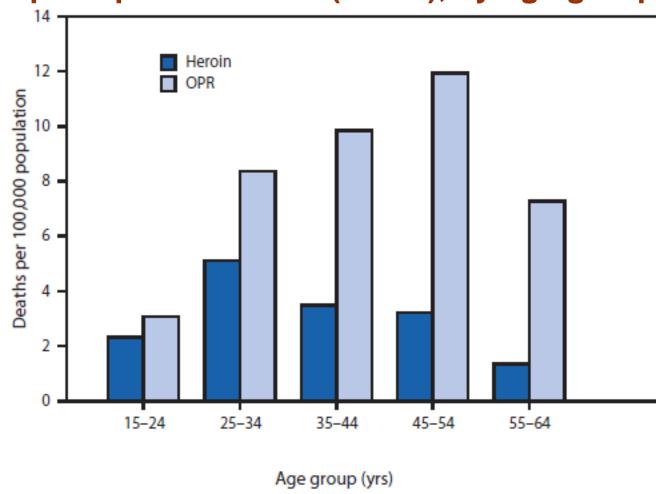
# Opioid Related Overdose Deaths United States, 1999-2014



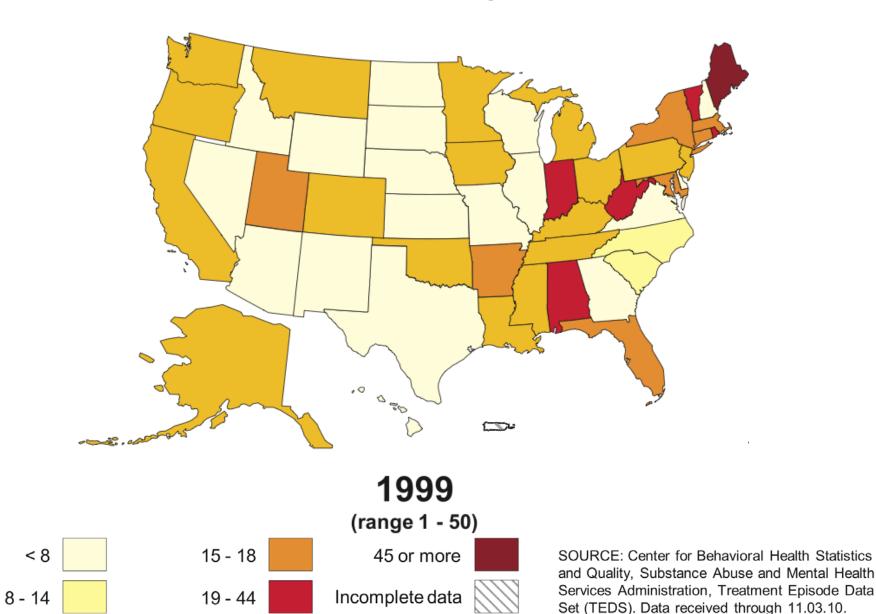
#### Heroin treatment admissions: 2003-2013

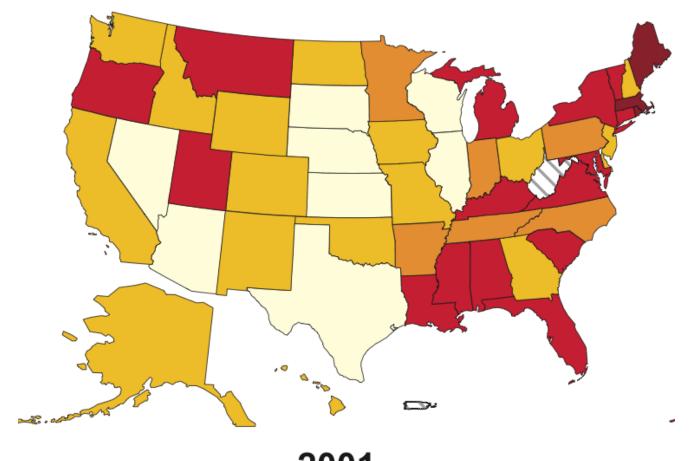


# Death rates from overdoses of heroin or prescription opioid pain relievers (OPRs), by age group



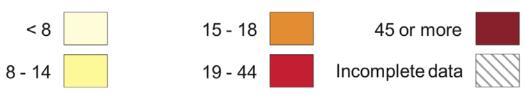
SOURCE: CDC. Increases in Heroin Overdose Deaths — 28 States, 2010 to 2012 MMWR. 2014, 63:849-854

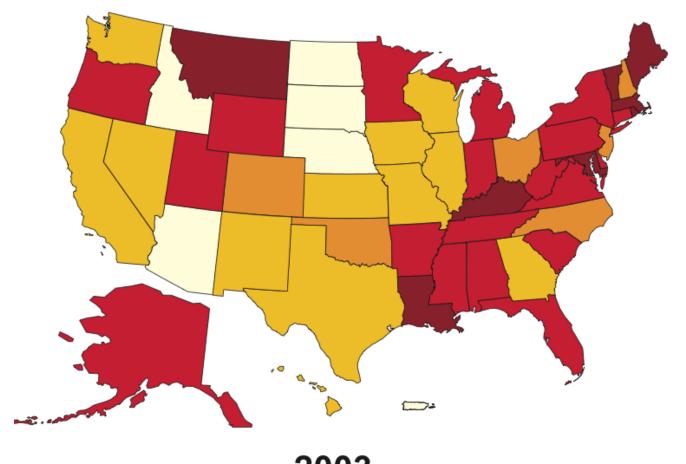






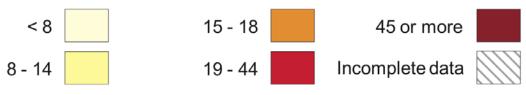
(range 1 - 71)

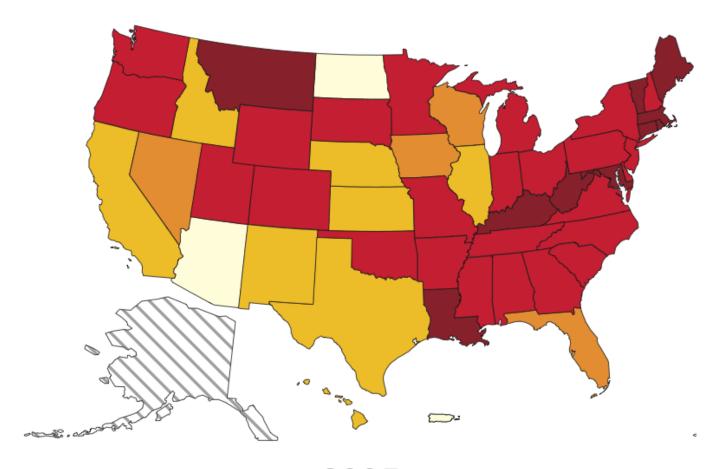




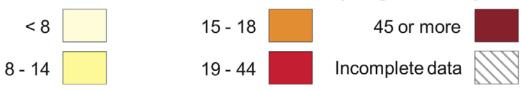


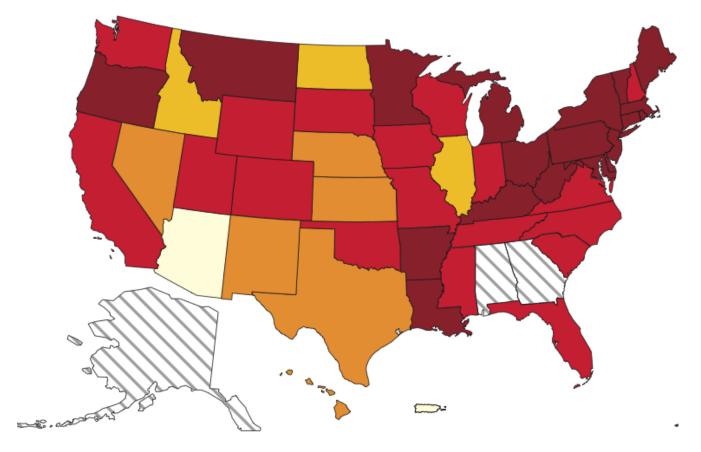
(range 2 - 139)



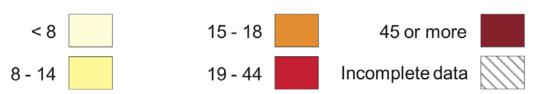


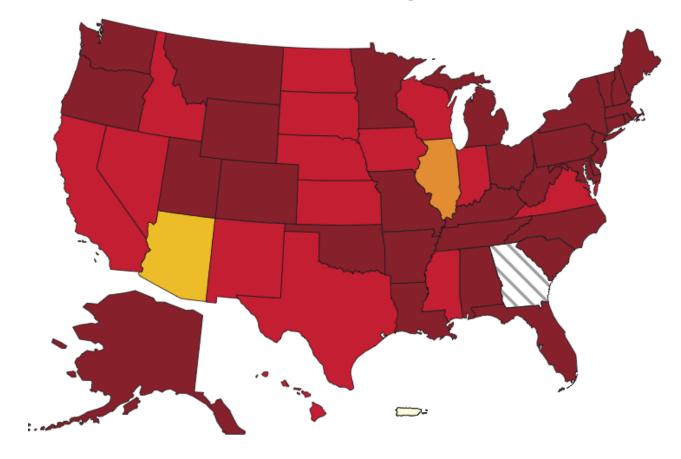








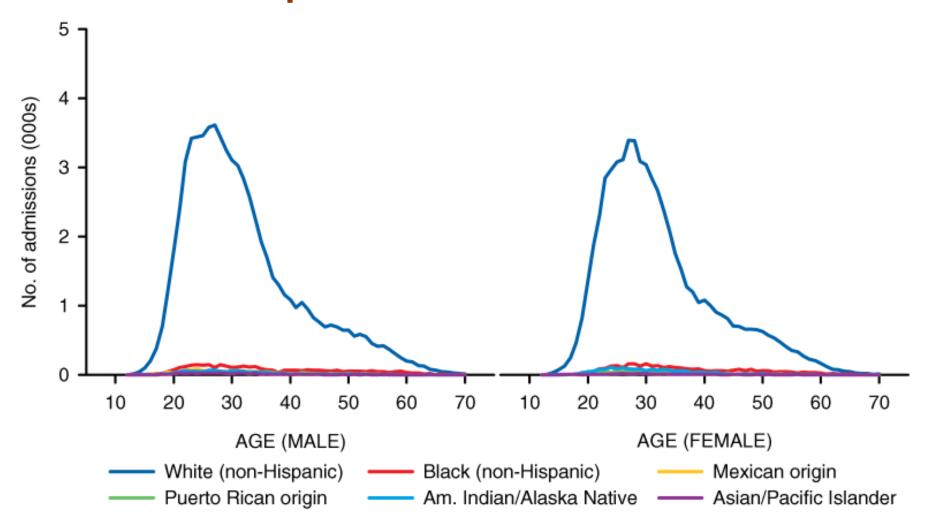




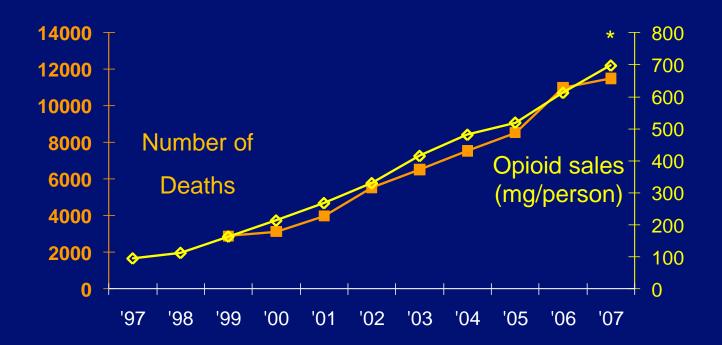


45 or more
 15 - 18
 19 - 44
 Incomplete data

### Non-heroin opioid treatment admissions: 2013



# Unintentional overdose deaths involving opioid analgesics parallel per capita sales of opioid analgesics in morphine equivalents by year, U.S., 1997-2007

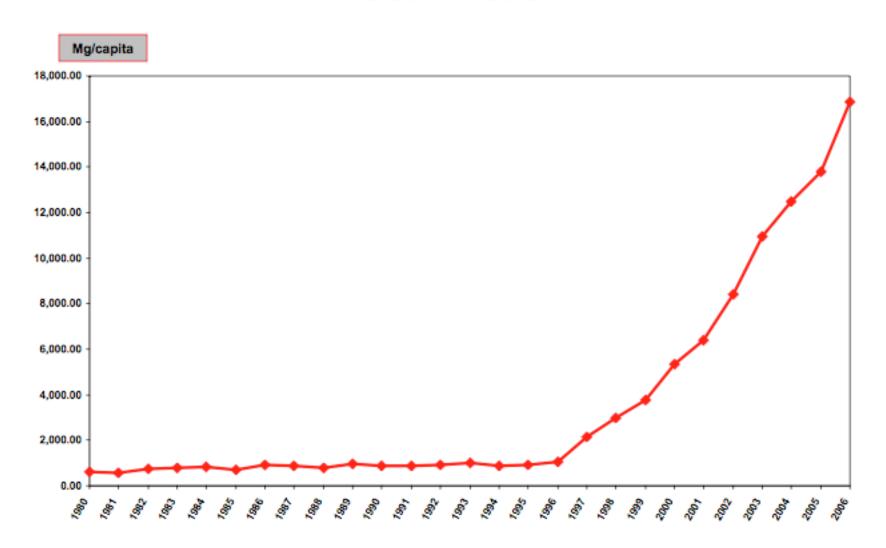


Source: National Vital Statistics System, multiple cause of death dataset, and DEA ARCOS \* 2007 opioid sales figure is preliminary.

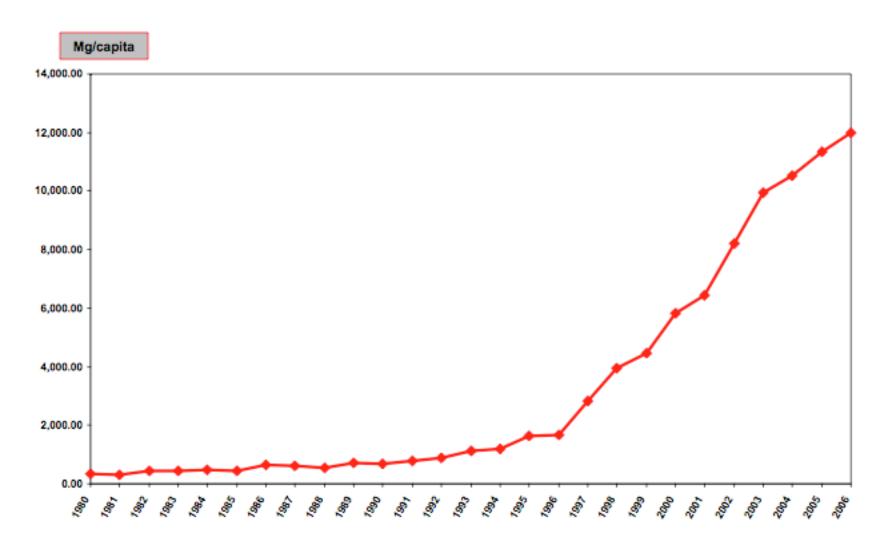
# Rates of Opioid Sales, OD Deaths, and Treatment, 1999–2010 Opioid Sales KG/10,000 Opioid Deaths/100,000 Opioid Treatment Admissions/10,000

Year

# New York Consumption of Oxycodone 1980 - 2006

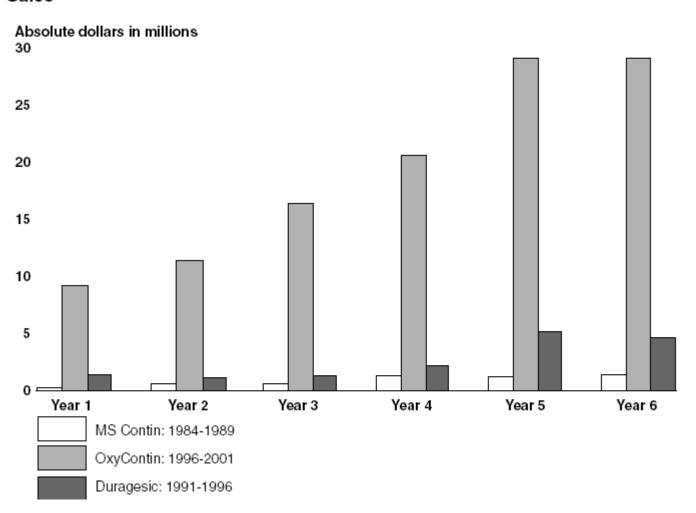


### New York Consumption of Hydrocodone 1980 - 2006



#### **Dollars Spent Marketing OxyContin (1996-2001)**

Figure 1: Promotional Spending for Three Opioid Analgesics in First 6 Years of Sales



Source: United States General Accounting Office: Dec. 2003, "OxyContin Abuse and Diversion and Efforts to Address the Problem."

### Industry-funded "educational" messages

 Physicians are needlessly allowing patients to suffer because of "opiophobia."

Opioid addiction is rare in pain patients.

- Opioids can be easily discontinued.
- Opioids are safe and effective for chronic pain.

# Industry-funded organizations campaigned for greater use of opioids

Pain Patient Groups

Professional Societies

The Joint Commission



The Federation of State Medical Boards

#### "The risk of addiction is much less than 1%"

Porter J, Jick H. *Addiction rare in patients treated with narcotics*. N Engl J Med. 1980 Jan 10;302(2):123

Cited 824 times (Google Scholar)

### N Engl J Med. 1980 Jan 10;302(2):123.

### ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients¹ who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

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- 1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. JAMA. 1970; 213:1455-60.
- 2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:180-8.

#### Long-term Opioid Treatment of Nonmalignant Pain

A Believer Loses His Faith

(REPRINTED) ARCH INTERN MED/VOL 170 (NO. 16), SEP 13, 2010

WWW.ARCHINTERNMED.COM

**Annals of Internal Medicine** 

EDITORIAL

Chronic Noncancer Pain Management and Opioid Overdose: Time to Change Prescribing Practices



#### Facing up to the prescription opioid crisis

Deaths resulting from prescription opioids tripled in the United States between 1999 and 2007 and are also increasing in many other countries, including the United Kingdom. Irfan A Dhalla, Navindra Persaud, and David N Juurlink describe how this situation developed and propose several ways to reduce morbidity and mortality from opioids

BMJ 2011;343:d5142 doi: 10.1136/bmj.d5142

**Annals of Internal Medicine** 

Ideas and Opinions

Long-Term Opioid Therapy Reconsidered

Michael Von Korff Sch: Andrew Koloday MD: Richard A. Davo, MD. MPH: and Roger Chos. MD.



The NEW ENGLAND JOURNAL of MEDICINE

A Flood of Opioids, a Rising Tide of Deaths
Susan Okie, M.D.

EXPAND

DICINE



Viewpoint

Patient Satisfaction, Prescription Drug
Abuse, and Potential Unintended Consequences

Aleksandra Zgierska, MD, PhD; Michael Miller, MD; David Rabago, MD

# The Effectiveness and Risks of Long-Term Opioid Therapy for Chronic Pain: A Systematic Review for a National Institutes of Health Pathways to Prevention Workshop

Roger Chou, MD; Judith A. Turner, PhD; Emily B. Devine, PharmD, PhD, MBA; Ryan N. Hansen, PharmD, PhD; Sean D. Sullivan, PhD; Ian Blazina, MPH; Tracy Dana, MLS; Christina Bougatsos, MPH; and Richard A. Deyo, MD, MPH

**Background:** Increases in prescriptions of opioid medications for chronic pain have been accompanied by increases in opioid overdoses, abuse, and other harms and uncertainty about long-term effectiveness.

**Purpose:** To evaluate evidence on the effectiveness and harms of long-term (>3 months) opioid therapy for chronic pain in adults.

**Data Sources:** MEDLINE, the Cochrane Central Register of Controlled Trials, the Cochrane Database of Systematic Reviews, PsycINFO, and CINAHL (January 2008 through August 2014); relevant studies from a prior review; reference lists; and ClinicalTrials.gov.

**Study Selection:** Randomized trials and observational studies that involved adults with chronic pain who were prescribed long-term opioid therapy and that evaluated opioid therapy versus placebo, no opioid, or nonopioid therapy; different opioid dosing strategies; or risk mitigation strategies.

Data Extraction: Dual extraction and quality assessment.

Data Synthesis: No study of opioid therapy versus no opioid therapy evaluated long-term (>1 year) outcomes related to pain, function, quality of life, opioid abuse, or addiction. Good- and

fair-quality observational studies suggest that opioid therapy for chronic pain is associated with increased risk for overdose, opioid abuse, fractures, myocardial infarction, and markers of sexual dysfunction, although there are few studies for each of these outcomes; for some harms, higher doses are associated with increased risk. Evidence on the effectiveness and harms of different opioid dosing and risk mitigation strategies is limited.

**Limitations:** Non-English-language articles were excluded, meta-analysis could not be done, and publication bias could not be assessed. No placebo-controlled trials met inclusion criteria, evidence was lacking for many comparisons and outcomes, and observational studies were limited in their ability to address potential confounding.

**Conclusion:** Evidence is insufficient to determine the effectiveness of long-term opioid therapy for improving chronic pain and function. Evidence supports a dose-dependent risk for serious harms.

**Primary Funding Source:** Agency for Healthcare Research and Quality.

Ann Intern Med. 2015;162:276-286. doi:10.7326/M14-2559 www.annals.org
For author affiliations, see end of text.

This article was published online first at www.annals.org on 13 January 2015.



### The NEW ENGLAND JOURNAL of MEDICINE

# Reducing the Risks of Relief — The CDC Opioid-Prescribing Guideline

Thomas R. Frieden, M.D., M.P.H., and Debra Houry, M.D., M.P.H. March 15, 2016

"The science of opioids for chronic pain is clear: for the vast majority of patients, the known, serious, and too-often-fatal risks far outweigh the unproven and transient benefits."

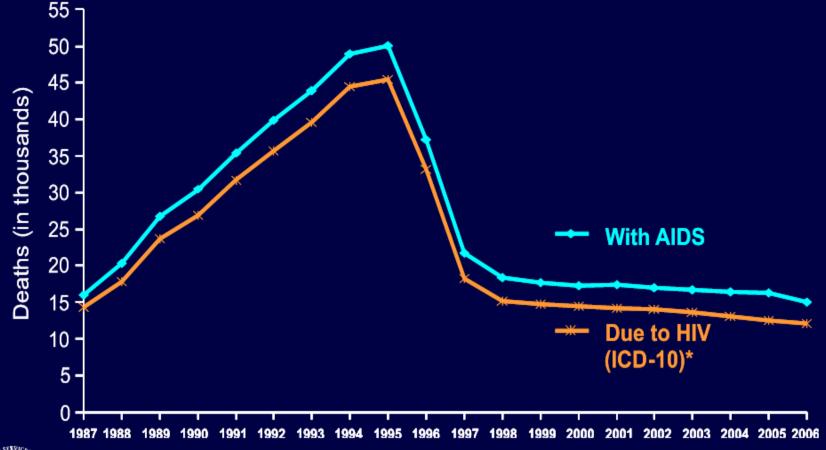
## Controlling the epidemic:

### A Three-pronged Approach

Prevent new cases of opioid addiction.

Treat people who are already addicted.

 Reduce supply from pill mills and the blackmarket. Comparison of Mortality Data from AIDS Case Reports and Death Certificates in Which HIV Disease Was Selected as the Underlying Cause of Death, United States, 1987–2006







## Summary

 The U.S. is in the midst of a severe epidemic of opioid addiction

- To bring the epidemic to an end:
  - We must prevent new cases of opioid addiction
  - We must ensure access to treatment for people already addicted