



**PROP**

Physicians for Responsible  
Opioid Prescribing

# The Prescription Opioid and Heroin Crisis: *How it Happened*

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*Twitter: @andrewkolodny*



**Phoenix House**  
Rising Above Addiction

# Conflict of Interests

*I have no relevant financial relationships to disclose.*

# Opium

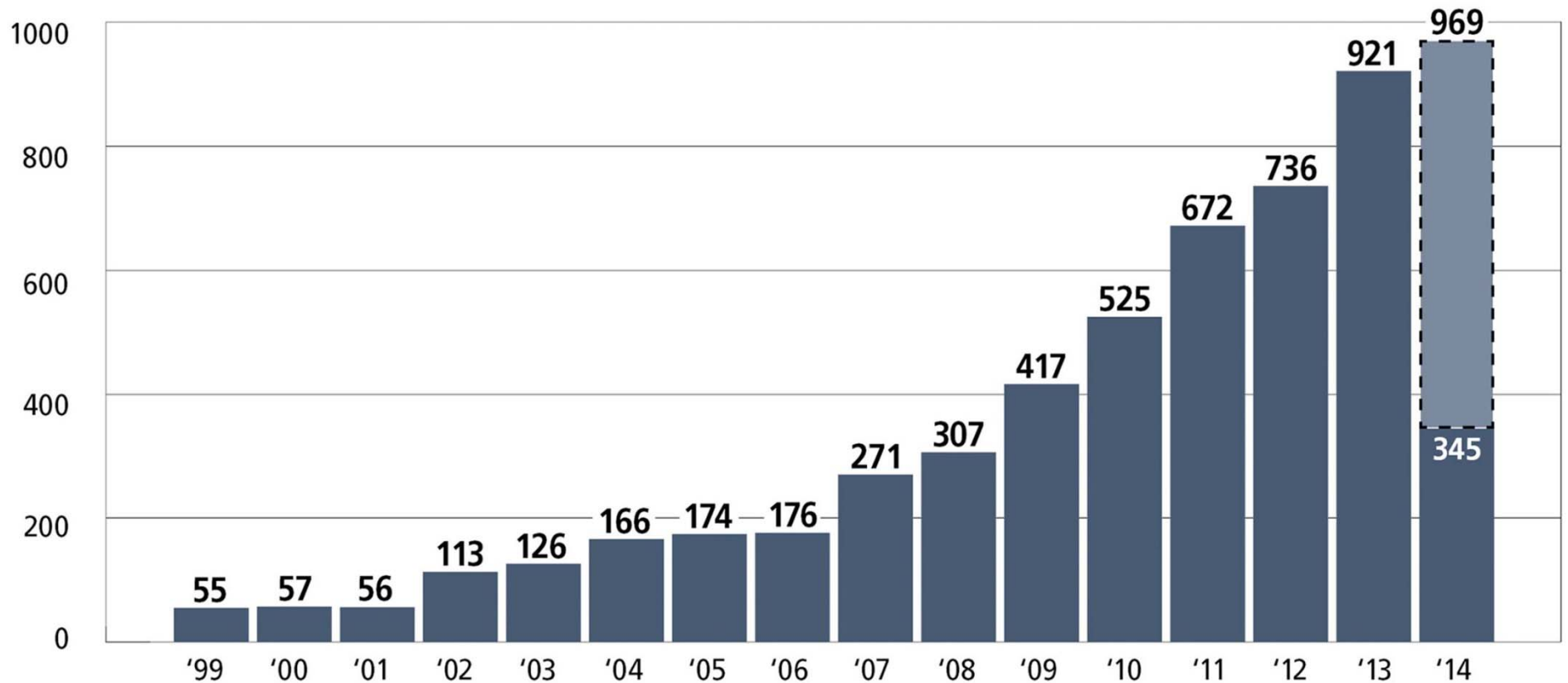






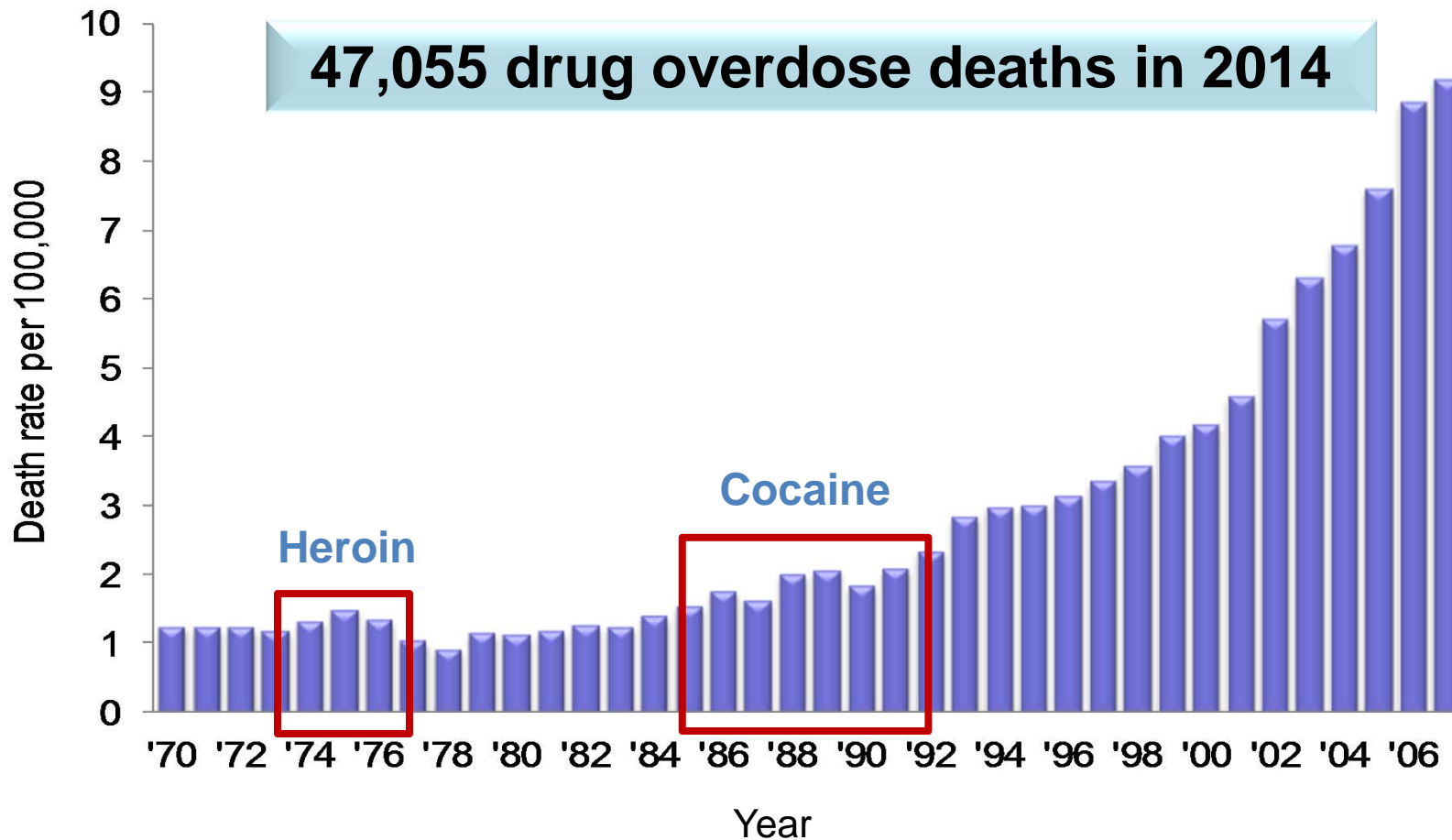
## Rapid rise of infant drug dependency

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.

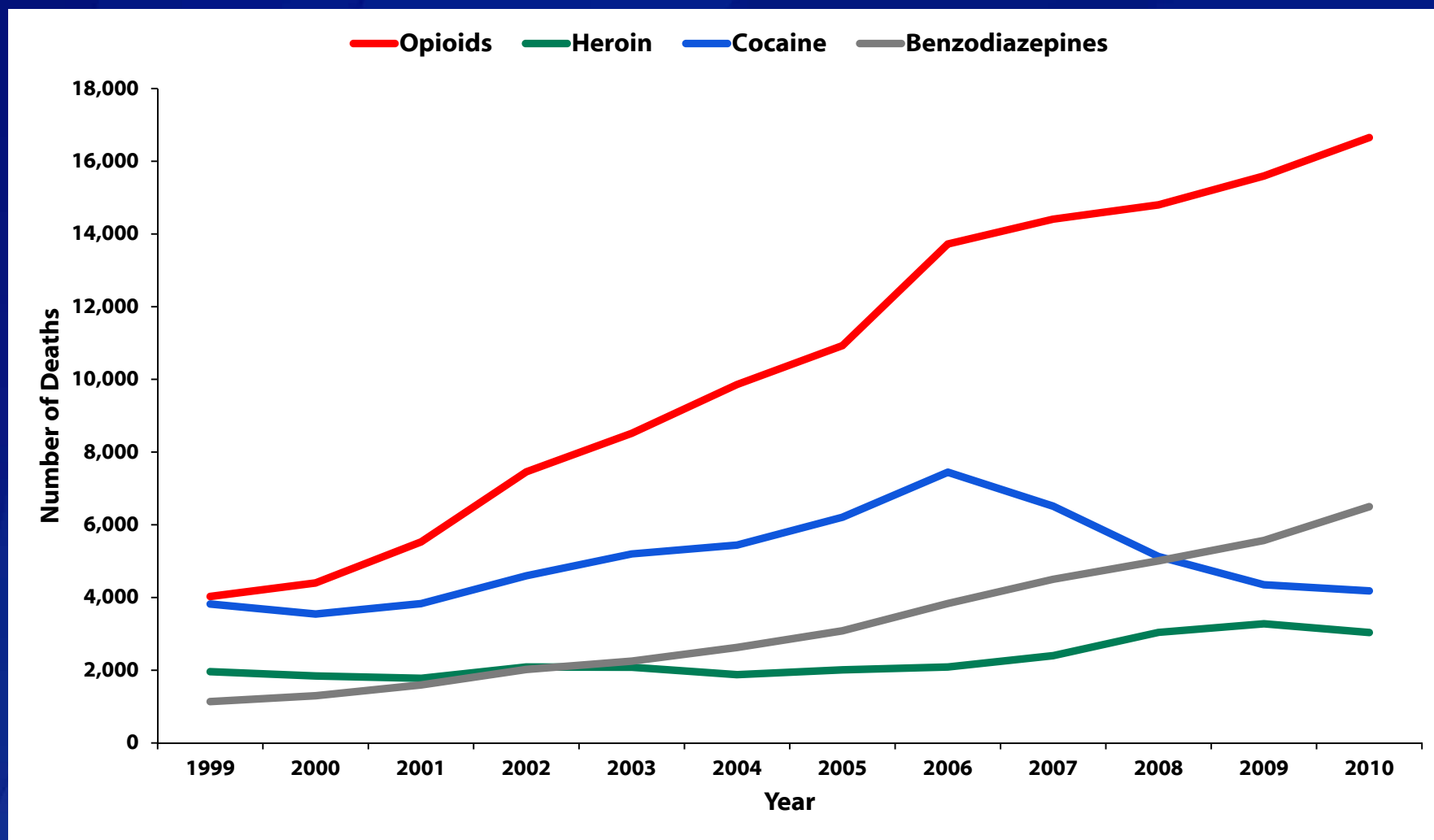


Source: Tenn. Dept. of Health

# Unintentional Drug Overdose Deaths United States, 1970–2007



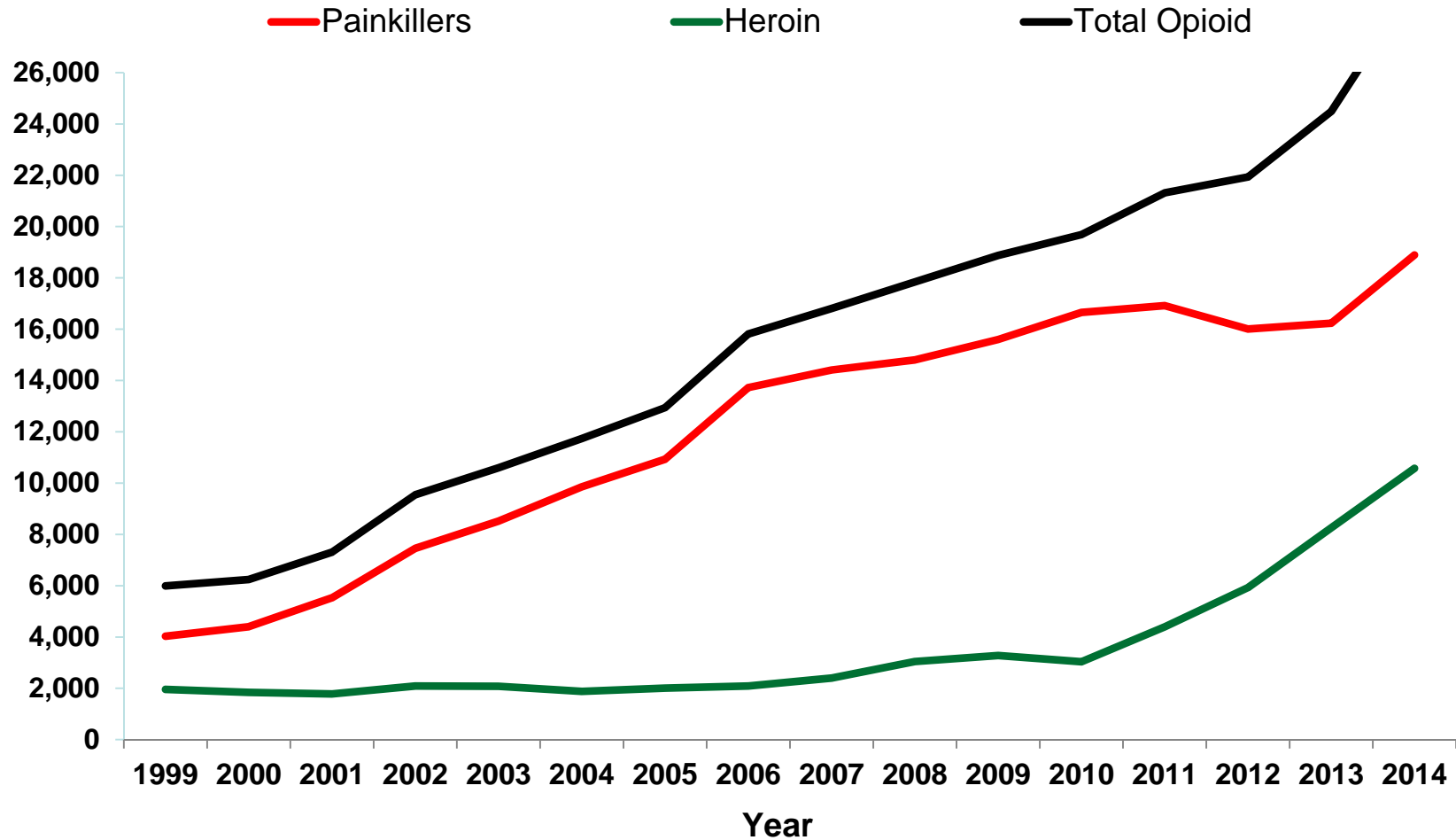
# Drug Overdose Deaths by Major Drug Type, United States, 1999–2010



CDC, National Center for Health Statistics, National Vital Statistics System, CDC Wonder. Updated with 2010 mortality data.

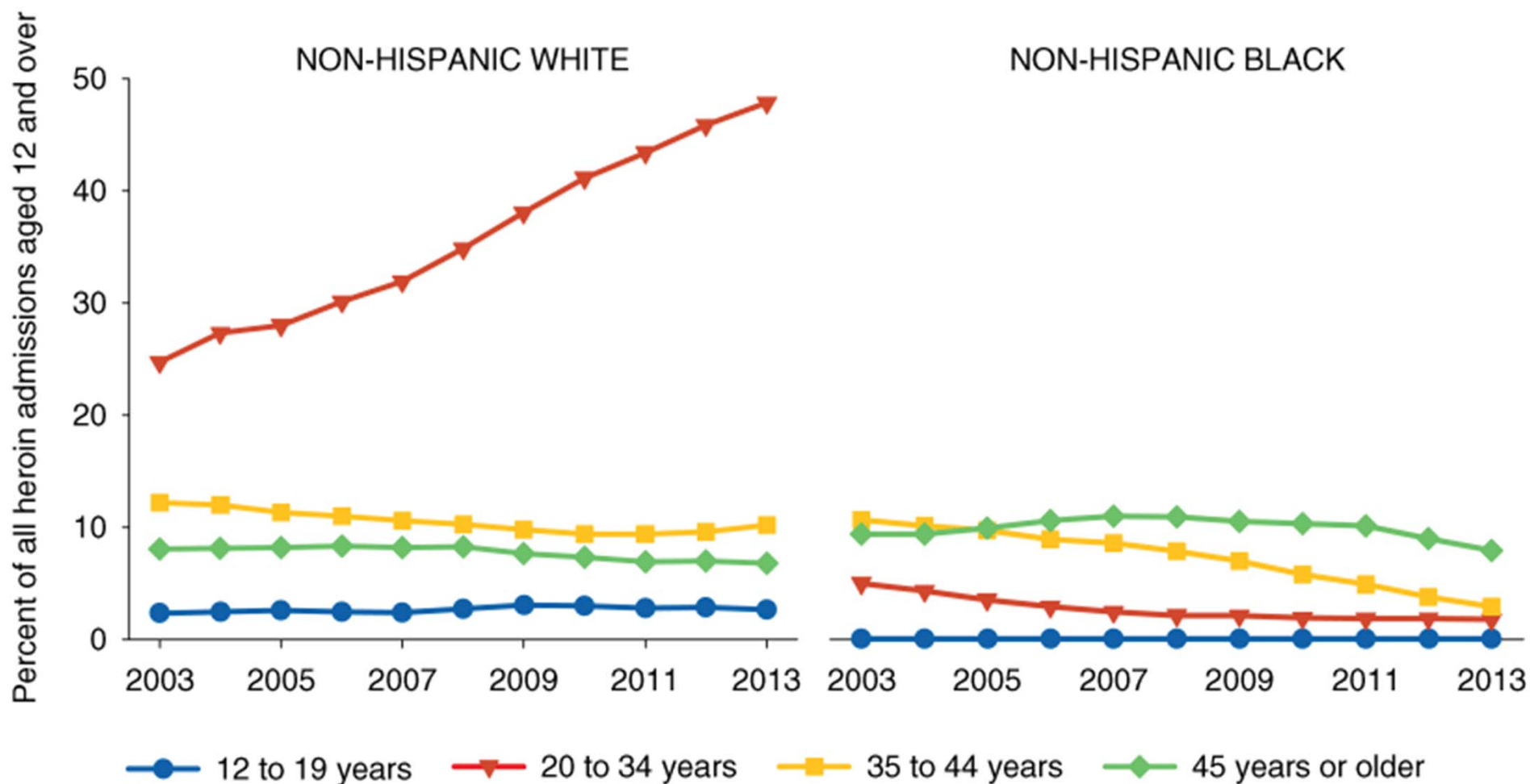


# Opioid Related Overdose Deaths United States, 1999-2014



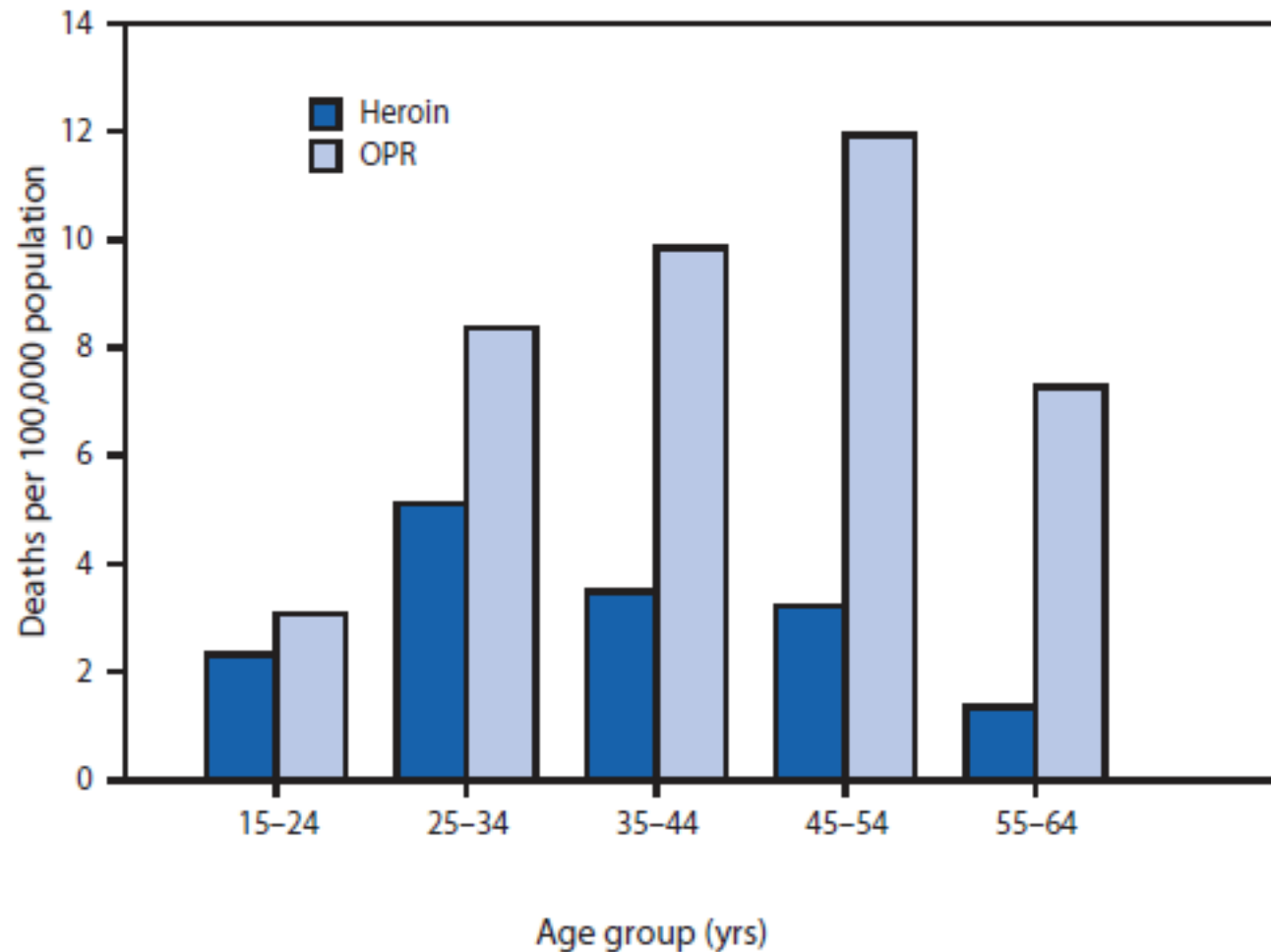
CDC, National Center for Health Statistics, National Vital Statistics System, CDC Wonder. Updated with 2010 mortality data.

# Heroin treatment admissions : 2003-2013



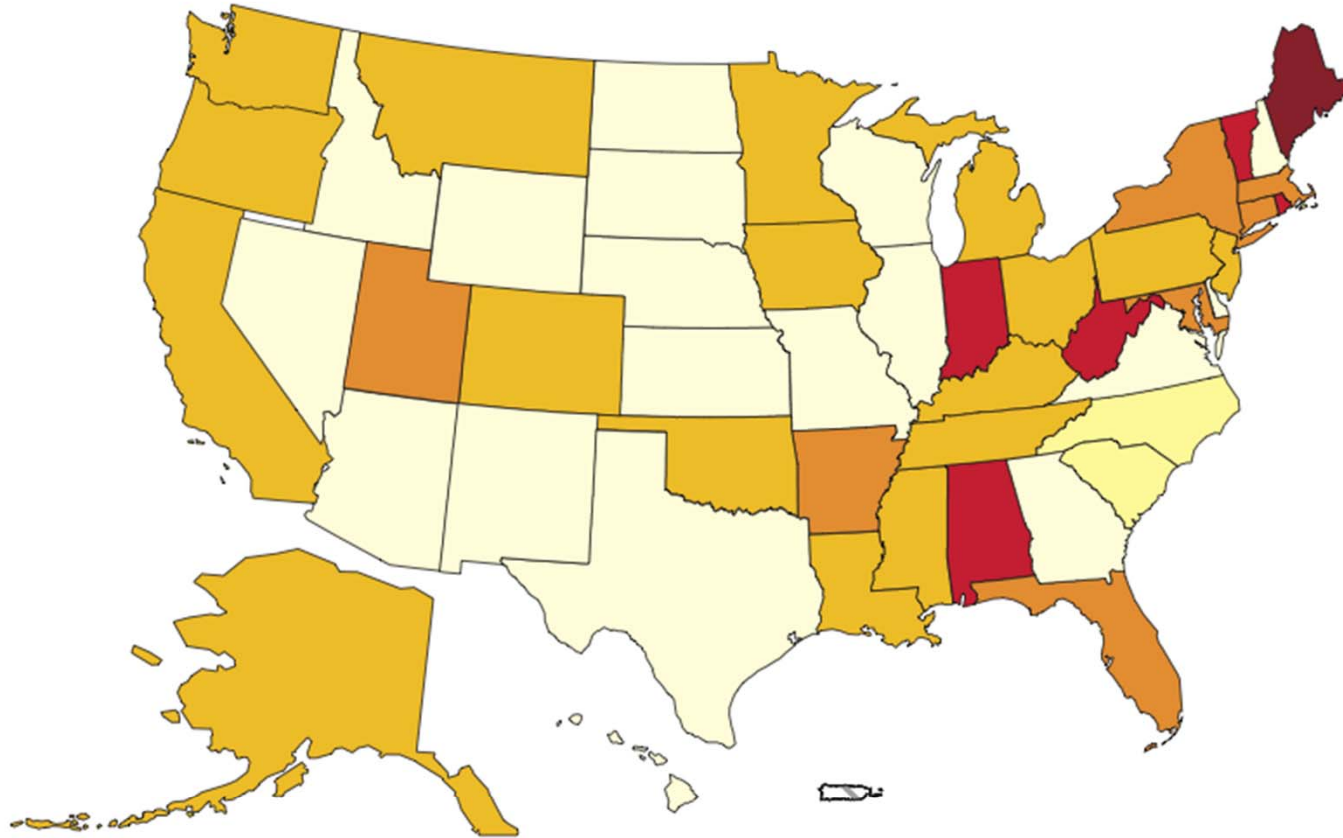
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 01.23.15.

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



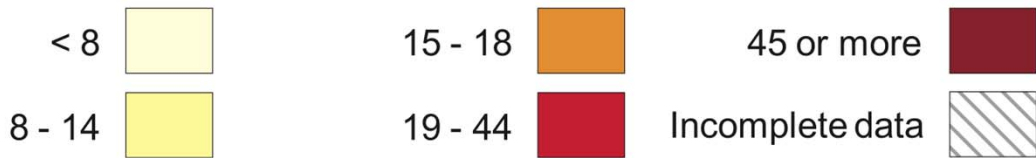
SOURCE: CDC. *Increases in Heroin Overdose Deaths — 28 States, 2010 to 2012*  
MMWR. 2014, 63:849-854

# Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



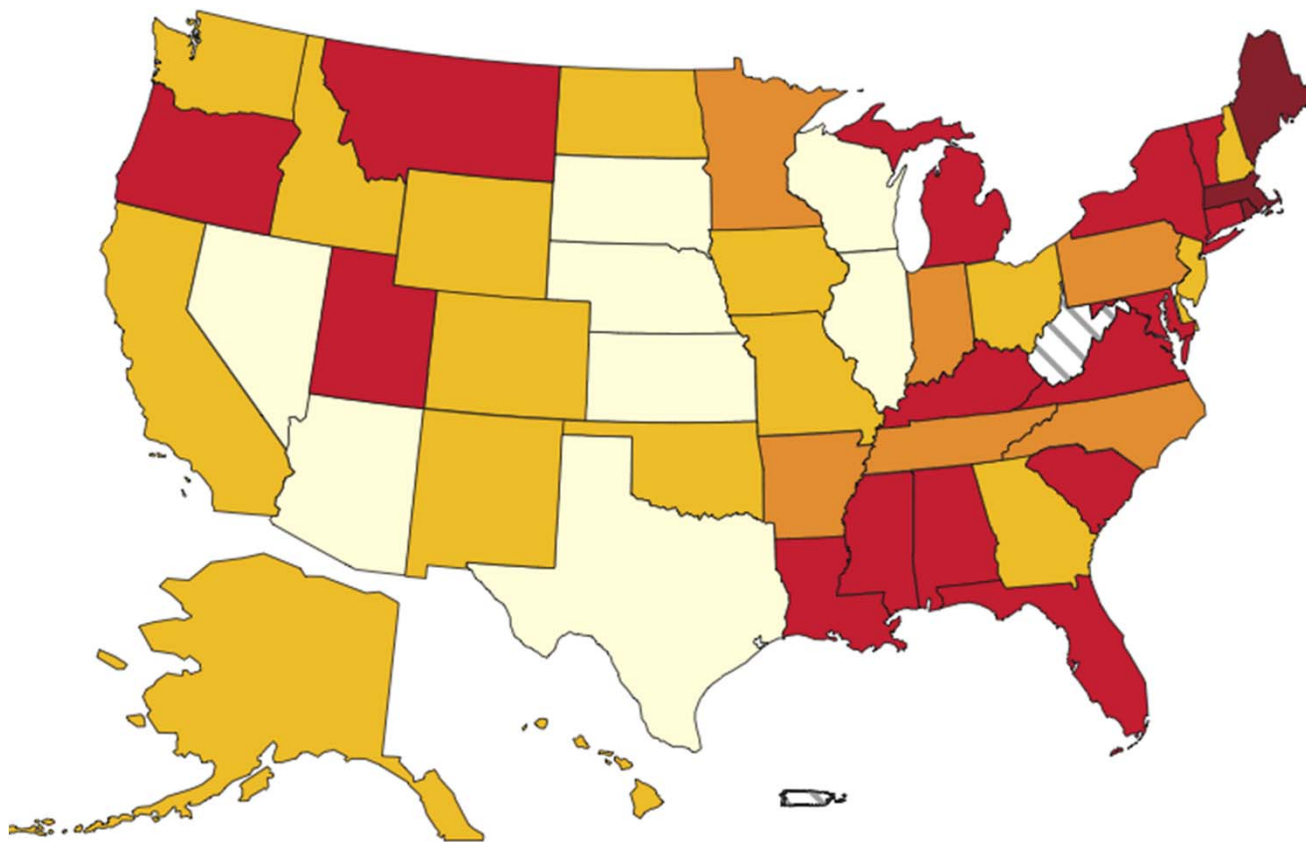
**1999**

(range 1 - 50)



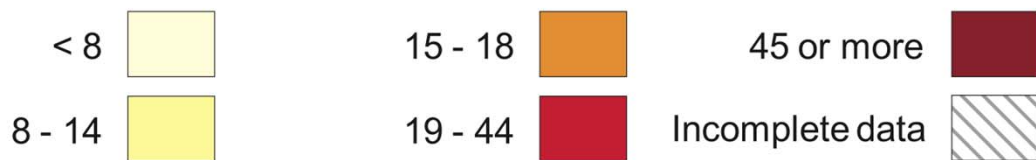
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

## Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



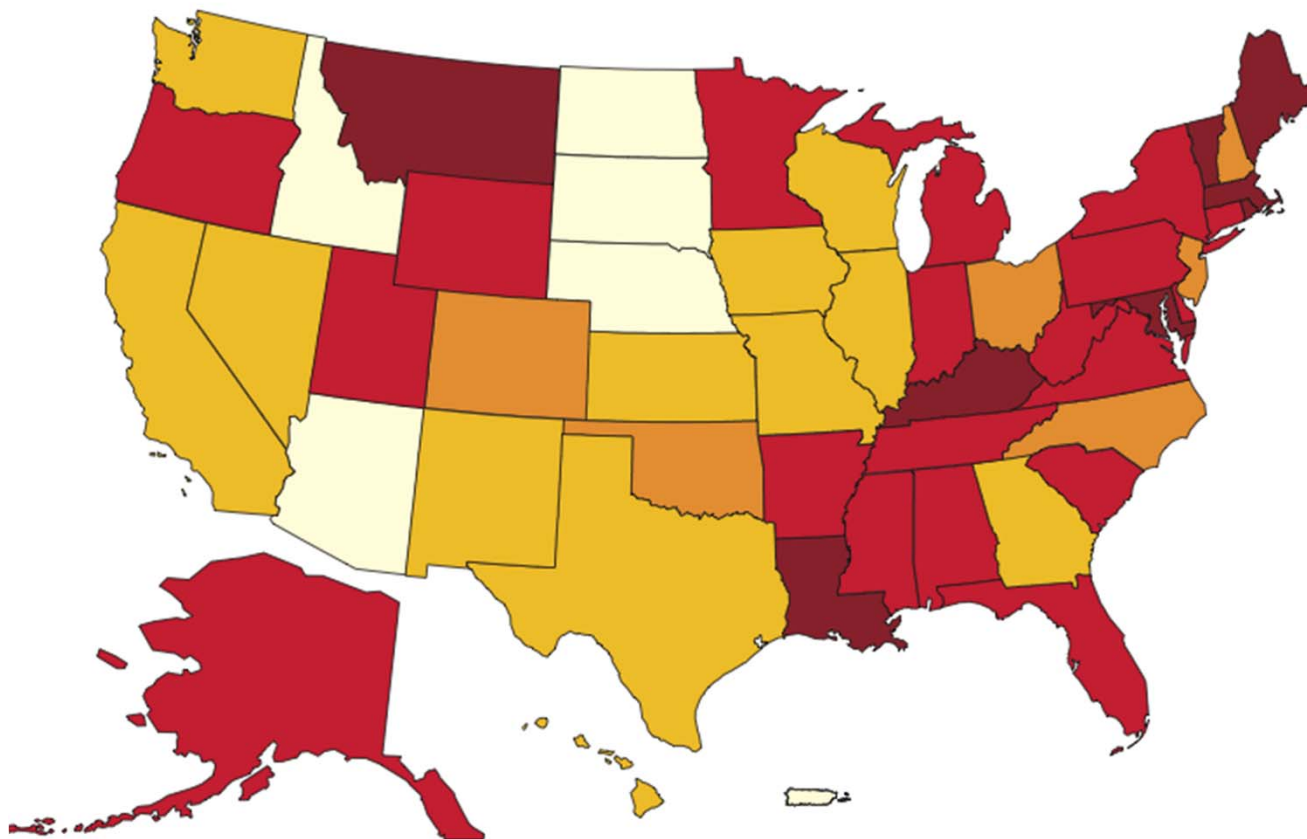
**2001**

(range 1 – 71)



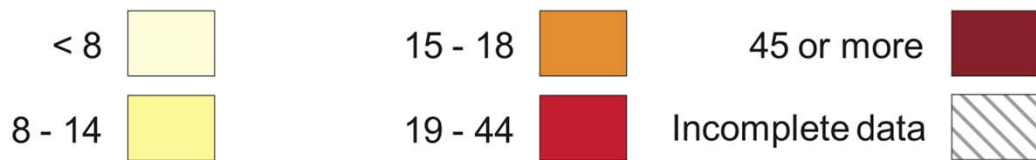
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

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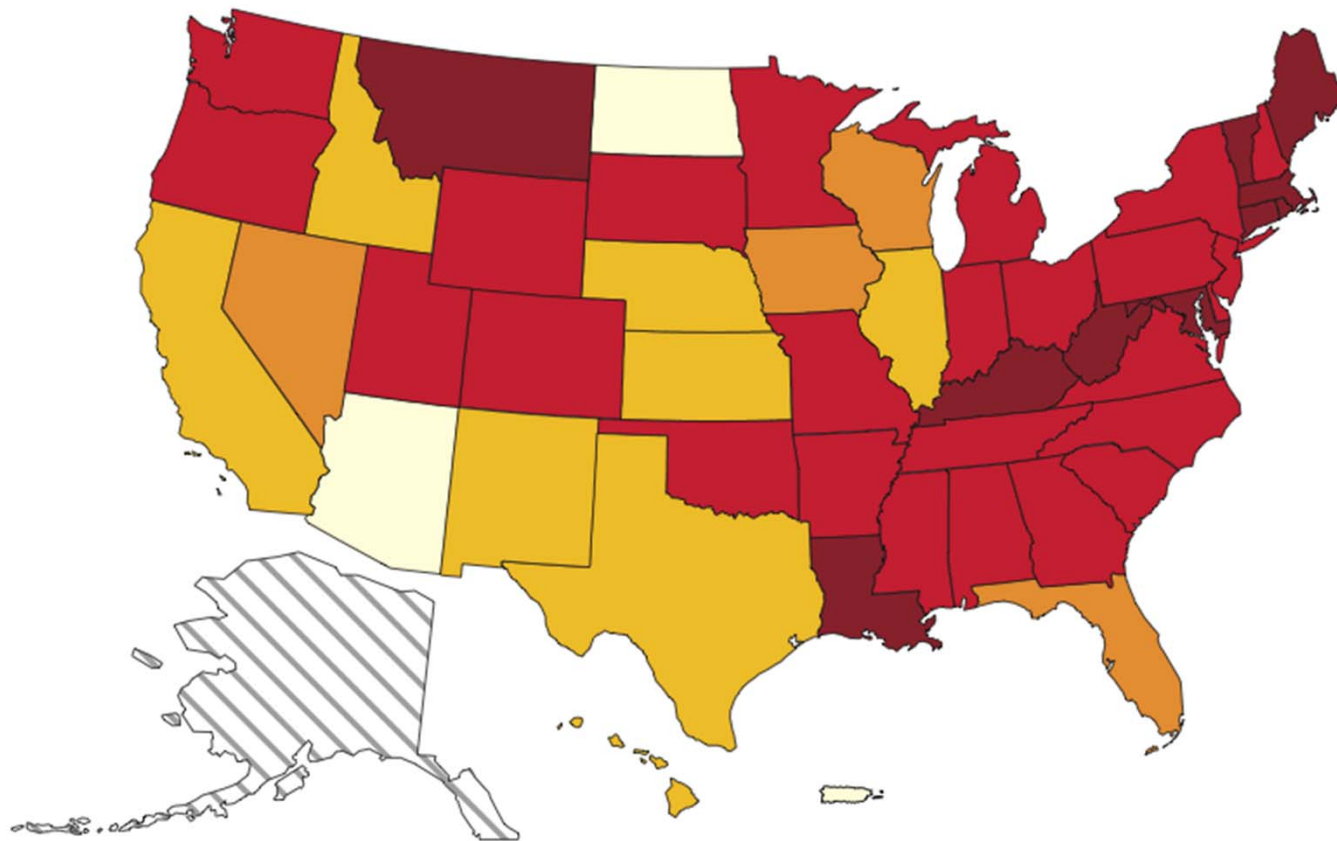
**2003**

(range 2 – 139)



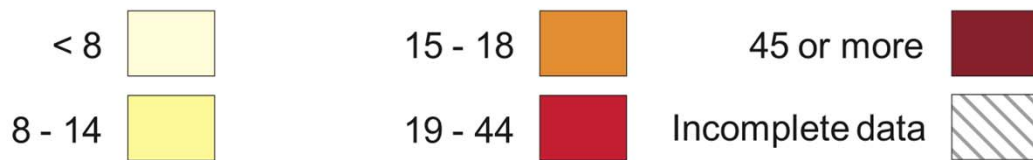
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

## Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



**2005**

(range 0 – 214)

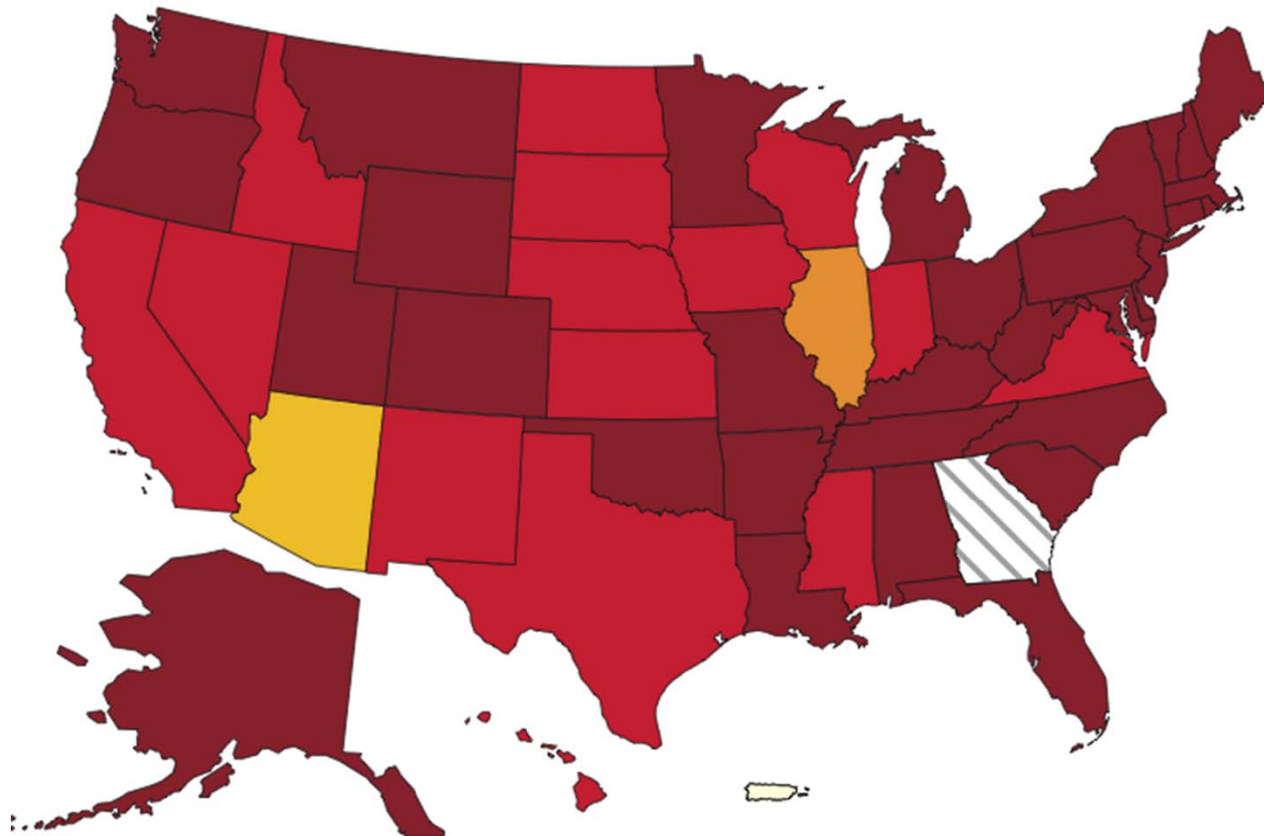


SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

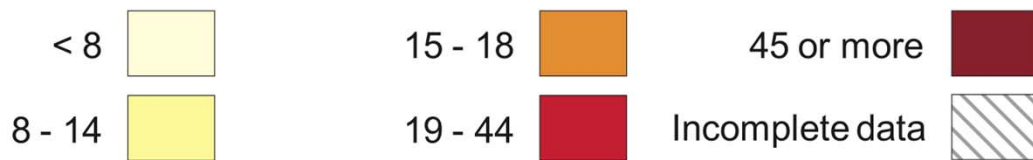




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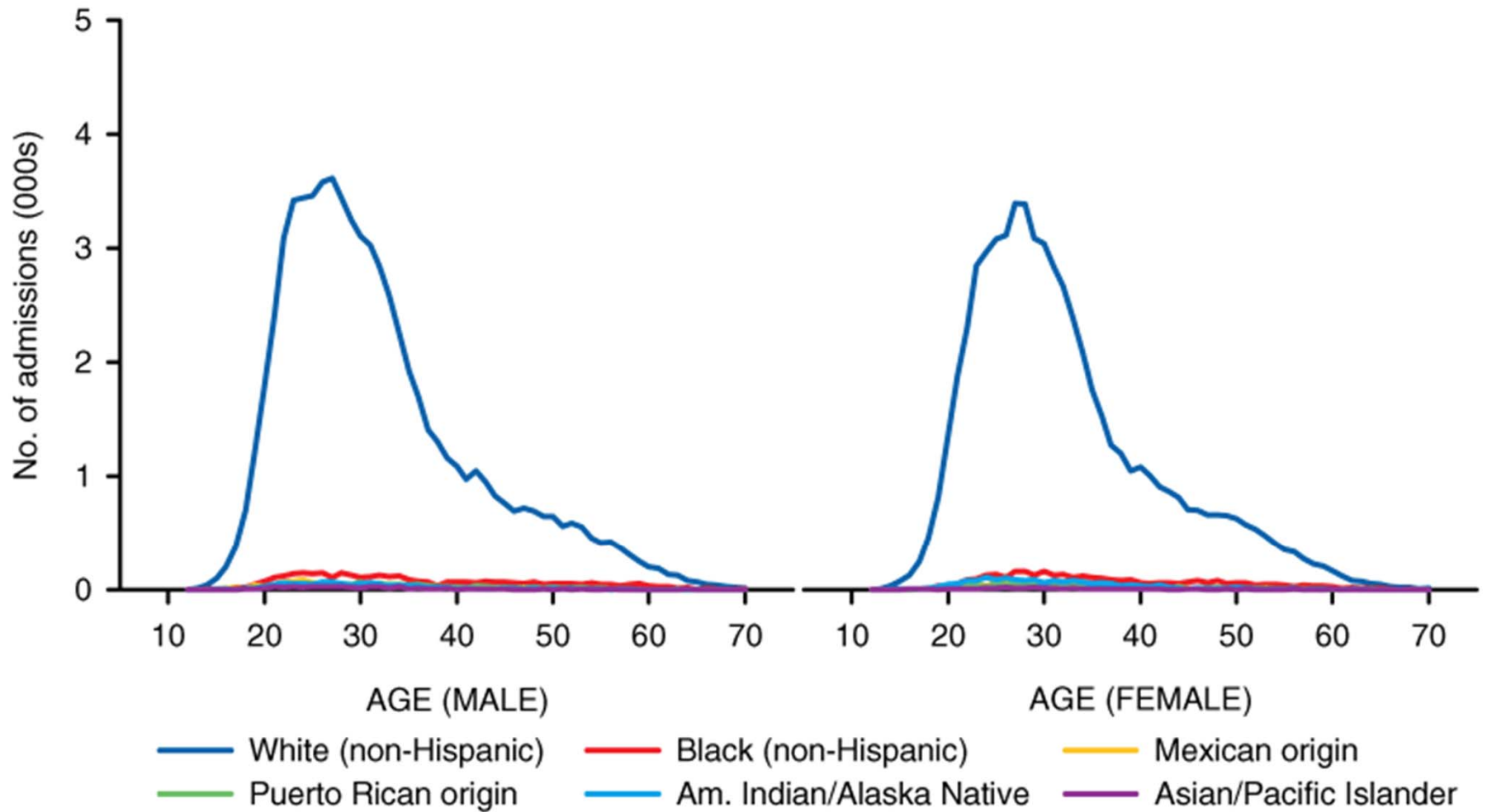


**2009**  
(range 1 – 379)



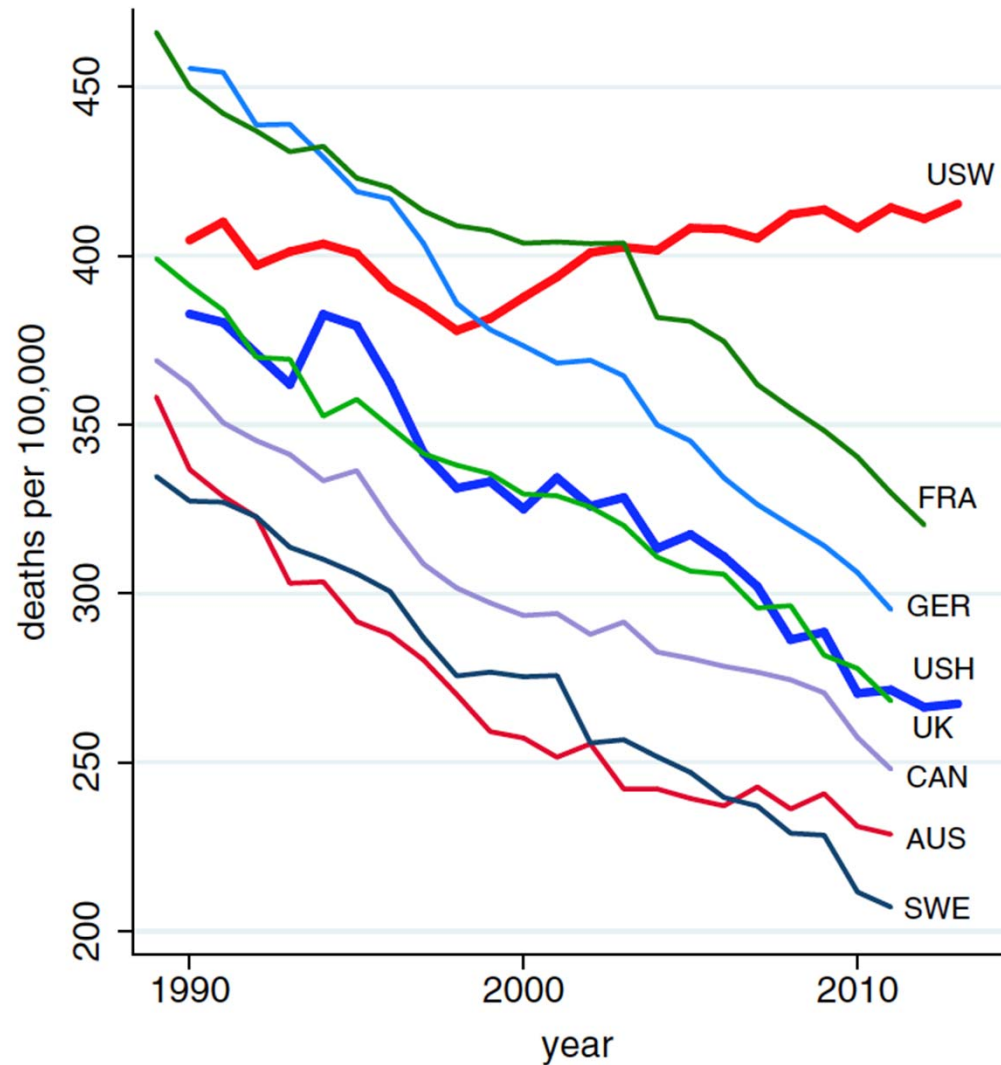
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

# Non-heroin opioid treatment admissions: 2013



SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 01.23.15.

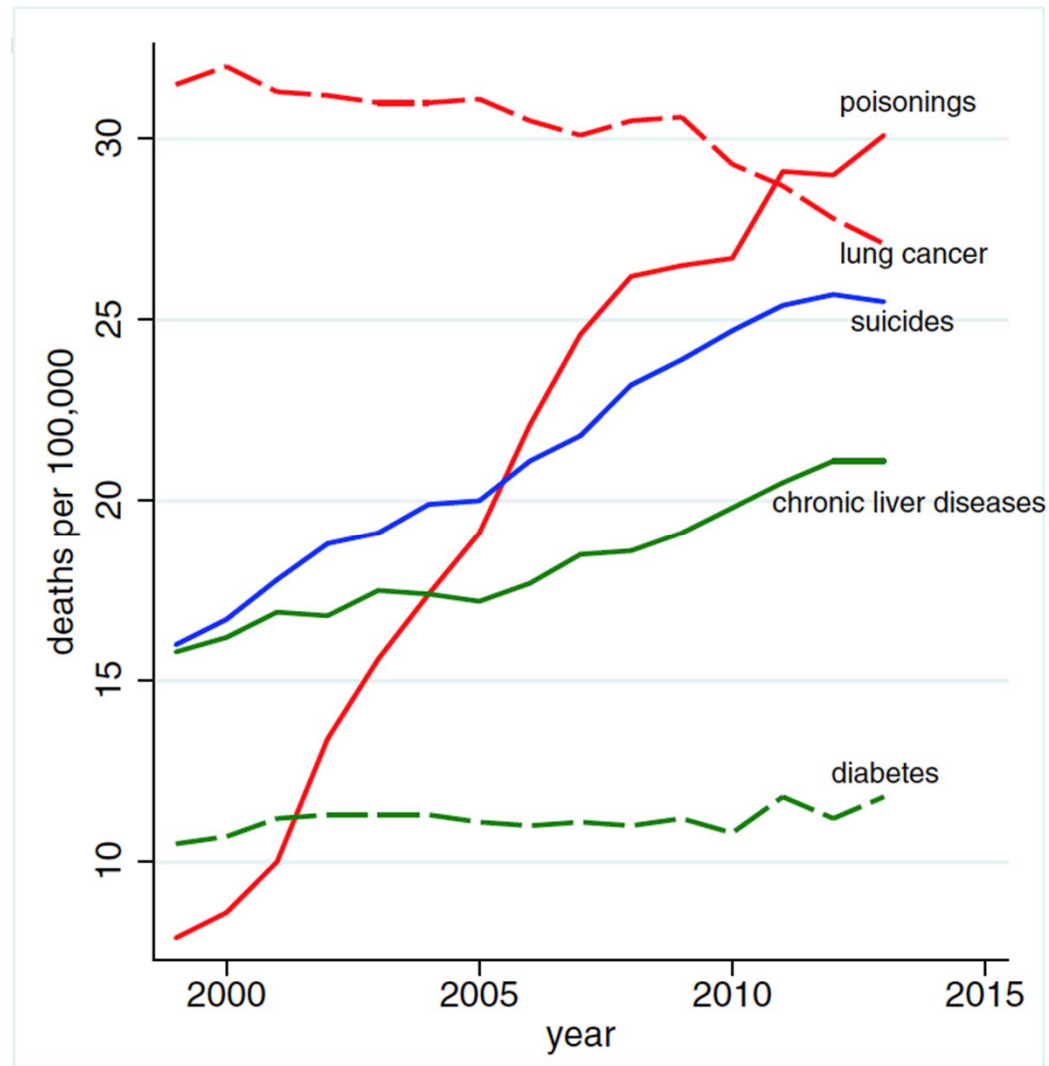
All-cause mortality, ages 45–54 for US White non-Hispanics (USW) , US Hispanics (USH)



France (FRA), Germany (GER), the United Kingdom (UK), Canada (CAN), Australia (AUS), and Sweden (SWE).

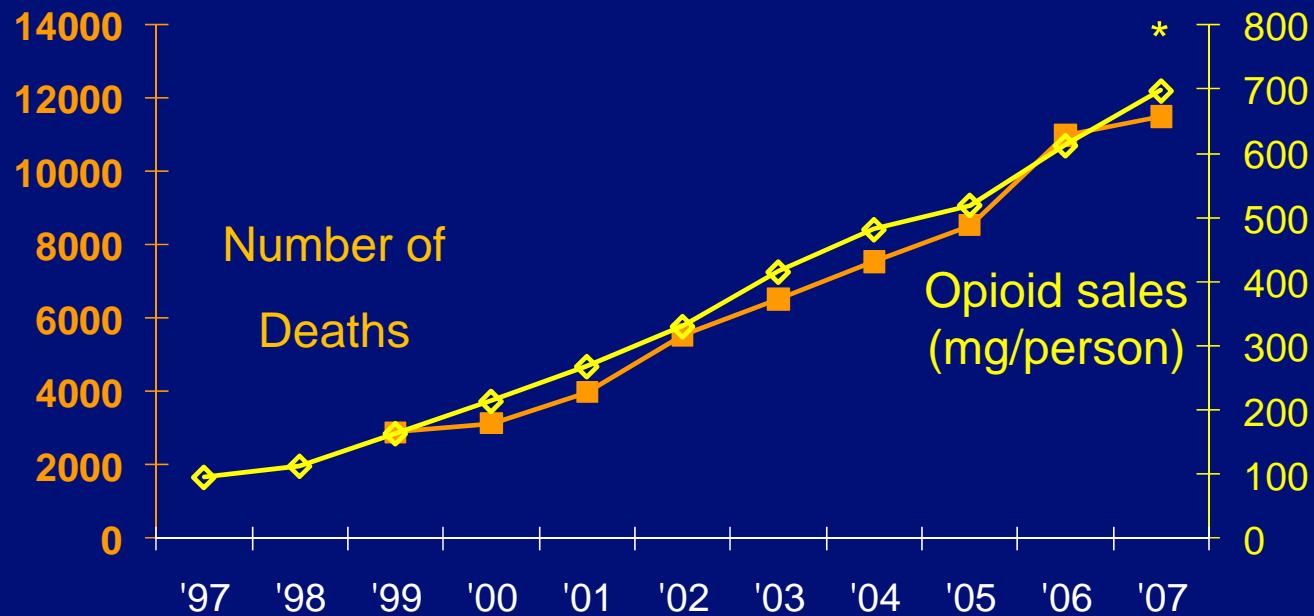
Source: Anne Case, Angus Deaton. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences*. November 2, 2015 (online ahead of print).

## Mortality by cause, white non-Hispanics ages 45–54



Source: Anne Case, Angus Deaton. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences*. 20 November 2, 2015 (online ahead of print).

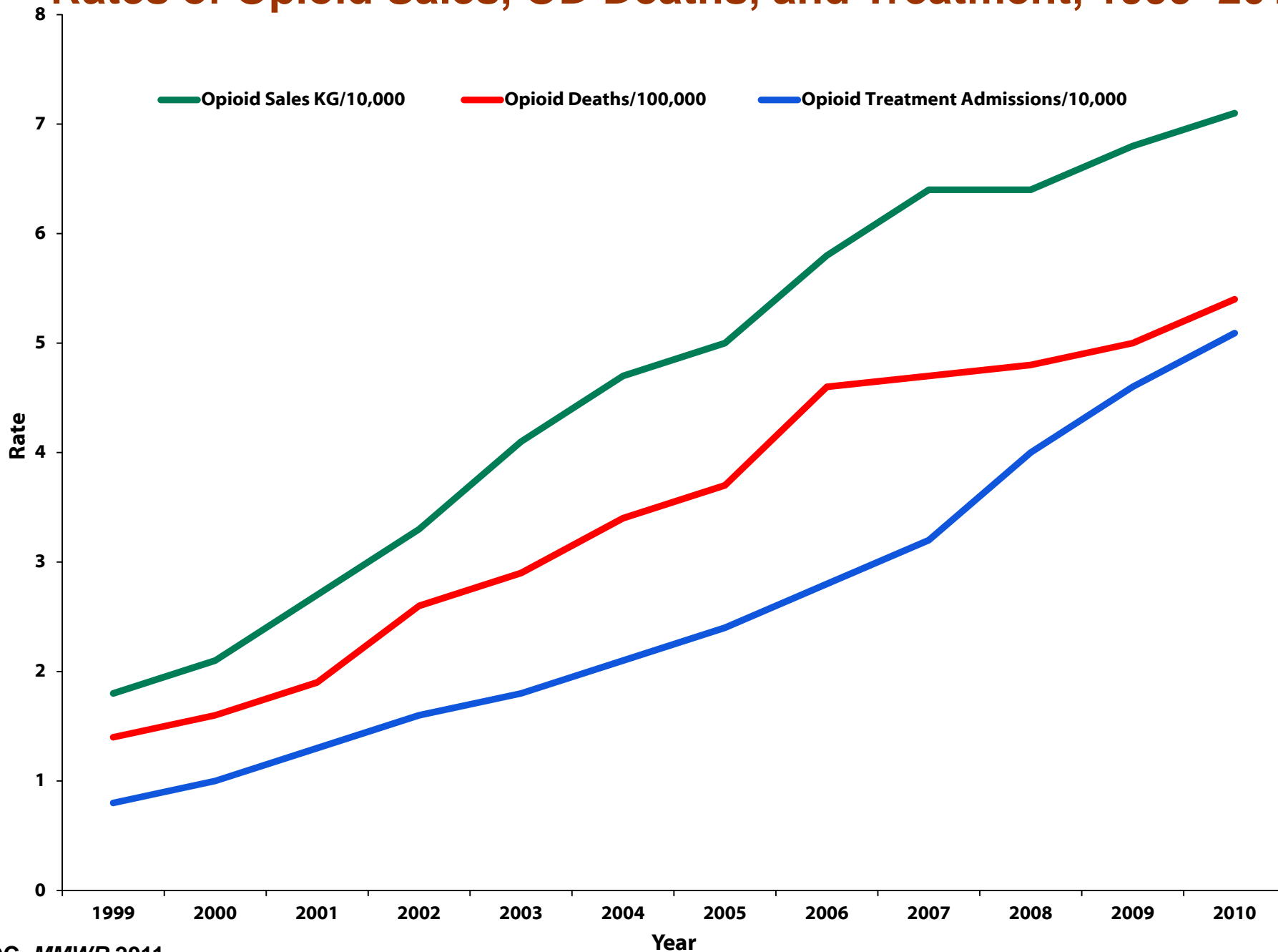
# Unintentional overdose deaths involving opioid analgesics parallel per capita sales of opioid analgesics in morphine equivalents by year, U.S., 1997-2007



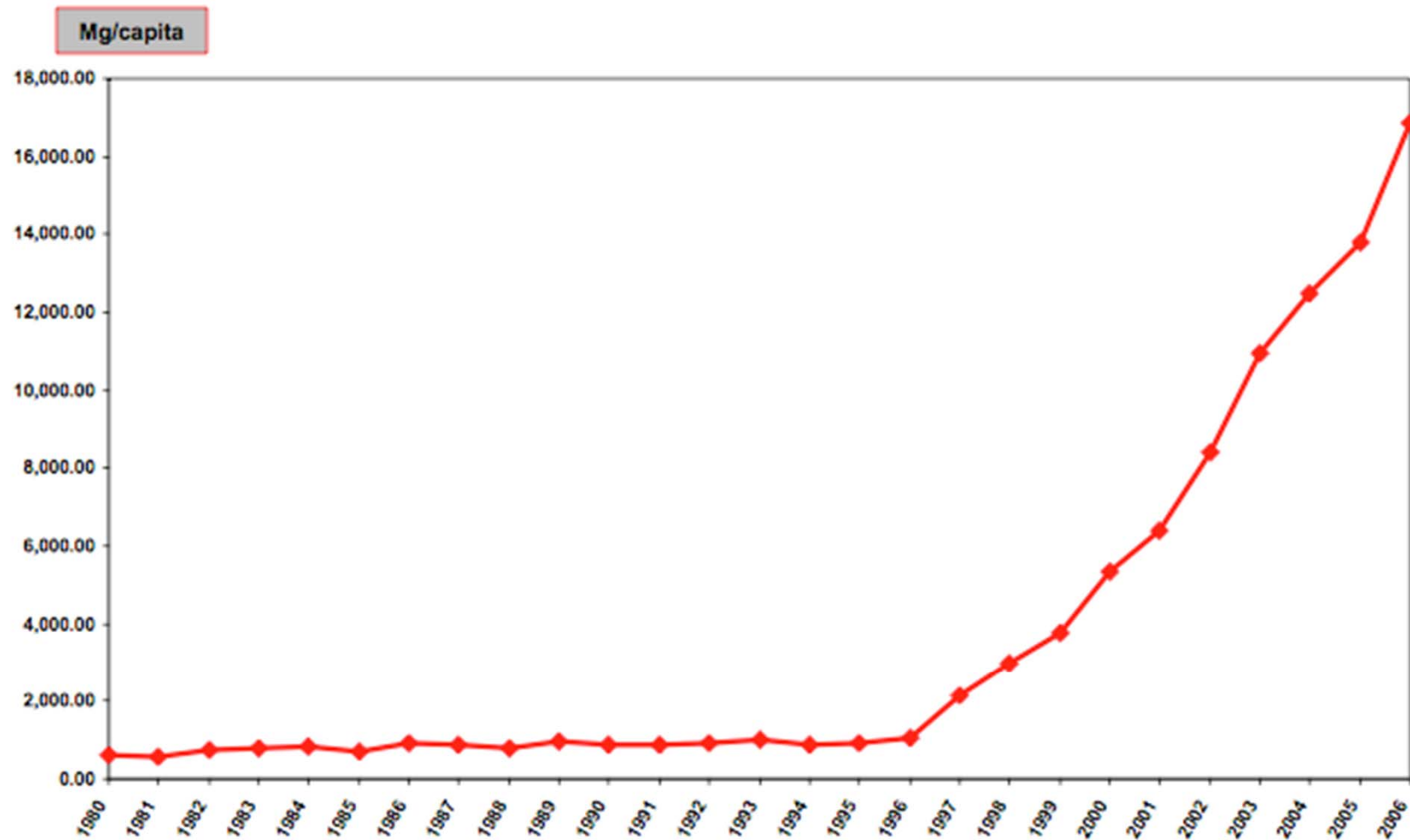
Source: National Vital Statistics System, multiple cause of death dataset, and DEA ARCOS

\* 2007 opioid sales figure is preliminary.

# Rates of Opioid Sales, OD Deaths, and Treatment, 1999–2010

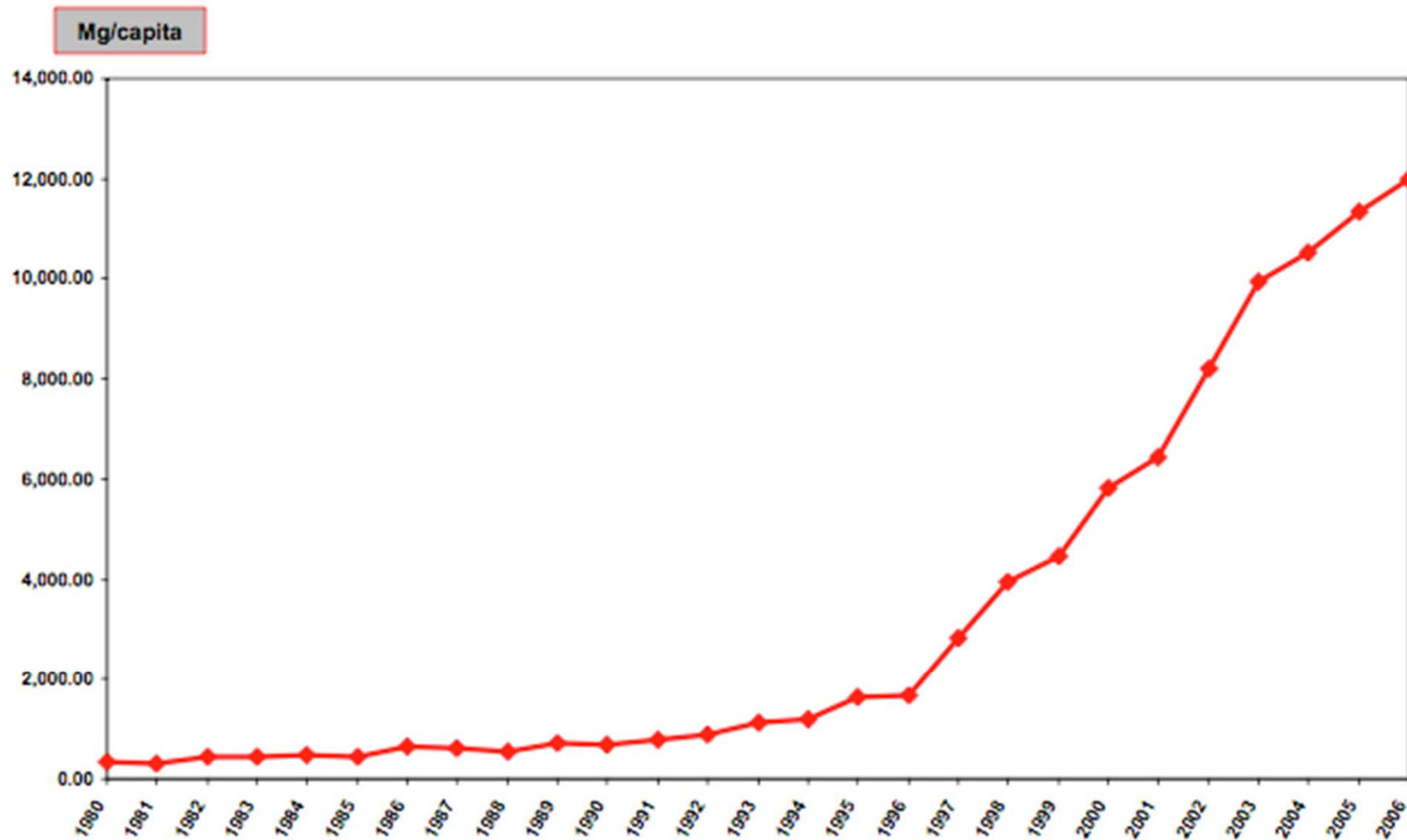


# New York Consumption of Oxycodone 1980 - 2006



Sources: U.S. Dept of Justice, Drug Enforcement Administration, Office of Diversion Control

# New York Consumption of Hydrocodone 1980 - 2006

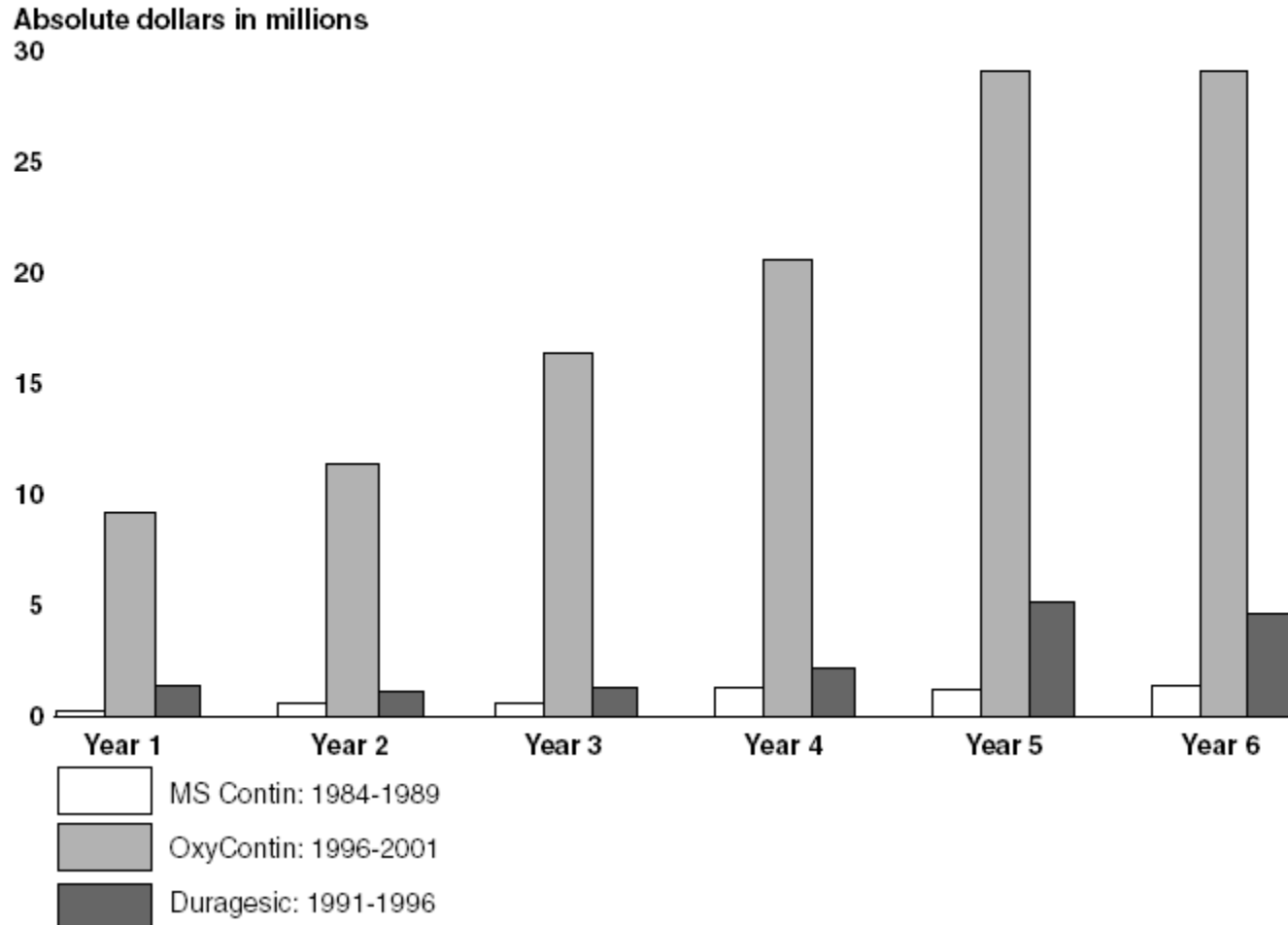


Sources: U.S. Dept of Justice, Drug Enforcement Administration, Office of Diversion Control



# 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 patients<sup>1</sup> 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,<sup>2</sup> 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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HERSHEL JICK, M.D.  
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Boston University Medical Center

Waltham, MA 02154

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  
1422

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, ScD; Andrew Kolodny, MD; Richard A. Devo, MD, MPH; and Rozer Chou, MD



The NEW ENGLAND JOURNAL of MEDICINE

## A Flood of Opioids, a Rising Tide of Deaths

Susan Okie, M.D.

Viewpoint

EXPAND

## Patient Satisfaction, Prescription Drug Abuse, and Potential Unintended Consequences

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

# JAMA<sup>®</sup>

The Journal of the American Medical Association

# 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](http://www.annals.org)  
For author affiliations, see end of text.

This article was published online first at [www.annals.org](http://www.annals.org) on 13 January 2015.

# 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 black-market.



# How the opioid lobby frames the problem:

## Who Will Be Affected by Rescheduling?



*the* AMERICAN ACADEMY *of* PAIN MEDICINE

2

Source: Slide presented by Dr. Lynn Webster at FDA meeting on hydrocodone upscheduling, Jan 25<sup>th</sup>, 2013.

This is a **false dichotomy**  
Opioid harms are not limited to so-called “drug abusers”

*35% met DSM V criteria for an opioid use disorder<sup>1</sup>*

**Pain Patients**



**“Drug Abusers”**

*92% of opioid OD decedents were prescribed opioids for chronic pain.<sup>2</sup>*

1. Boscarino JA, Rukstalis MR, Hoffman SN, et al. Prevalence of prescription opioid-use disorder among chronic pain patients: comparison of the DSM-5 vs. DSM-4 diagnostic criteria. J Addict Dis. 2011;30:185-194.

2. Johnson EM, Lanier WA, Merrill RM, et al. Unintentional Prescription Opioid-Related Overdose Deaths: Description of Decedents by Next of Kin or Best Contact, Utah, 2008-2009. J Gen Intern Med. 2012 Oct 16.

## President Obama discussing the opioid addiction epidemic in West Virginia



Andrew Kolodny Retweeted



**President Obama** @POTUS · Oct 21

Sales of powerful painkillers have skyrocketed. In 2012, enough prescriptions were written to give every American adult a bottle of pills.



1.4K



1.5K



[View conversation](#)



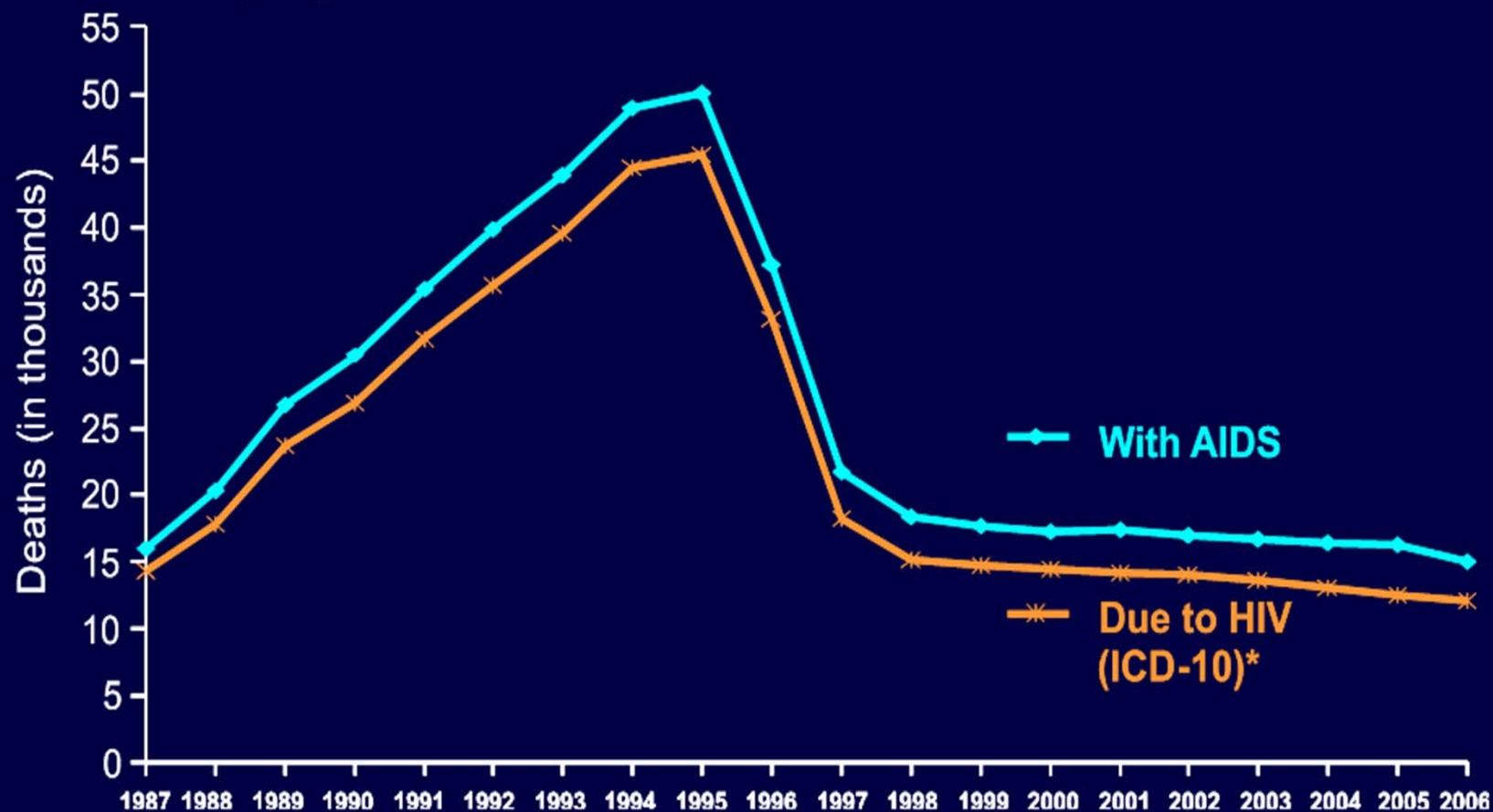
# The NEW ENGLAND JOURNAL of MEDICINE

## 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.”*

# 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



\*For comparison with data for 1999 and later years, data in the bottom (red) line for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.



# 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