

OPIOID EPIDEMIC: UM SOD INITIATIVE

HAROLD KAI TU DMD,MD,FACS

CHIEF: DIVISION OF OMFS

MEMBER: HHS PAIN MANAGEMENT

TASK FORCE

MEMBER: CDC OPIOID WORKGROUP



Disclosure: None



“MY EPIPHANY”



“ We know of no other medication routinely used for a nonfatal condition that kills patients so frequently”

Dr. Tom Frieden





91
AMERICANS

die every day from
an **opioid overdose**
(that includes prescription
opioids and heroin).

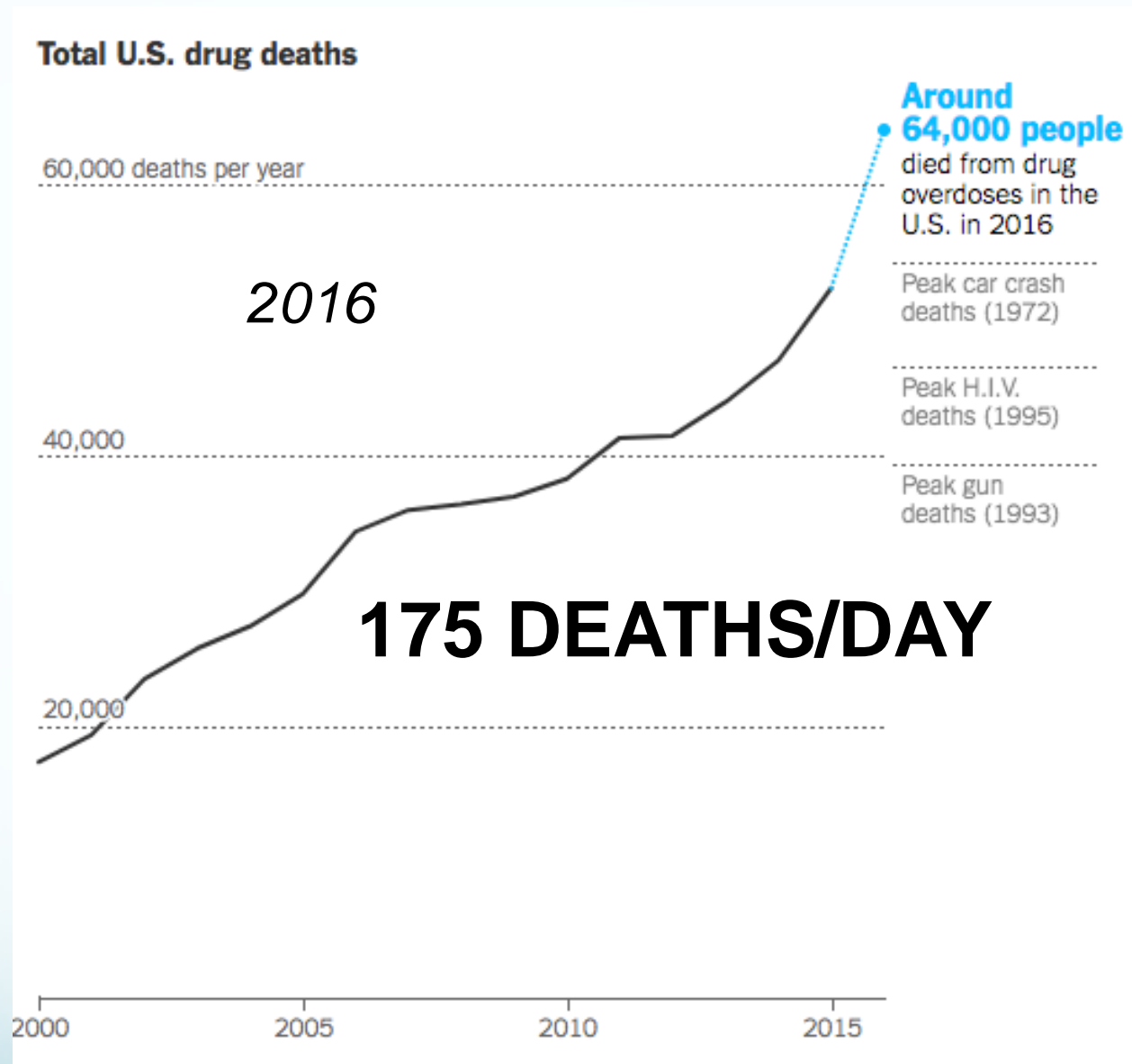
142 DEATHS/DAY

2016 P.C.



Around
46
PEOPLE

die every day from
overdoses involving
prescription opioids.

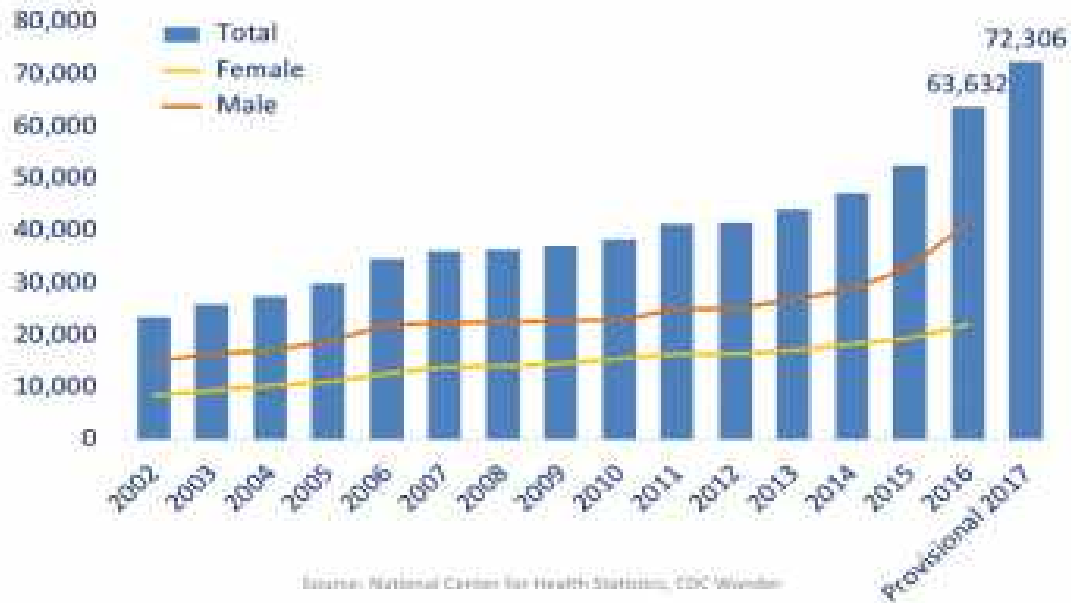


DYING AT RECORDS RATES > CARS, GUNS AND FALLING



National Overdose Deaths

Number of Deaths Involving All Drugs

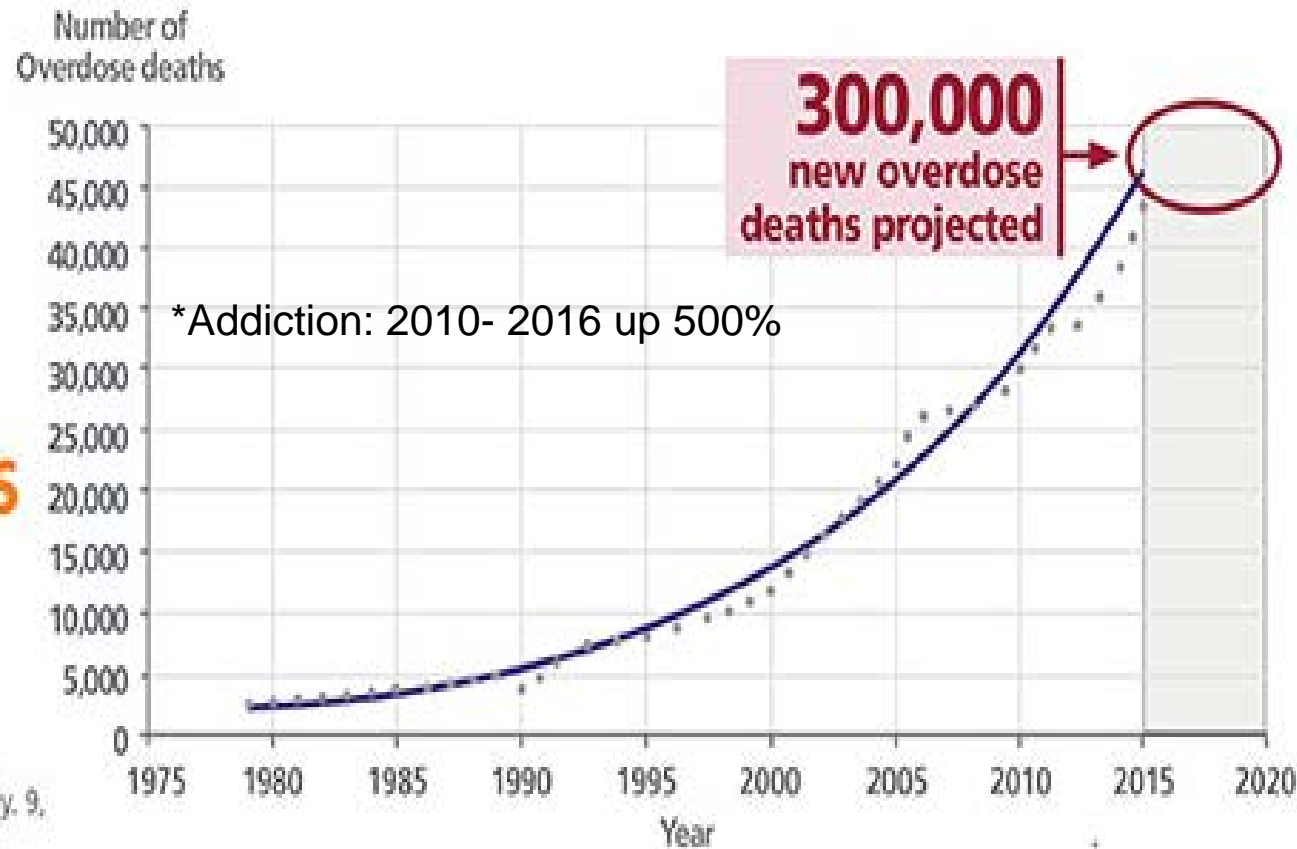


200 DEATHS/DAY

2017

GOAL: BEND THE CURVE

Exponential Growth in Drug Overdose Deaths



Source: bioRxiv. Exponential growth of the USA overdose epidemic. Preprint first posted online May. 9, 2017; doi: <http://dx.doi.org/10.1101/134403>. [PDF]

LEADING THE NEWS

CDC: Drug overdoses killed 72,000 in 2017



DEATHS: 9/11 EVERY 2 WEEKS



**WHAT, WHY AND WHEN
HAPPENED?**



**TREATMENT
INDUSTRY**

PAIN FREE

**CRIMINAL/ECONOMIC
BEHAVIOR**

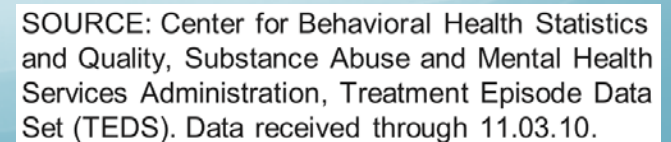
DOCTOR PRESCRIBING



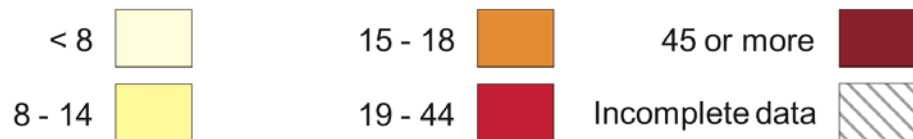
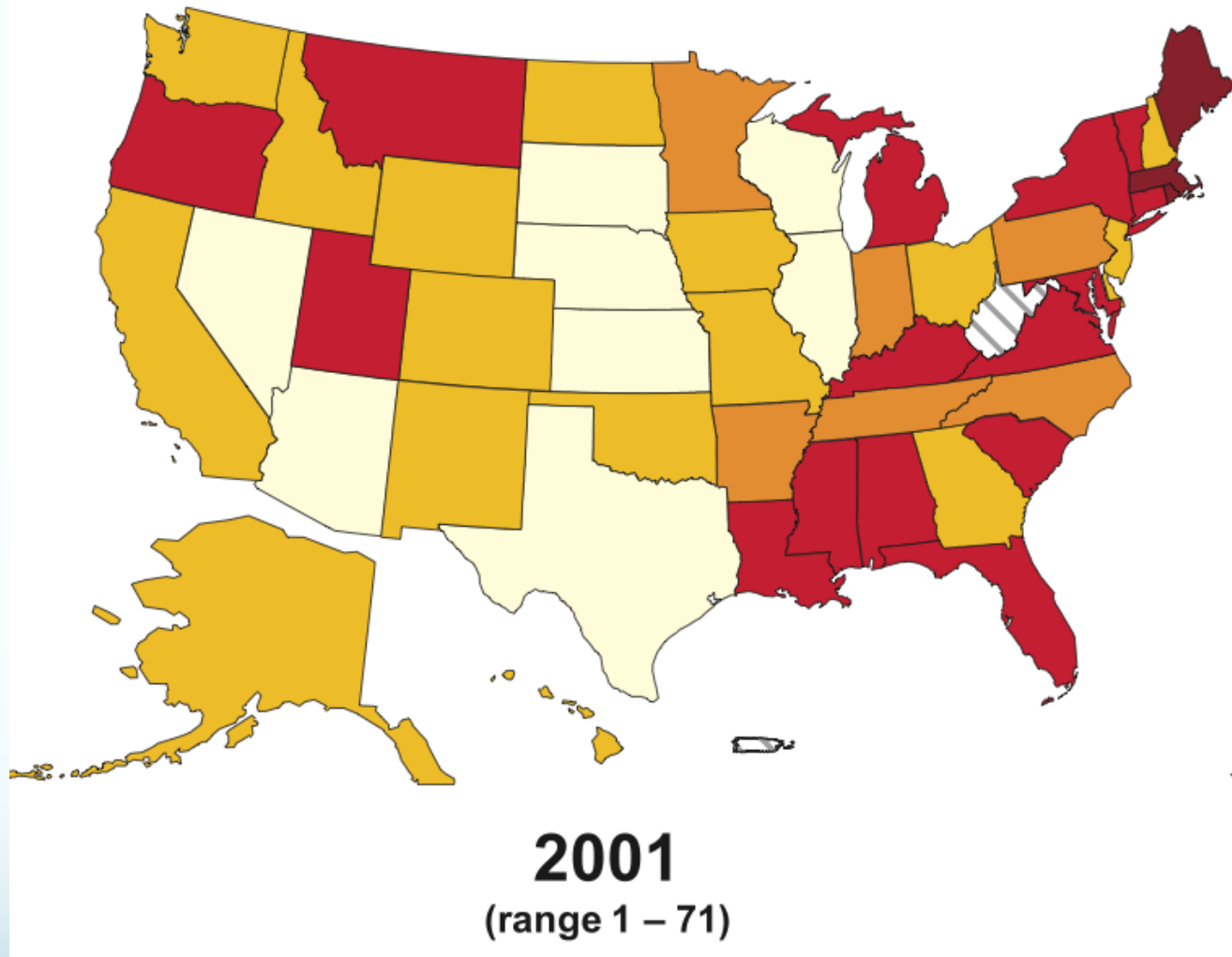
“The United States contains 5% of the World’s Population and consumes 80% of the World’s Opioids.”

2009 National Survey on Drug Use and Health

1999
(range 1 - 50)

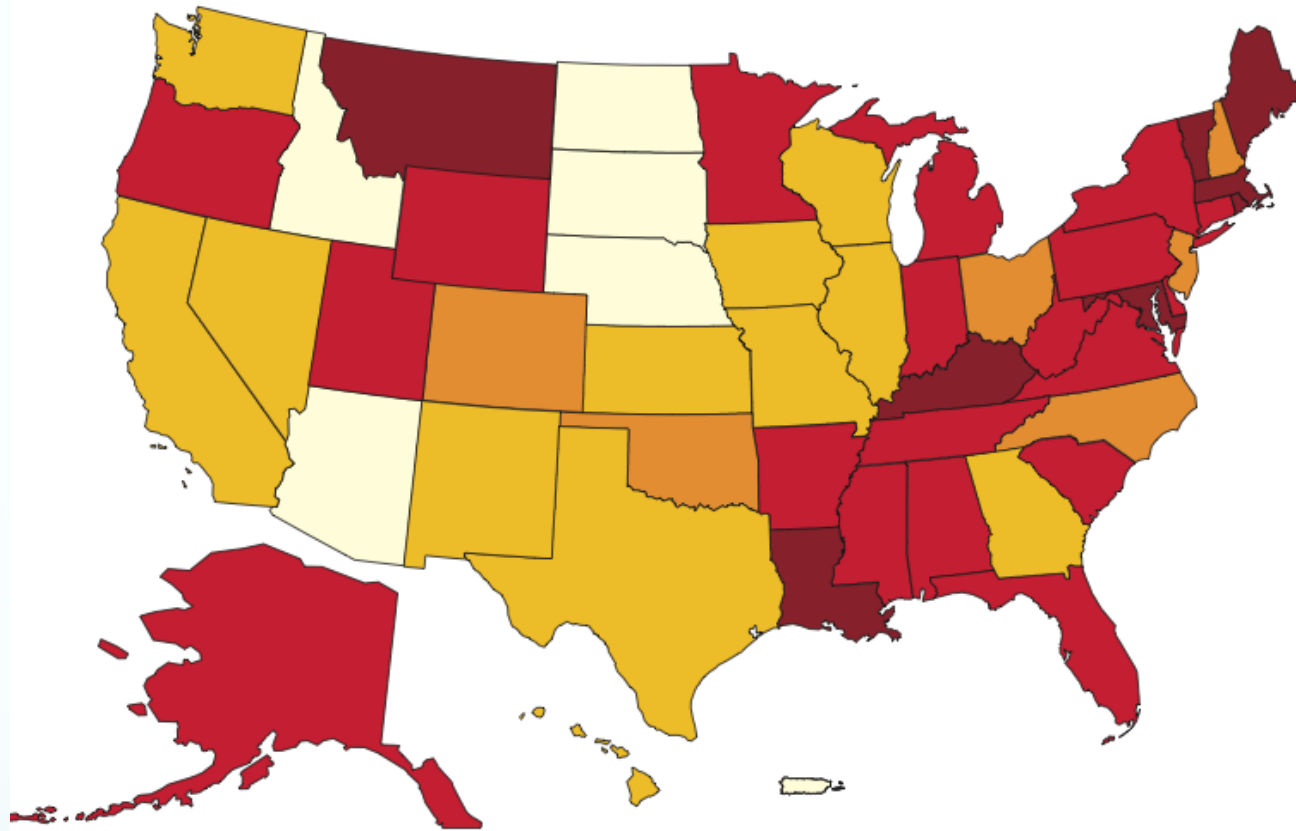


Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



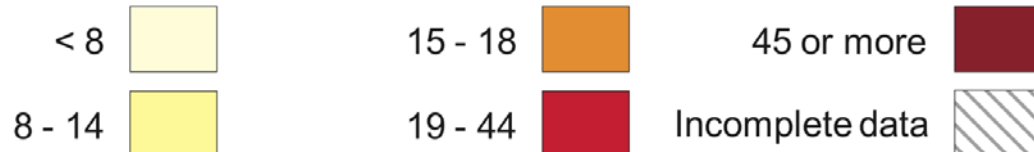
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

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



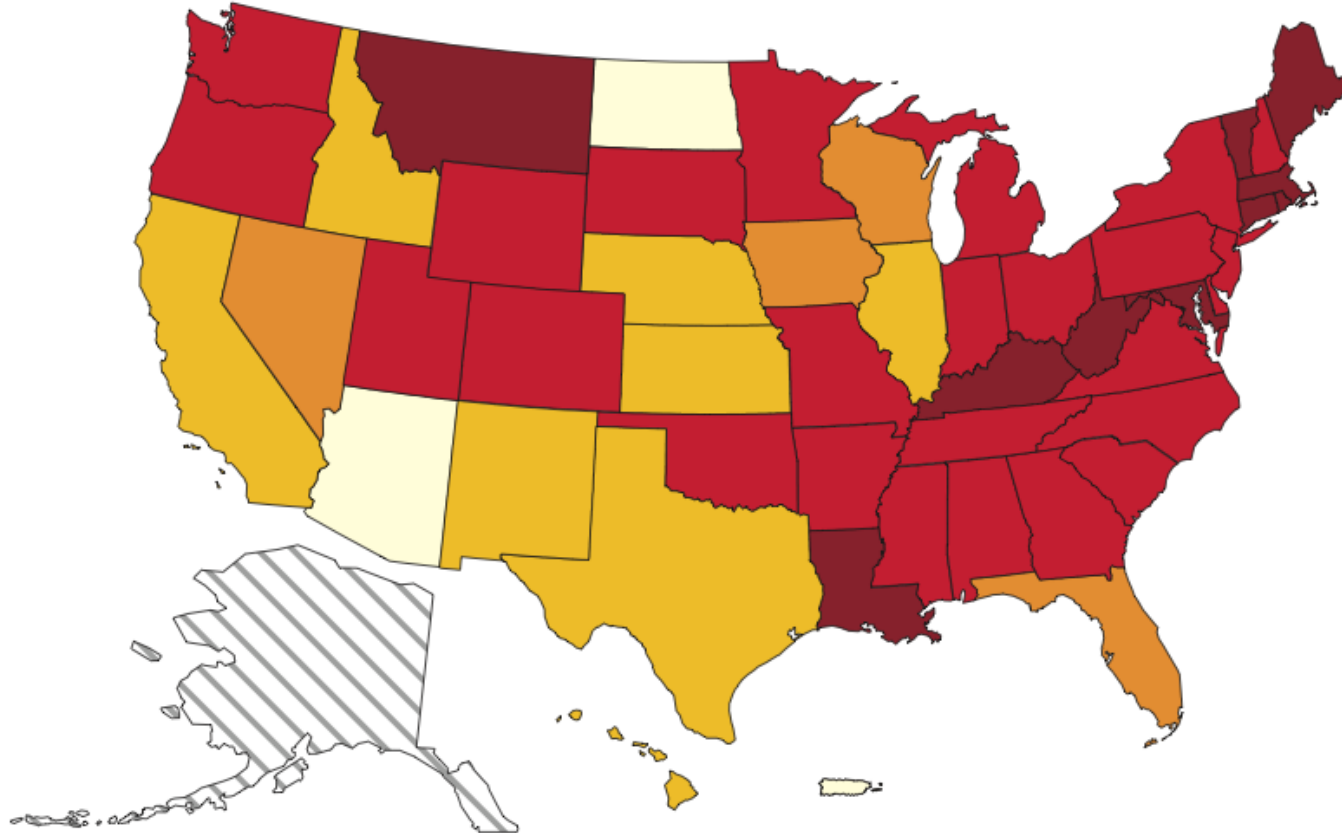
2003

(range 2 – 139)



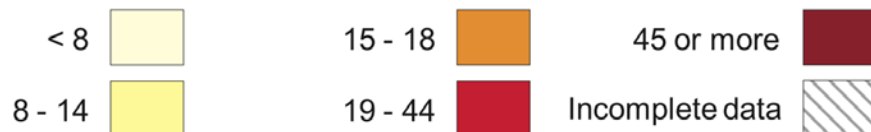
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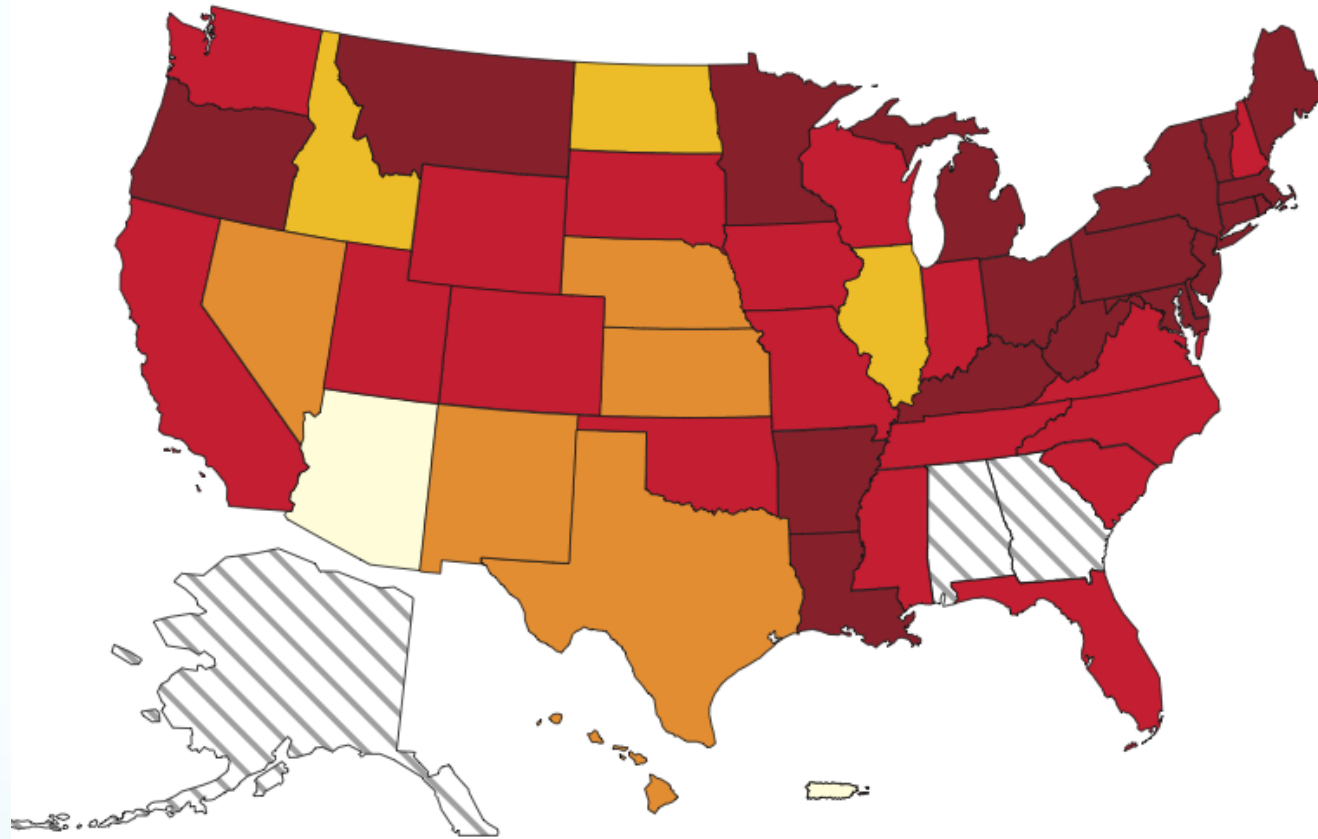
2005

(range 0 – 214)

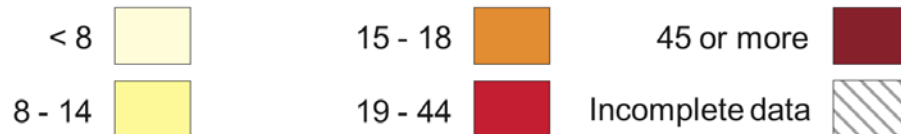


SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

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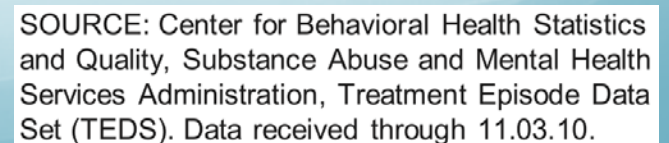


2007
(range 1 – 340)



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.

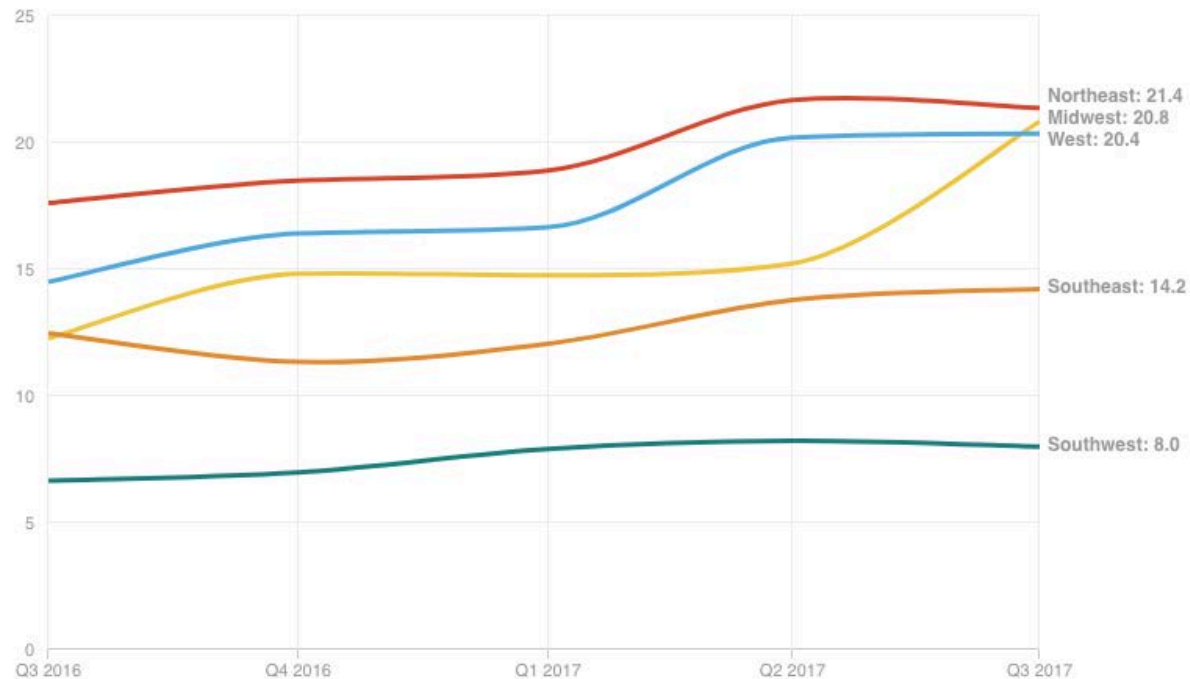
(range 1 – 379)



2016- 2017: 30% increase ER visits

Opioid Overdose Rates Rose Across The Country

Suspected opioid overdose rate per 10,000 emergency hospital visits



Source: Centers for Disease Control and Prevention

Credit: Hilary Fung/NPR

Midwest: 69.7% West: 40.3% NE: 21.3% SW: 20.2% SE: 14%

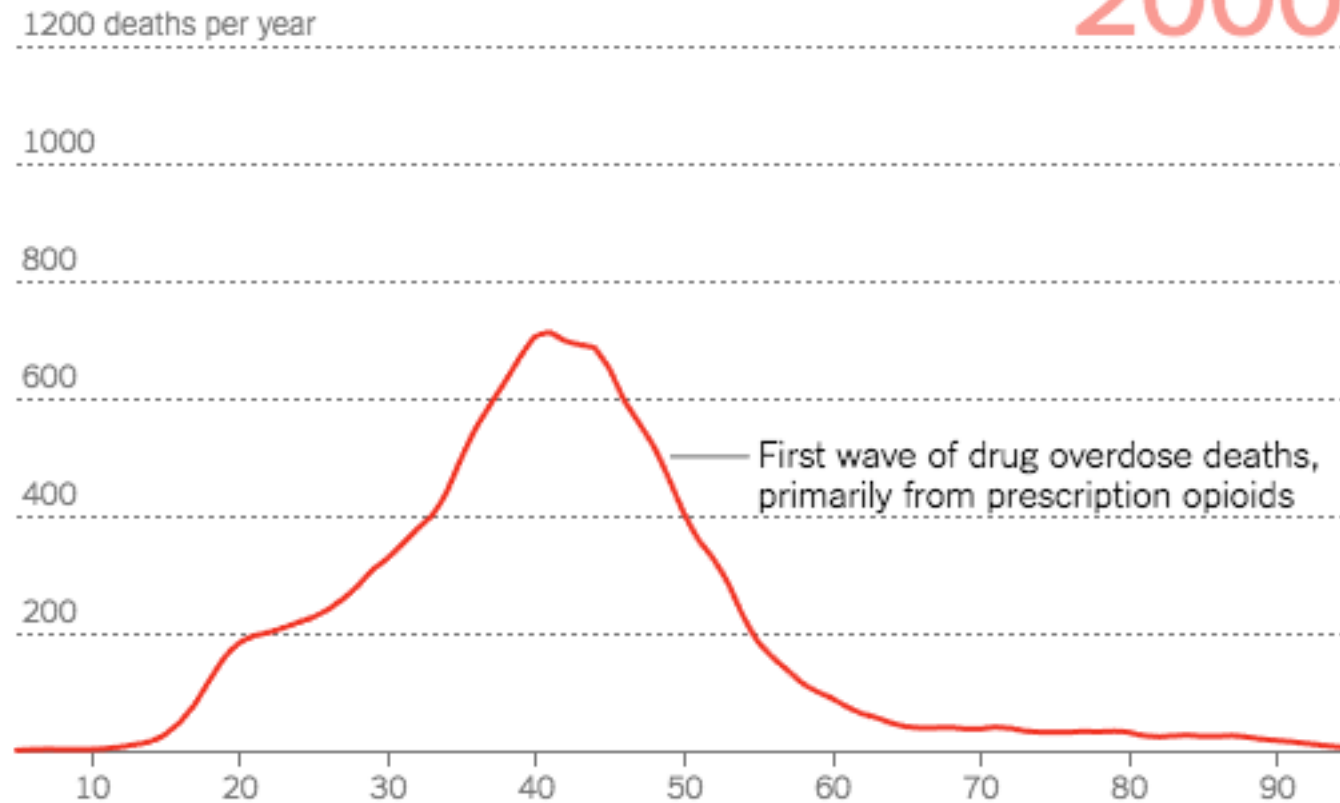
“OPIOID Rx Quadrupled: 1999- 2014”

CDC 2016

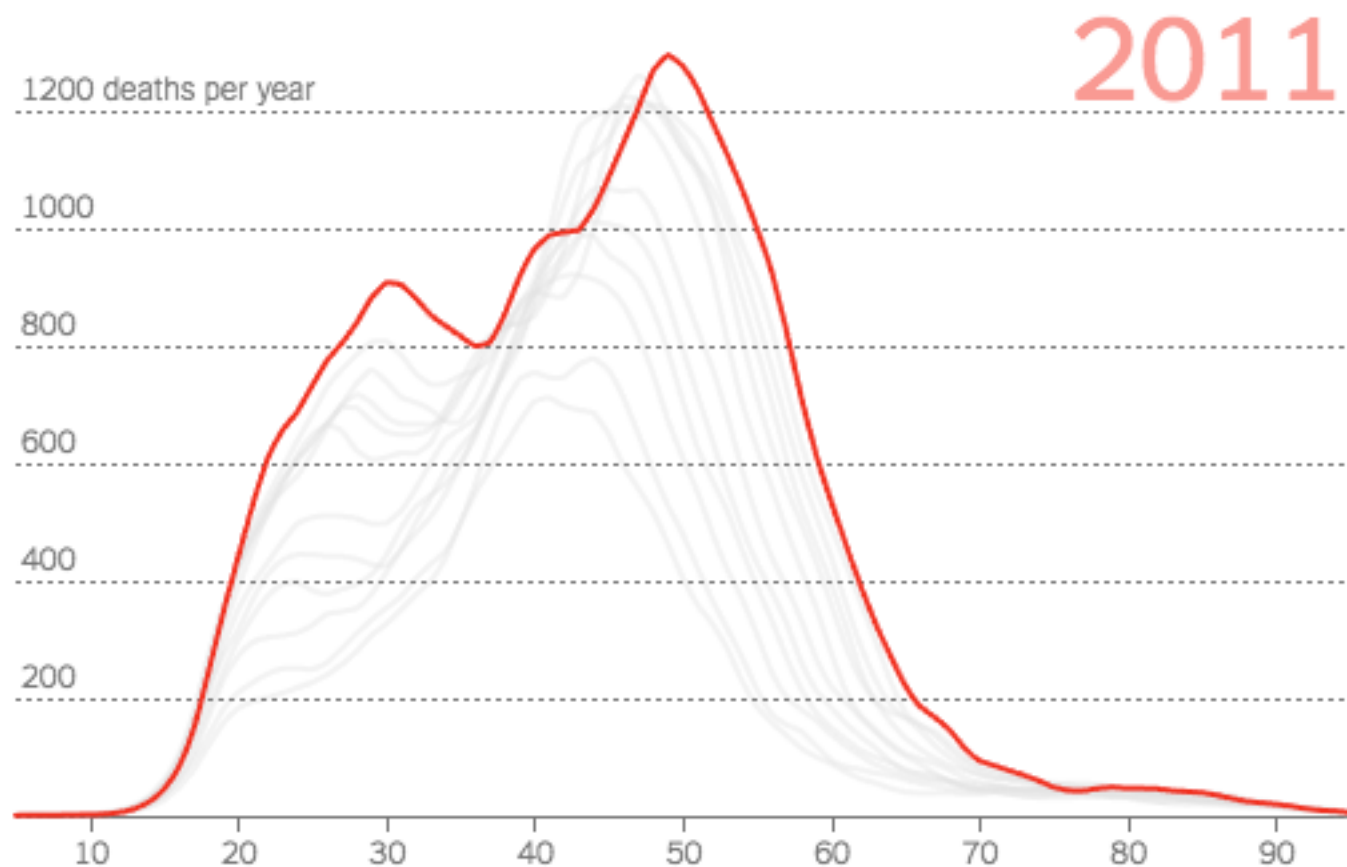
- * 1/3 Americans Opioid Rx (2015)
- * 2 Million Americans Opioid Addiction
- 4 out of 5 Heroin users start with Opioid Rx
- Over 50% Opioid Rx from Friends/Family

Distribution of drug deaths by age

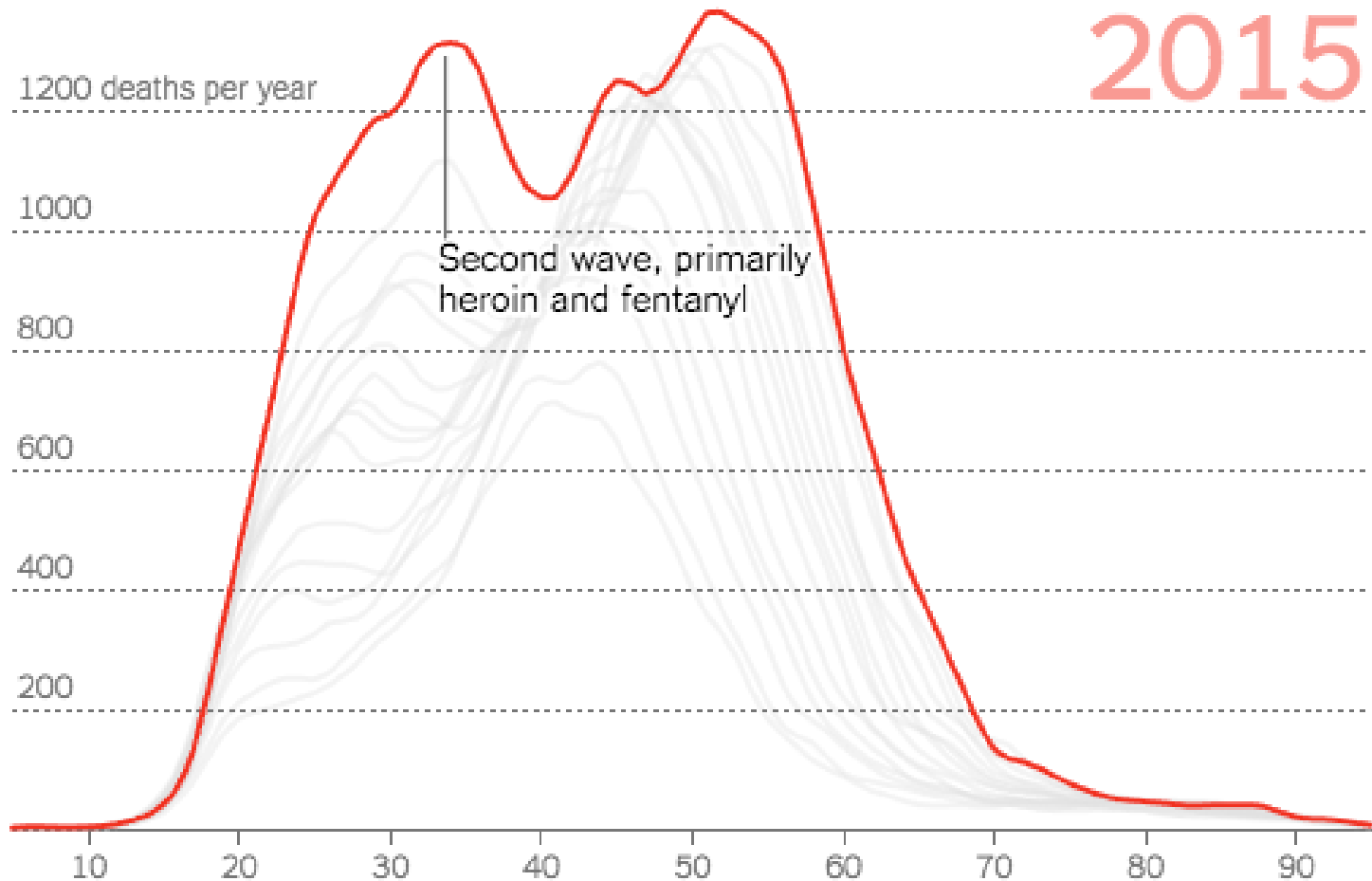
2000



Distribution of drug deaths by age

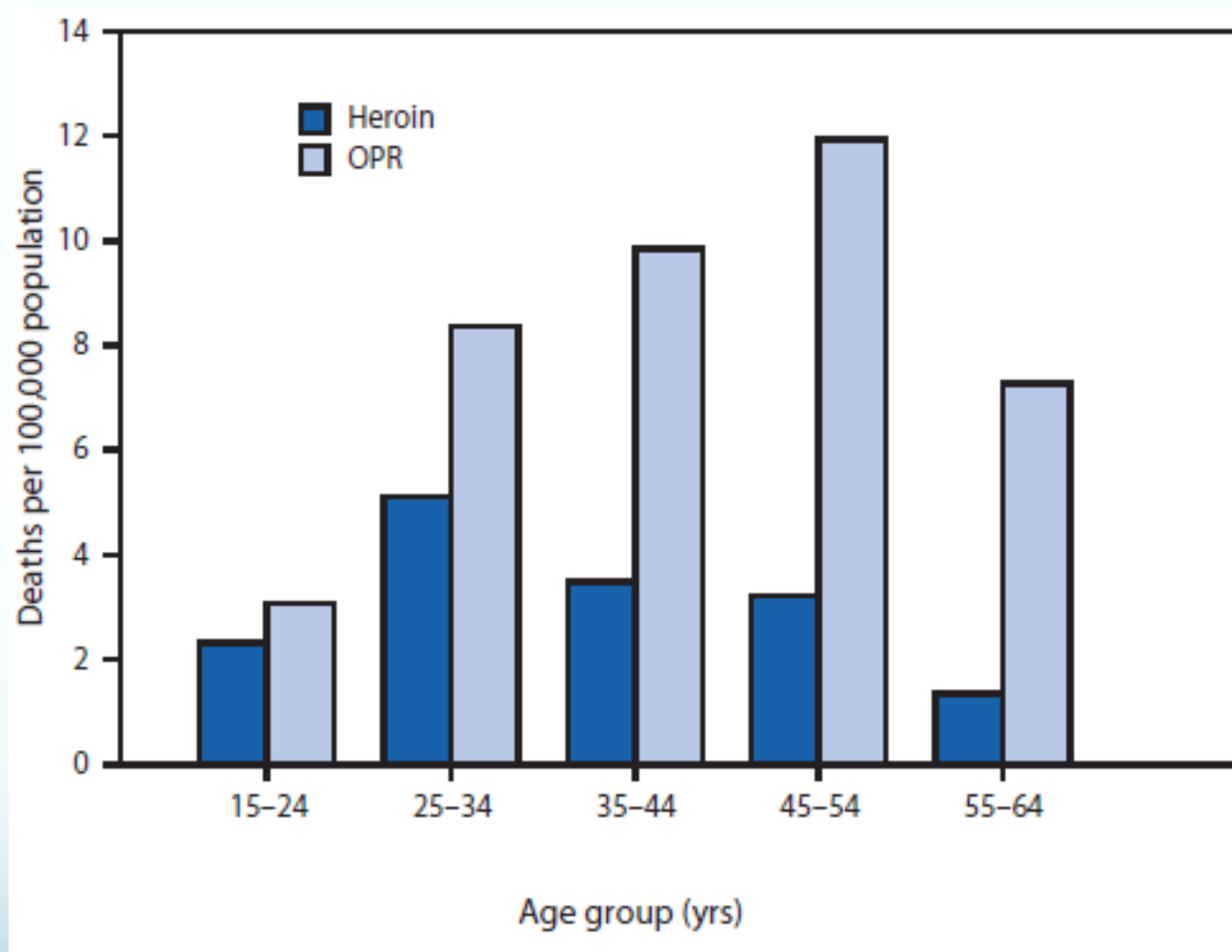


Distribution of drug deaths by age



DEATHS: AGE DISTRIBUTION 2000- 2015

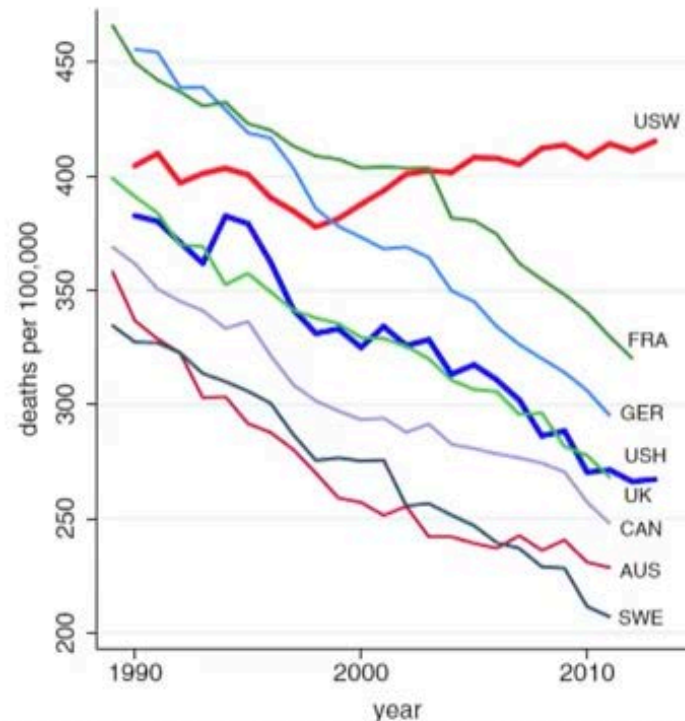
Death rates from overdoses of heroin or prescription opioid pain relievers (OPRs), by age group



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

Fueled by drug crisis, U.S. life expectancy declines for a second straight year

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

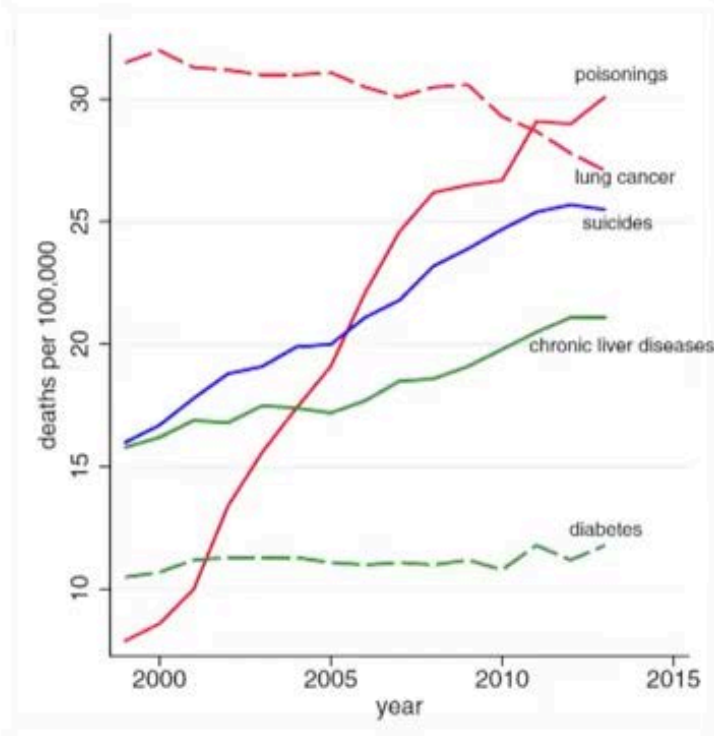


France (FRA), Germany (GER), the United Kingdom (UK), Canada (CAN), Australia (AUS), and Sweden (SWE).

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).

Fueled by drug crisis, U.S. life expectancy declines for a second straight year

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*. November 2, 2015 (online ahead of print).

OPIOID EPIDEMIC: PROFILE

WHO DIES FROM
AN OVERDOSE

- MALE
- WHITE
- 45-54 YEARS OLD
- MOST DIE AT HOME.



Cost Of U.S. Opioid Epidemic Since 2001 Is \$1 Trillion And Climbing

Feb

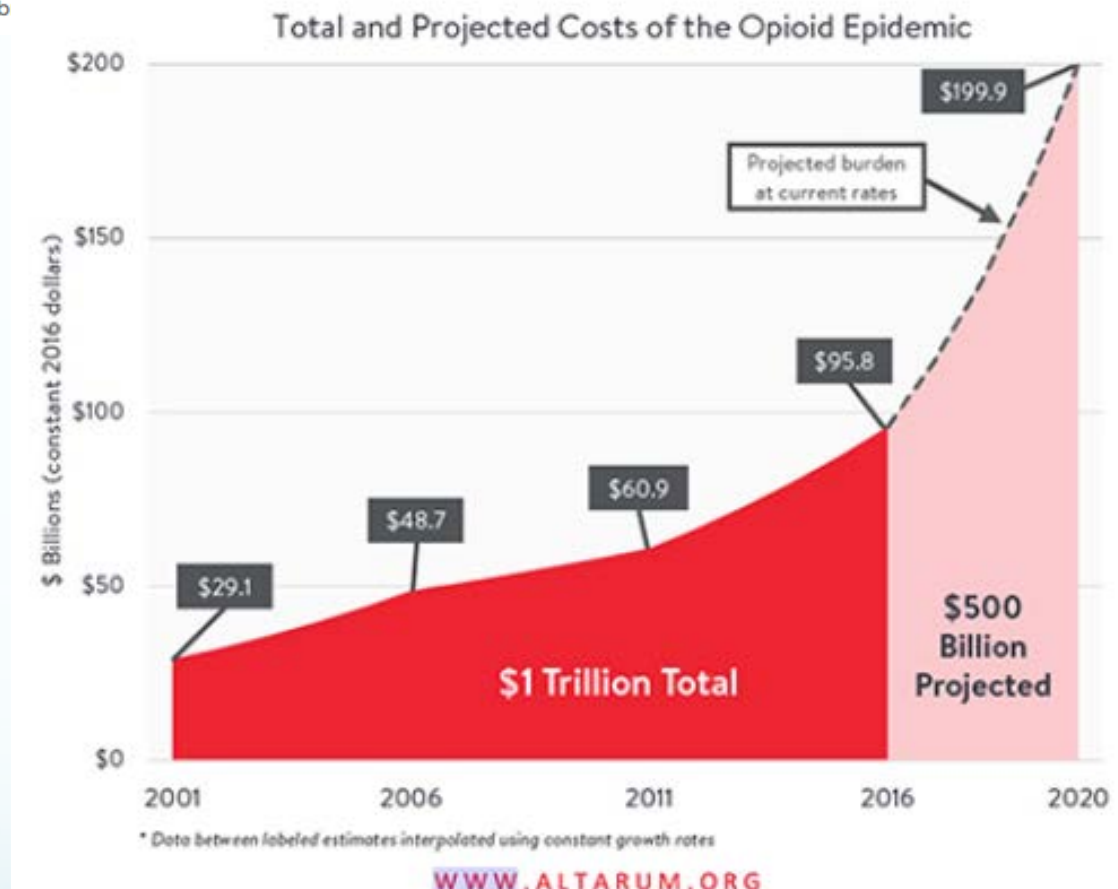


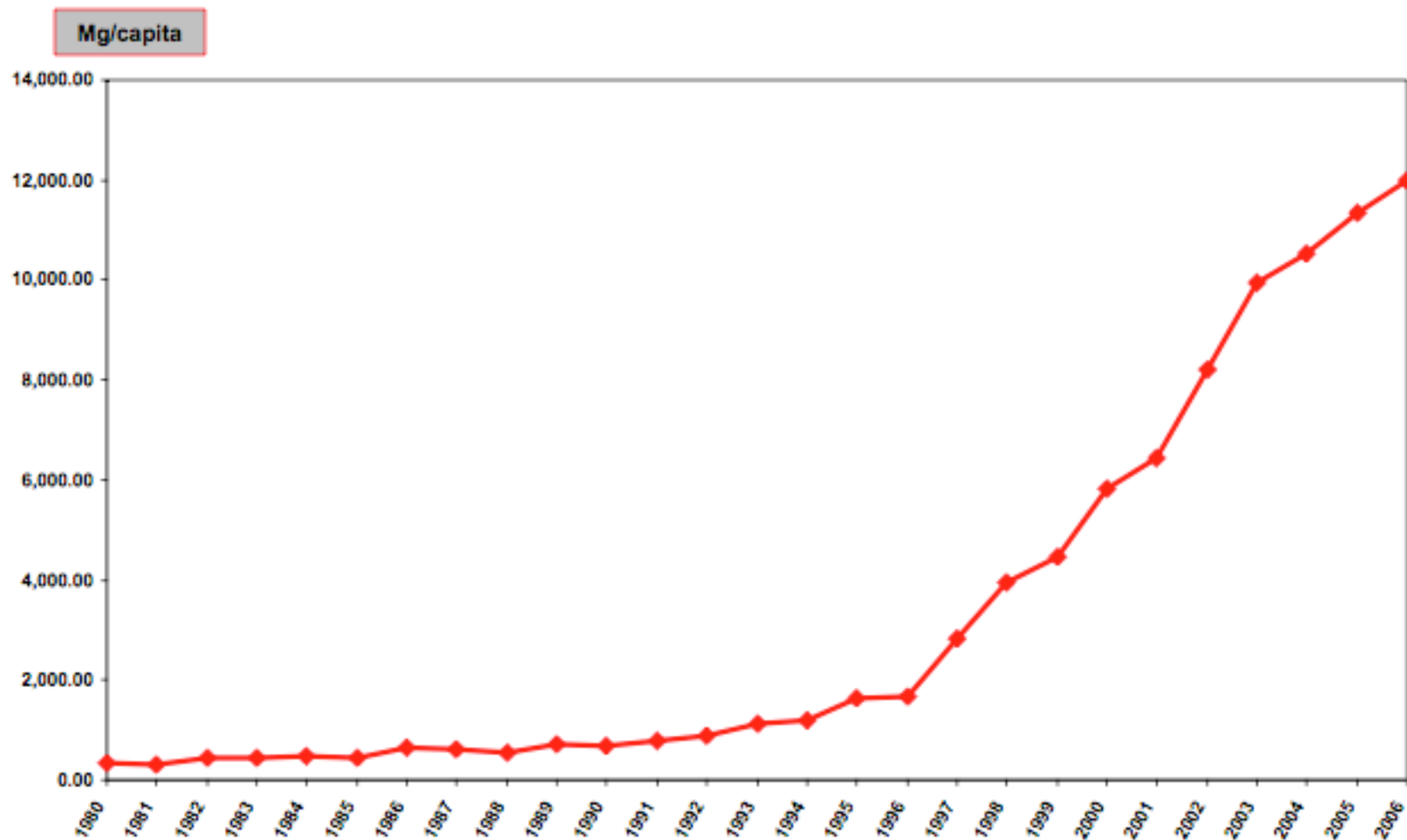
Table 2: Estimated Cost of the Opioid Crisis in 2015 (2015 \$)

VSL Assumption	Fatality Costs	Non-fatality Costs	Total Costs
Age-dependent	\$431.7 billion	\$72.3 billion	\$504.0 billion
Low	\$221.6 billion	\$72.3 billion	\$293.9 billion
Middle	\$393.9 billion	\$72.3 billion	\$466.2 billion
High	\$549.8 billion	\$72.3 billion	\$622.1 billion

OPIOID EPIDEMIC:

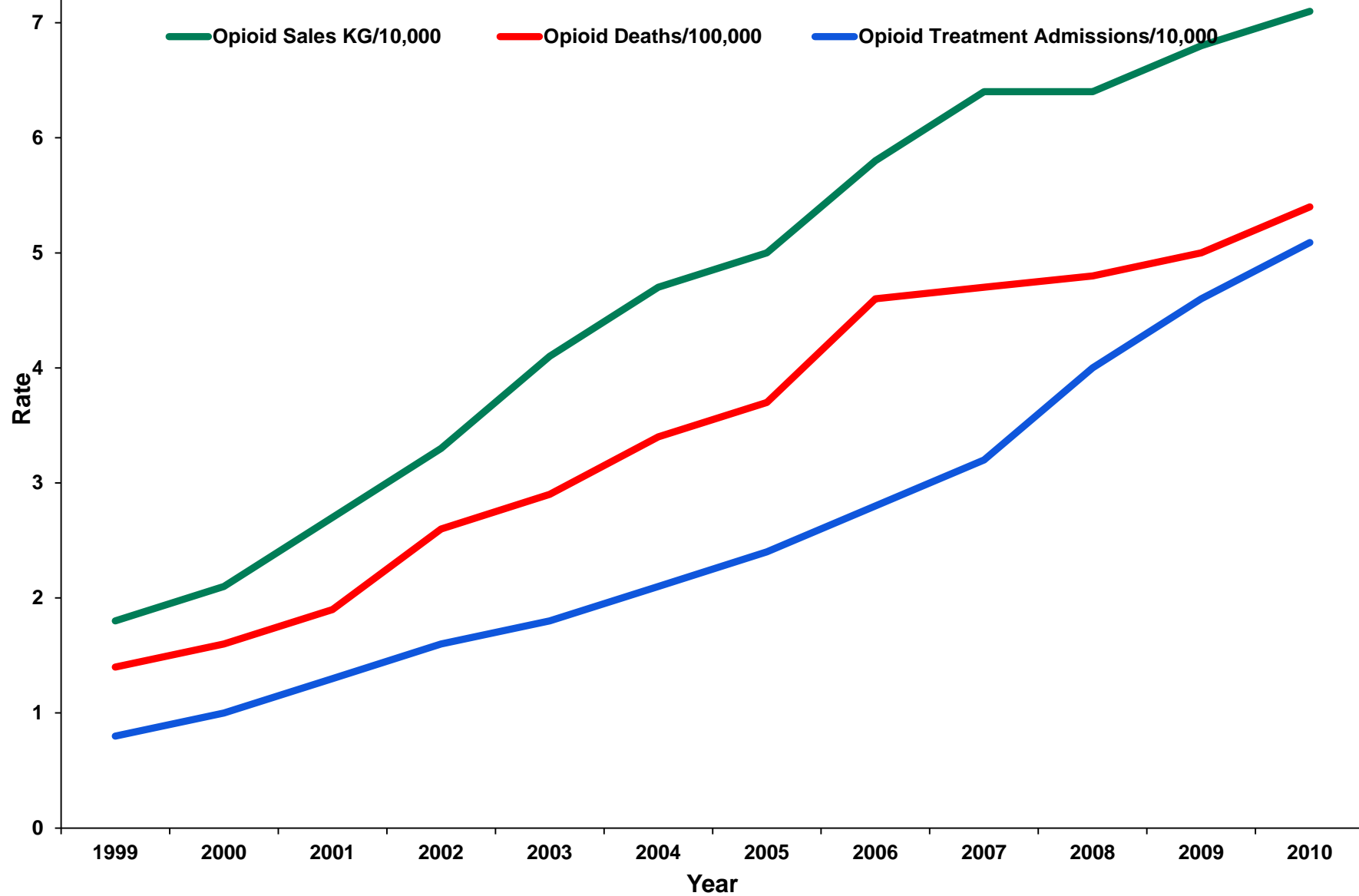
1996

New York Consumption of Hydrocodone 1980 - 2006



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

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





What has changed in America that has led to this crisis: **“power and influence of the pharmaceutical industry”**.

TWO KEY POINTS:

1. *Chronic Non-Cancer Pain is an “under-treated epidemic” which is characterized by needless suffering.*
1. *Opiates are effective to solve this epidemic and their “risks have been greatly exaggerated.”*

“fear should not stand in the way of your pain”

Purdue Pharma





1996 – co-authored a position statement: risk of addiction of opioids “less than 1%”.



Dr. Russell Portenoy

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.

JANE PORTER

HERSHEL JICK, M.D.

Boston Collaborative Drug
Surveillance Program

Waltham, MA 02154

Boston University Medical Center

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.

“development of addiction is rare”



NOT A STUDY: A “TWEET”

#NotRealMedicine

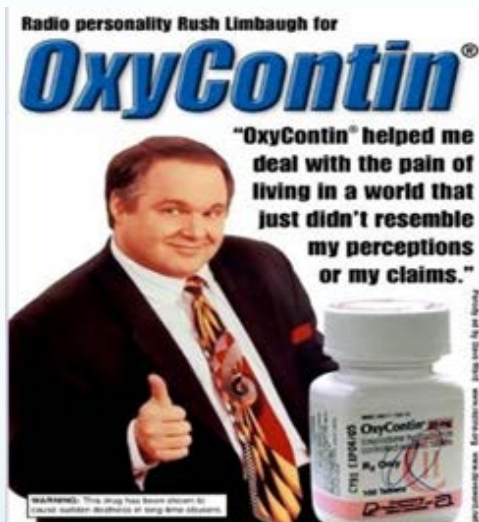
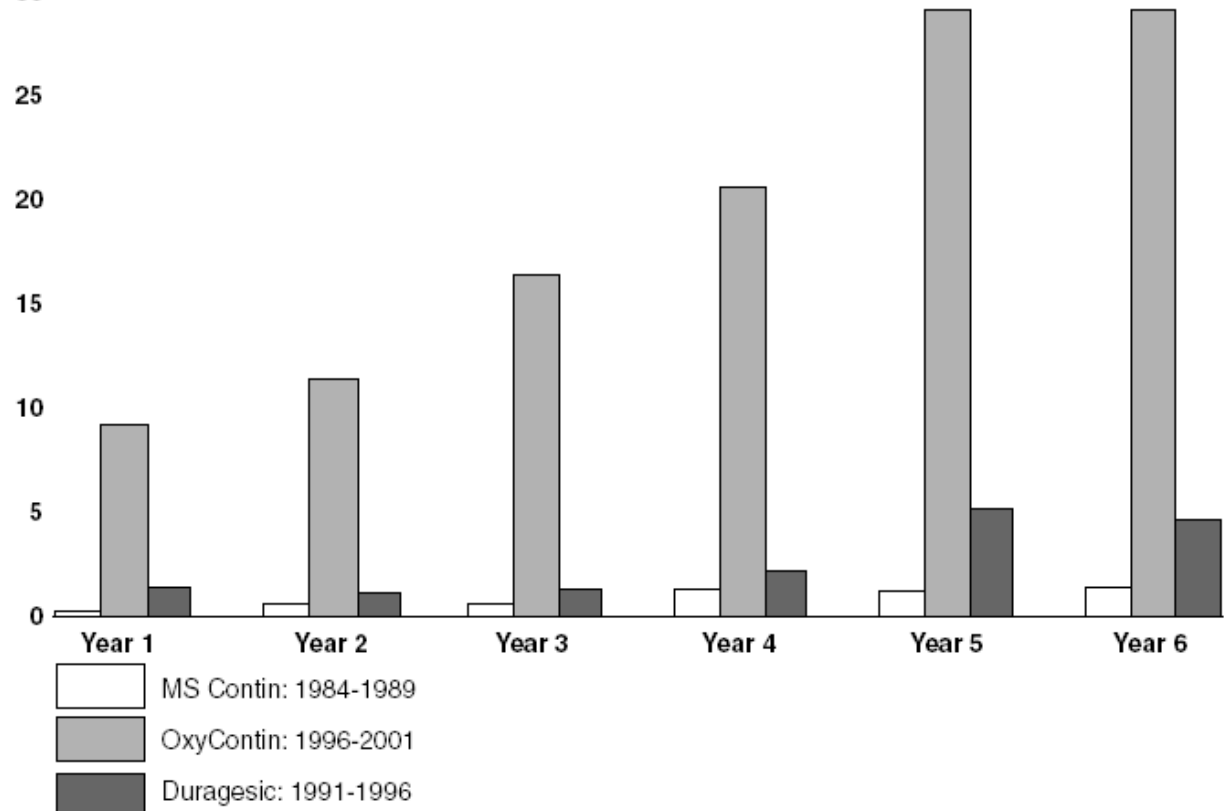
Study: Dentists prescribe only 2% of opioids

By Theresa Pablos, DrBicuspid.com associate editor

Dollars Spent Marketing OxyContin (1996-2001)

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

Absolute dollars in millions



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

PURDUE PHARMA: 2016 BOARD UPDATE

Critical Shifts in The National Discussion about Pain And Opioids

From	To
Undertreatment of Pain	Opioid Epidemic
Abuse	Addiction
Criminal	Victim
FDA	CDC
Benefits Outweigh Risks	Lack of Long-Term Evidence
ADFs as Part of Solution	ADF Value Unproven



CONFIDENTIAL | 18

2016 Mid-Year Board Update



CONVERSATIONS ABOUT ETHICS
A SERIES OF ETHICS LECTURES — FREE AND OPEN TO THE PUBLIC

Drug Dealer, MD

OVERPRESCRIPTION AND THE OPIOID CRISIS IN AMERICA

Speaker: Anna Lembke, MD
Author, *Drug Dealer, MD*
Psychiatrist, Stanford University

Thursday, October 5, 2017

Lunch Seminar:
*Reclaiming Balance
in a Dopamine-Saturated World*
11:30 a.m. - 2:00 p.m.
Ecumenical Center
8310 Ewing Halsell | 210-616-0885

Evening Keynote:
Drug Dealer, MD
5:30 p.m. Reception | 6-7 p.m. Lecture
UT Health San Antonio | Pestana Lecture Hall 3.104A
7703 Floyd Curl | 210-567-0795

Register at ConversationsAboutEthics.org

Methodist Healthcare Ministries
OF NORTH TEXAS
Methodist Healthcare Ministries of North Texas is an Equal Opportunity Employer.

THE ECUMENICAL
CENTER FOR
RELIGION, ETHICS & HEALTH

UT Health
San Antonio
UNIVERSITY OF TEXAS
SAN ANTONIO, TEXAS

CME: This activity has been approved for AMA PRA Category 1 Credits™. This presentation meets the Texas Medical Board criteria for lifetime continuing medical education involving the study of medical ethics and/or professional responsibility.

CPE: The Ecumenical Center is an approved provider of continuing education by the State of Texas for the following: LPC, LMFT, LSW, LCSW and LMSW.

The lunchtime seminar provides 2.0 Ethics Continuing Education Units and the evening keynote provides 1.0 Ethics Continuing Education Unit.



ROLE OF DDS/MD ?



“ DOCTORS ARE CAUSING THIS ADDICTION IN PATIENTS THEY PRESCRIBE TO”

ANDREW KOLODNY MD

EXECUTIVE DIRECTOR (PROP)


“OPIOID Rx Quadrupled: 1999- 2014”

CDC 2016

- * 1/3 Americans Opioid Rx (2015)
- * 2 Million Americans Opioid Addiction
- * 21 Million Americans SUD/ 1.4% TX
- 4 out of 5 Heroin users start with Opioid Rx
- Over 50% Opioid Rx from Friends/Family


OPIOID EPIDEMIC: DDS/MD ROLE

- **OVERDOSE DEATHS:** MULTIPLE Rx PRESCRIBERS
- **60% DEATHS** HAD DOCTOR PRESCRIPTIONS
- 72% HAD LEFTOVER Rx OPIOID AND 71% KEPT IT
- 8% ADMIT ILLICIT USE
- Rx OPIOD DOUBLED FOR ADOLESCENTS/YOUNG ADULTS (1994 to 2007)
- **FP HIGHEST PRESCRIBERS**
- **DDS HIGHEST PRESCRIBERS AGE 10- 19**
- WESTERN EUROPE 4X LESS OPIOID USE



Would you give
your child
HEROIN
to remove a
wisdom tooth?

Ask Your Dentist How Prescription Drugs Can Lead to Heroin Abuse.

 Partnership for a Drug-Free New Jersey
in Cooperation with the Governor's Council on Alcoholism and Drug Abuse
and the NJ Dept. of Human Services

BEFORE THEY PRESCRIBE - YOU DECIDE.
drugfreej.org

HOW SHOULD WE RESPOND?

OPIOD Rx: DAYS/#PILLS

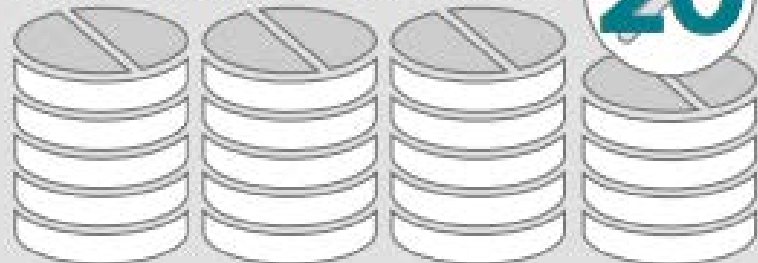
DAYS' SUPPLY AND QUANTITY OF PILLS PRESCRIBED BY DENTISTS AMONG PATIENTS WITH **PRIVATE INSURANCE** FOR 2010-15³



Median Number
of Days' Supply:

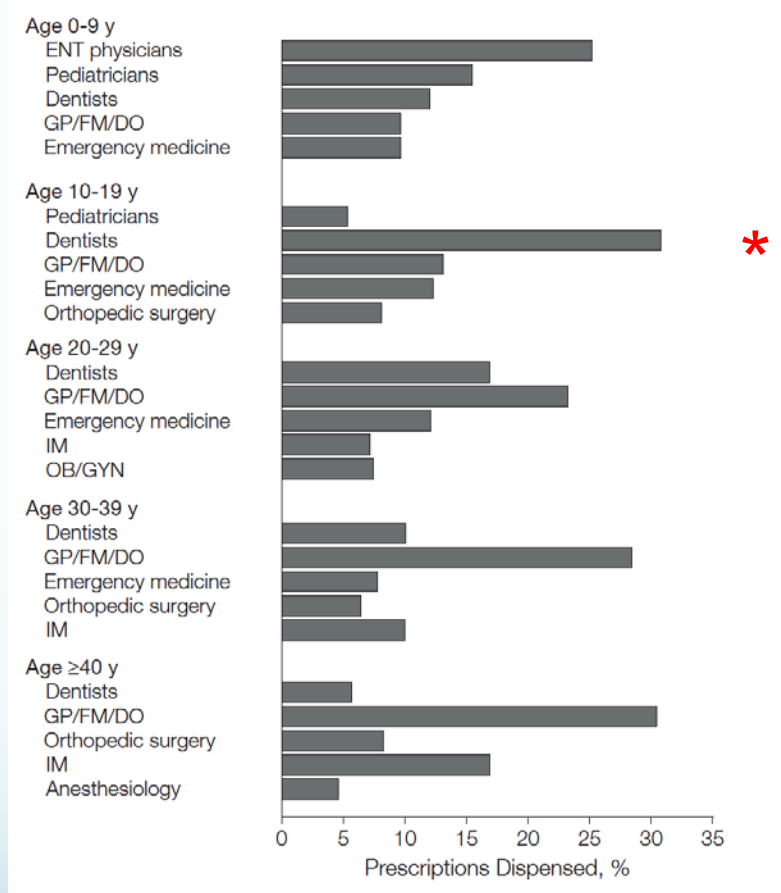
3 DAYS

Median Quantity of Pills Prescribed:



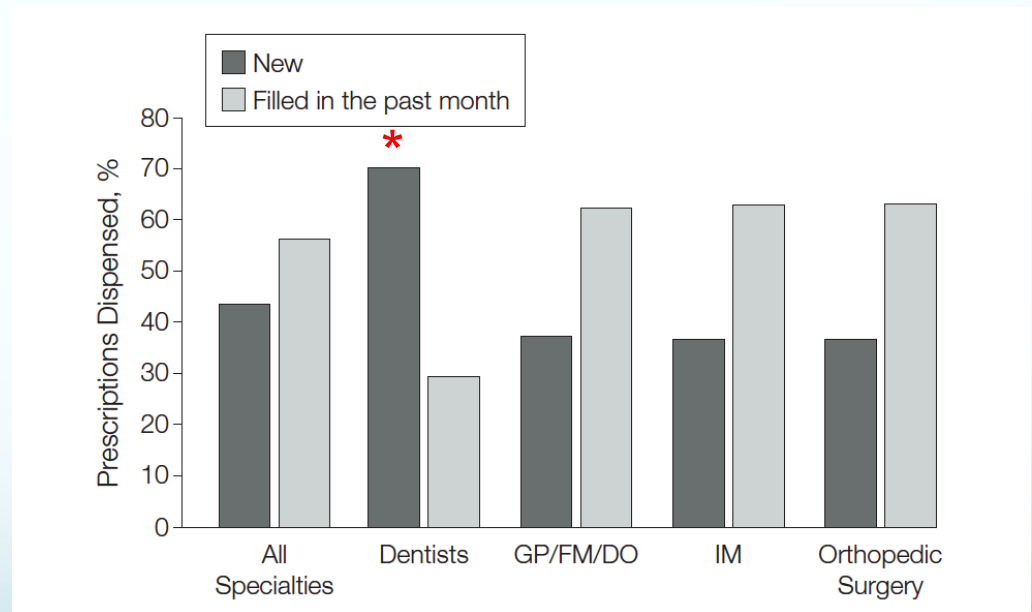
Rigoni et.al. 2017

DENTIST Rx PATTERN



LARGEST

MOST



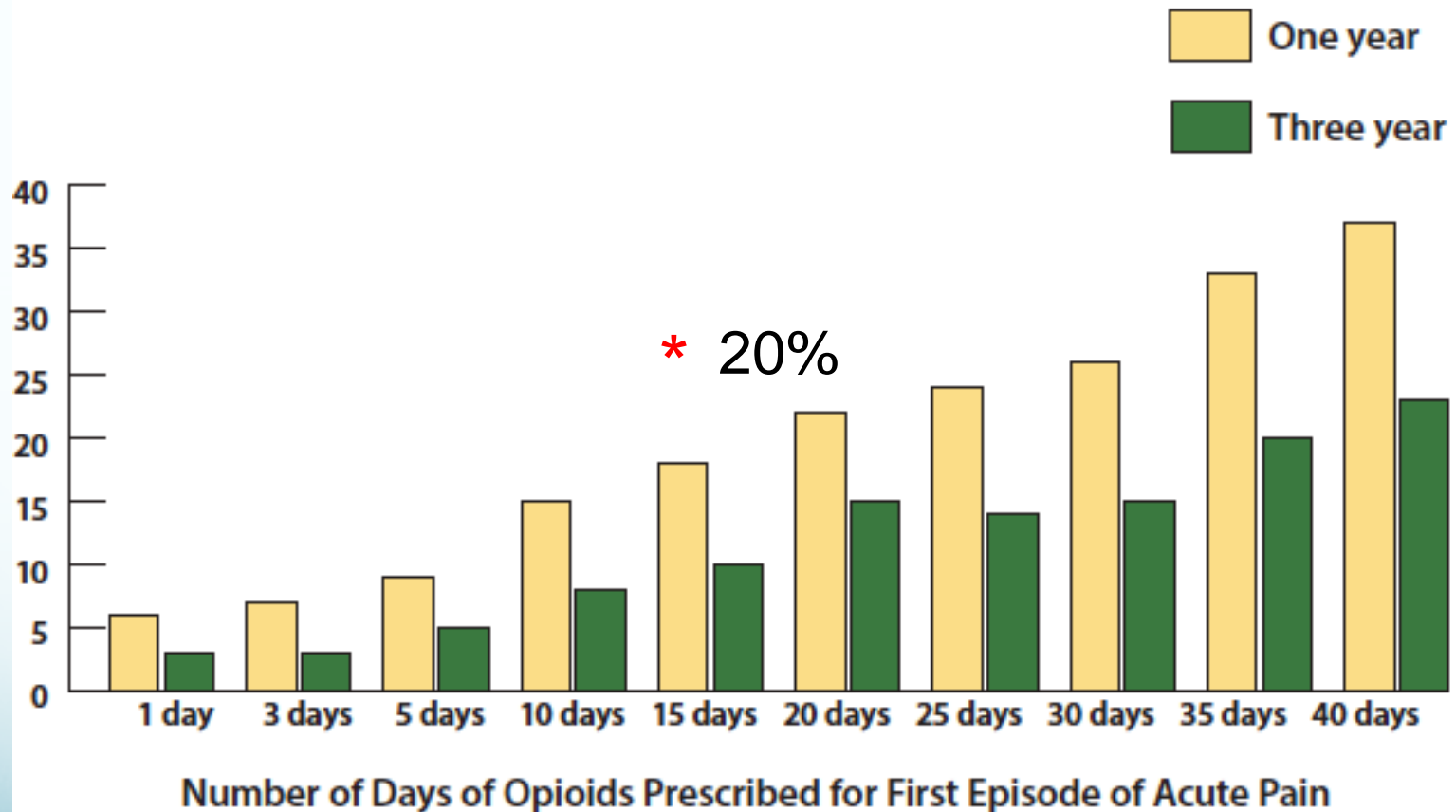
- “Legitimate opioid use before high school graduation is independently associated with a 33% increase in the risk of future misuse after high school”

Prescription Opioids in Adolescence and Future Opioid Misuse

Richard Miech, PhD^a, Lloyd Johnston, PhD^a, Patrick M. O'Malley, PhD^a, Katherine M. Keyes, PhD^b, Kennon Heard, MD^c

Journal Pediatrics 2015

Any Use of Opioids for Acute Pain Increases the Probability of Chronic Opioid Use .⁵⁶





CNN Exclusive: The more opioids
doctors prescribe, the more
money they make

Opioids for chronic noncancer pain

A position paper of the American Academy of Neurology

Gary M. Franklin

- LIBERAL EXPANSION OF OPIOID Rx 1990's
- EFFICACY OF OPIOID Rx FOR CNCP: WEAK
- **OPIOID Rx FOR CNCP:**

“decrease pain relief, functional capacity and quality of life”
- CHRONIC OPIOID Rx: INCREASE MORBIDITY
- **>90 MME: 9X OVERDOSE RISK**

NEUROLOGY 2014

Opioids for chronic noncancer pain

A position paper of the American Academy of Neurology

Gary M. Franklin

OPIOIDS FOR CHRONIC
CONDITIONS:

“NOT WORTH THE RISK”



FEDERAL OPIOID: INITIATIVES

- **PAIN MANAGEMENT TASK FORCE**

“GAPS AND INCONSISTENCIES CBP’S FOR PAIN MANAGEMENT”

- * **CDC PRESCRIBING ESTIMATE WORKGROUP**

“OBTAIN BROAD AND TRANSPARENT INPUT”

- **HEAL INITIATIVE**

“ 1.1 BILLION FUNDING 2018”

MINNESOTA OPIOID EPIDEMIC



“Prince”

Died April 21, 2016.

Cause of death – fentanyl overdose

Reliance on opioids: One of the greatest mistakes in medical history

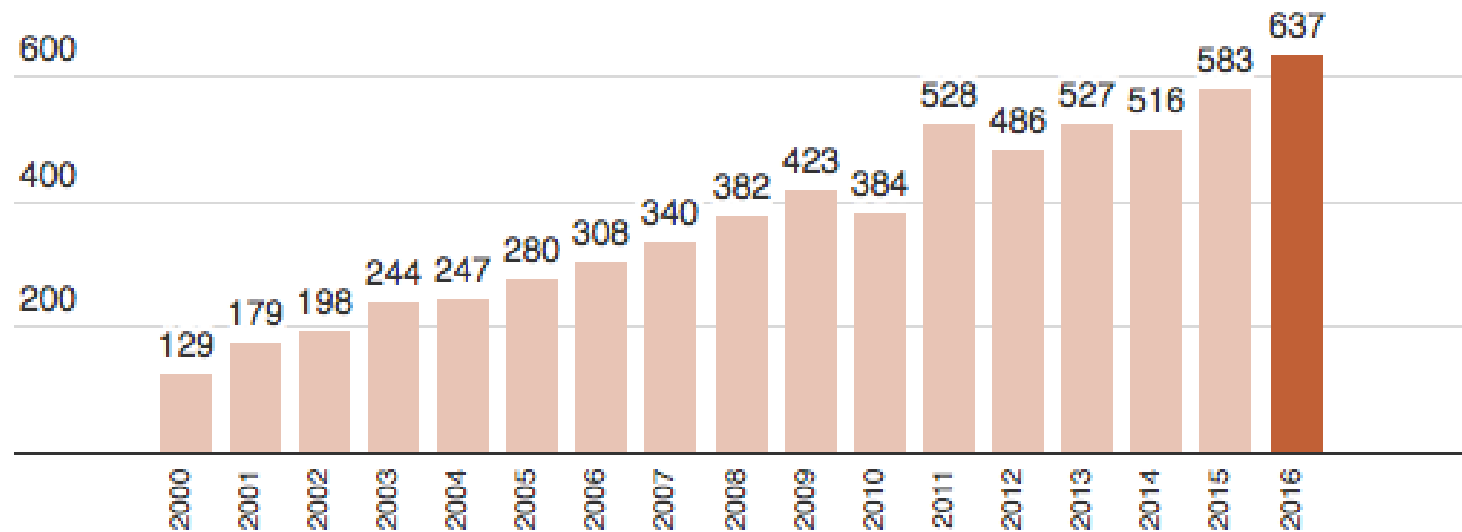


“DENTAL”

The worst public health crisis in our time was brought about by the practice of medicine.

Drug overdose deaths in Minnesota continue to rise

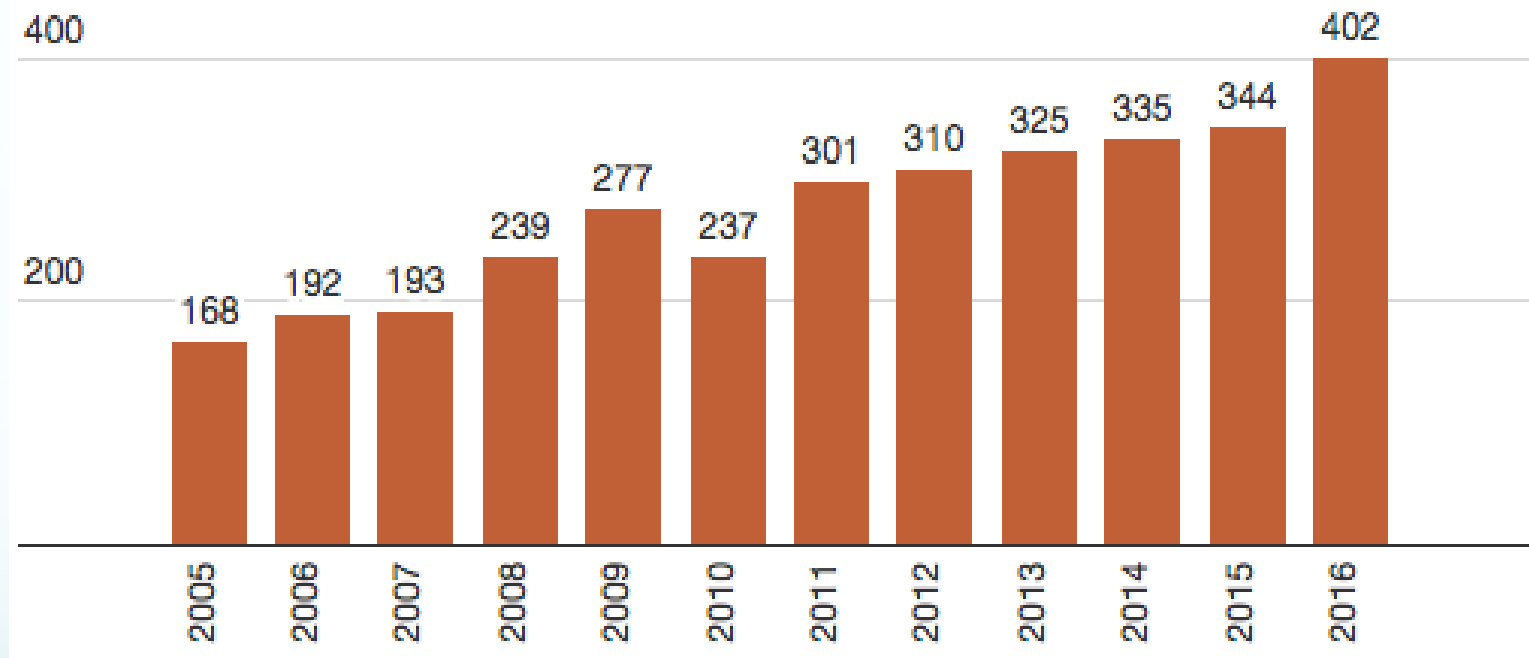
The death tally in 2016 was nearly six times higher than in 2000.



Source: Minnesota Department of Health • Created with Datawrapper

Total opioid-related deaths in Minnesota since 2005

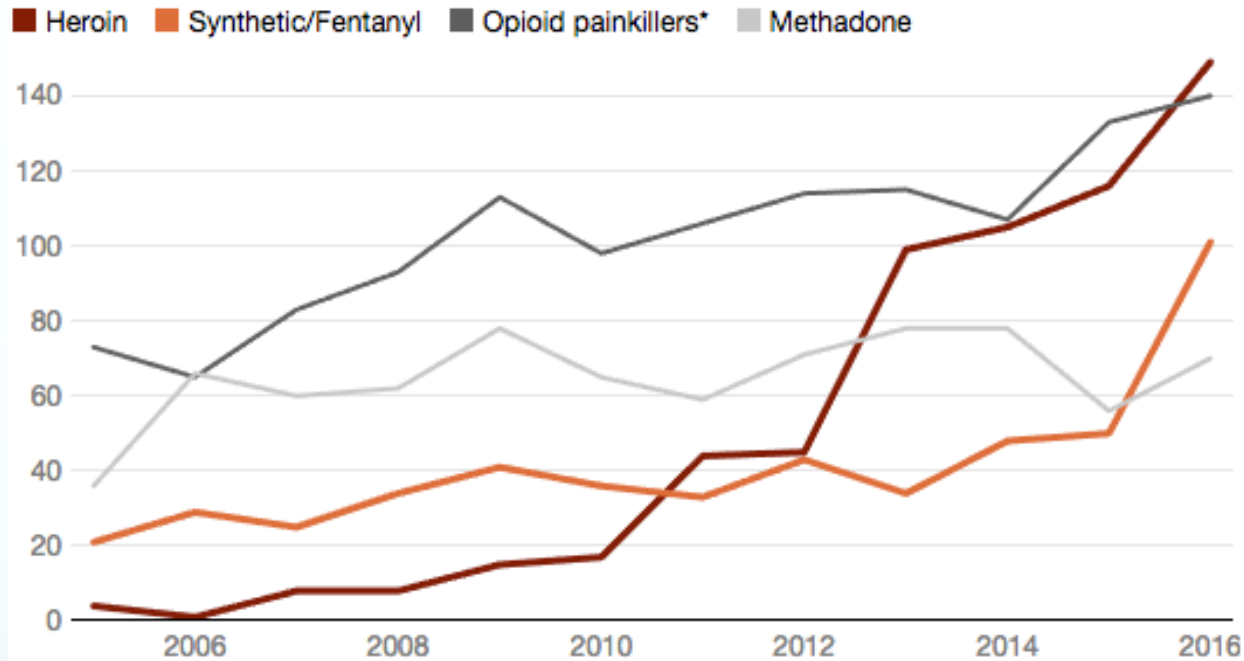
Heroin and fentanyl abuse resulted in an overall increase in opioid-related deaths in 2016.



* MNNESOTA OPIOID DASHBOARD

Opioid-related deaths in Minnesota by drug type

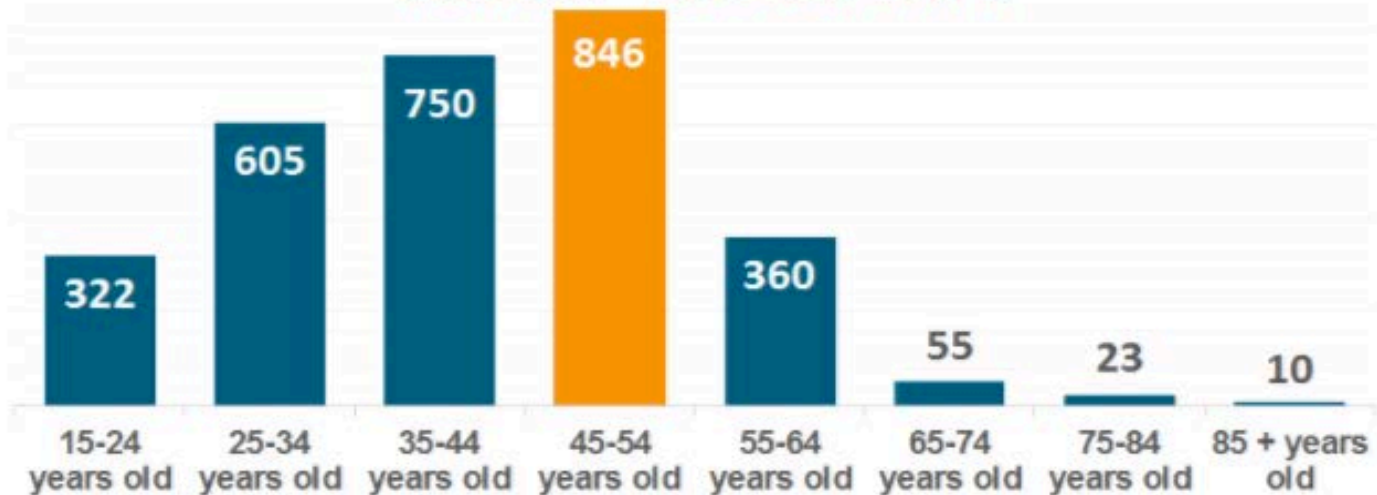
More death certificates listed illicit heroin as a contributing cause of death in 2016 than common prescribed opioid painkillers such as oxycodone.



**This category includes hydrocodone and oxycodone, but not methadone or synthetics/ fentanyl. In some cases, deaths were linked to multiple categories of opioid drugs.*

OPIOID EPIDEMIC: MN

More people **between the ages of 45 and 55 years old** died of opioid overdose in Minnesota than those in any other age group between 1999 and 2014.

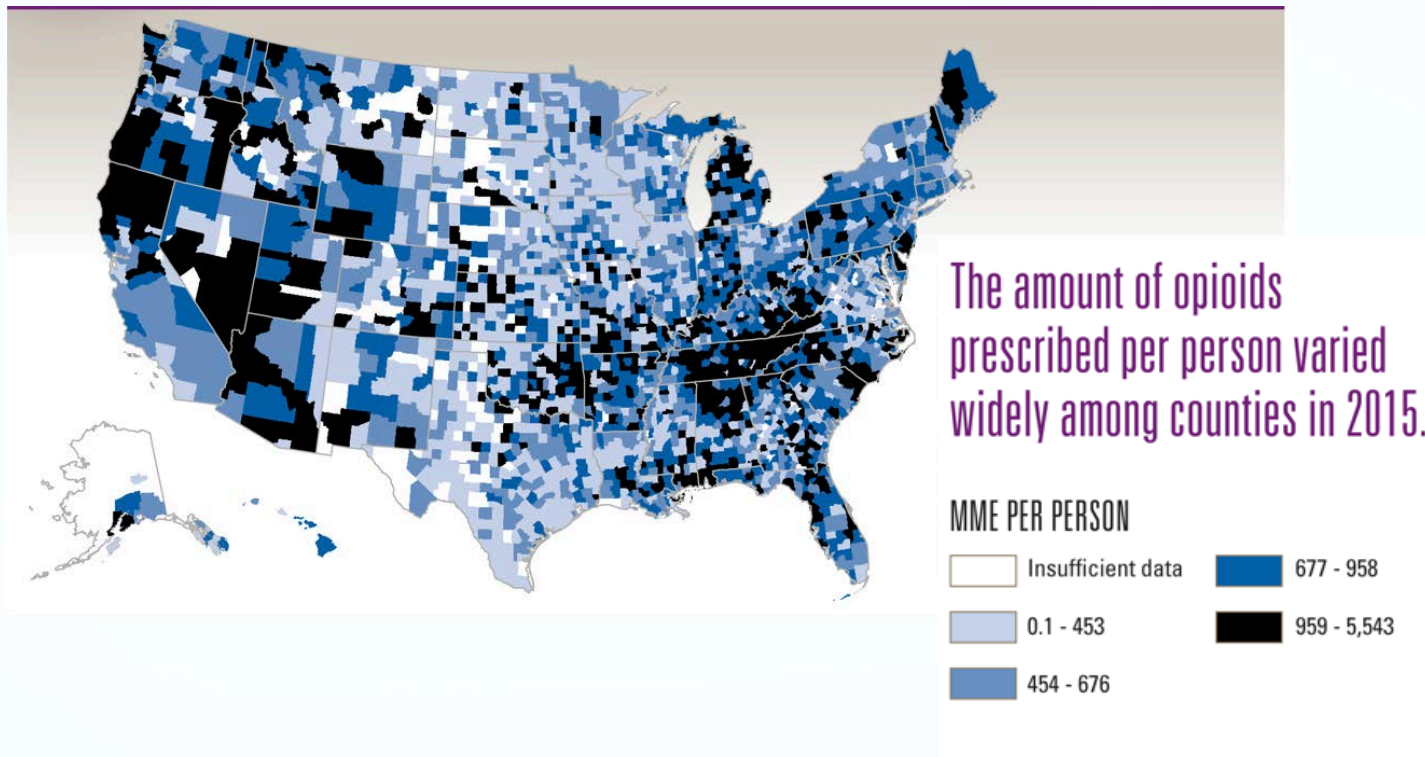


OPIOID EPIDEMIC: MN

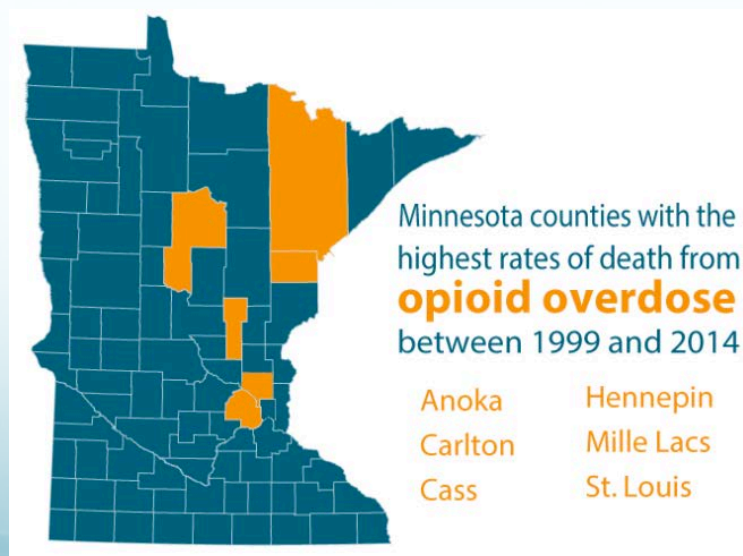
WHO DIES FROM
AN OVERDOSE

- MALE
- WHITE
- 45-54 YEARS OLD
- MOST DIE AT HOME.





MINNESOTA



Minnesota hospital confronts dilemma of opioid addicts who are expectant moms



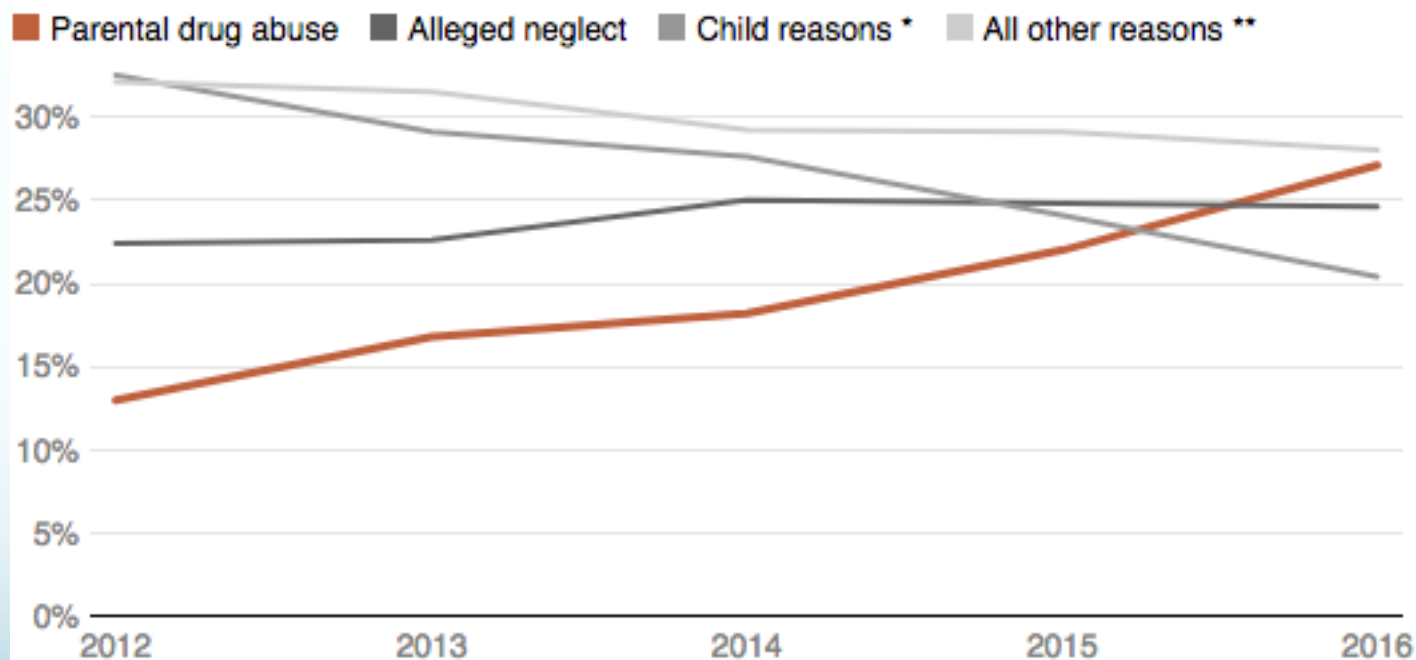
2012-- 624 NEWBORNS EXPOSED DRUGS/ALCOHOL

2016-- 1,300 NEWBORNS EXPOSED DRUGS/ALCOHOL

Opioid crisis strains Minnesota's child protection system

Parental drug abuse forces thousands into foster care.

Percentage of removals, by primary reason



MN NATIVE AMERICAN OPIOID EPIDEMIC

DEC 18, 2017:

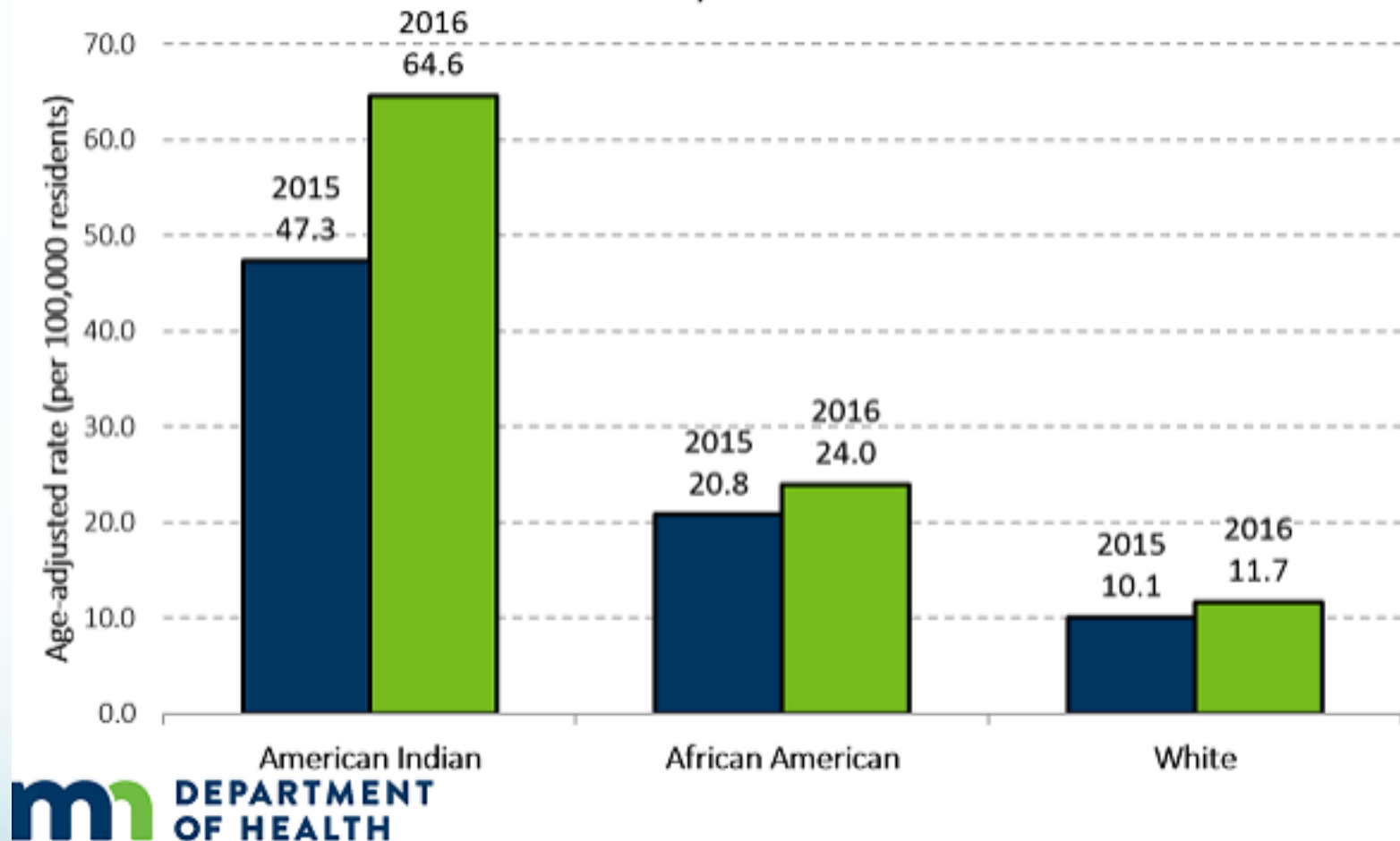
“7 OVERDOSES AND 2 DEATHS IN 48 HOURS”

WHITE EARTH POLICE

| Native Americans Slammed By Opioid Crisis

- **5x OVERDOSE DEATHS (1999- 2015)**
- **AI OVERDOSE DEATH IS HIGHEST/USA**
- **OPIOID Rx MISUSE 2X WHITES (1/10)**
- **6X OPIOID DEATHS (WHITES)**

Drug overdose mortality rates by race,
MN Residents, 2015 and 2016



5X MORE LIKELY THAN WHITES

UM SOD: INITIATIVE

5 opioids risk management strategies

1. Prevention & education
2. Minimizing early exposure
3. Reducing inappropriate supply
4. Treating the at-risk & high-risk
5. Supporting chronic populations and those in recovery

TARGET: 1, 2, 3

ACUTE POSTOPERATIVE PAIN: Rx PROTOCOL MN SOD

- PURPOSE:

“TO ESTABLISH A PROTOCOL FOR SAFE POSTOPERATIVE ACUTE PAIN OPIOID Rx AND ARE INTENDED TO SUPPLEMENT AND NOT REPLACE INDIVIDUAL PRESCRIBER’S CLINICAL JUDGEMENT”

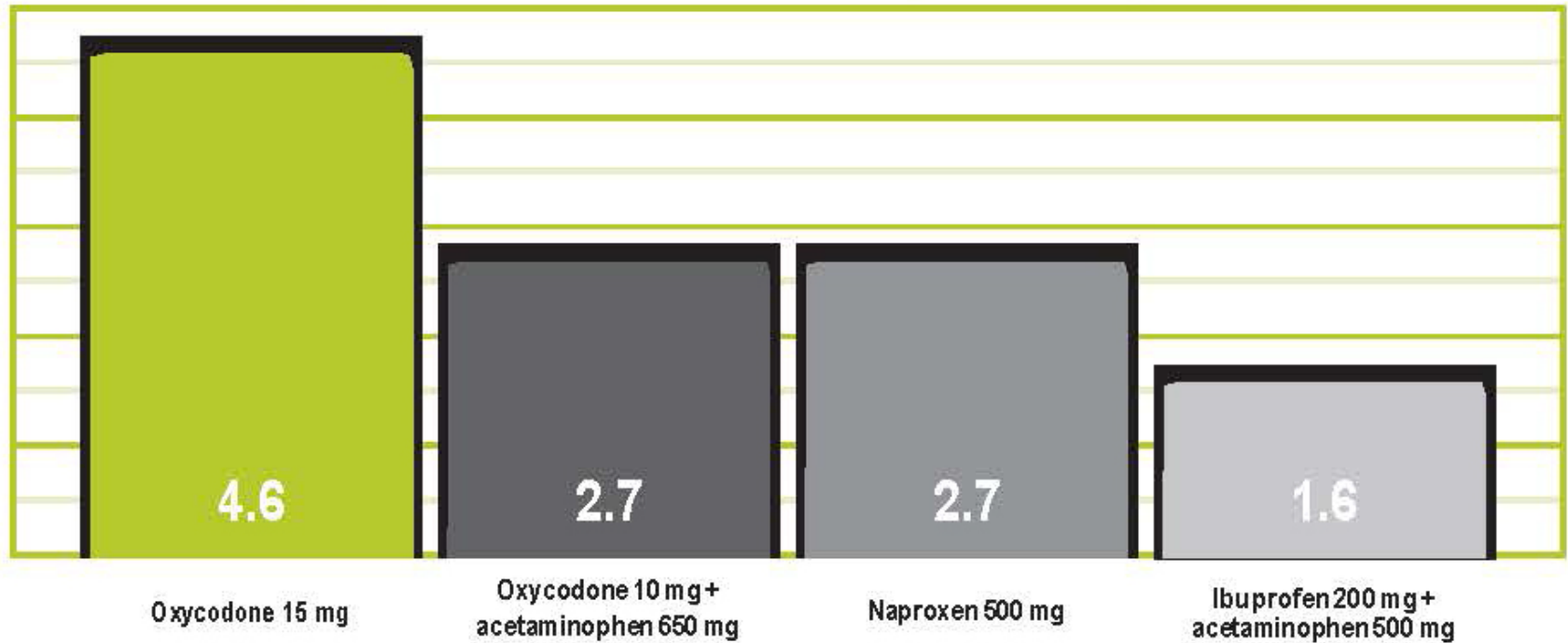
Rx OPIOID: GUIDELINE

NSAIDS FIRST LINE

- **All opioid Rx must be documented in Axiom** as to the indications ie. allergy, inadequate pain management from NSAIDS etc.
- 2. Primary use of e-Rx for opioid Rx
- 3. Pre-emptive use of NSAIDS or ACETAMINOPHEN prior to dental procedures under local
- 4. Pre-emptive use of IV Toradol prior to dental procedures under IV
- 5. Routine use of long acting LA after all dental procedures
- 6. Recommend that opioid Rx be limited to a 3 day supply
- 7. Mandatory consultation with appropriate MD or DDS with hx of addiction tx and or on chronic opioid Rx

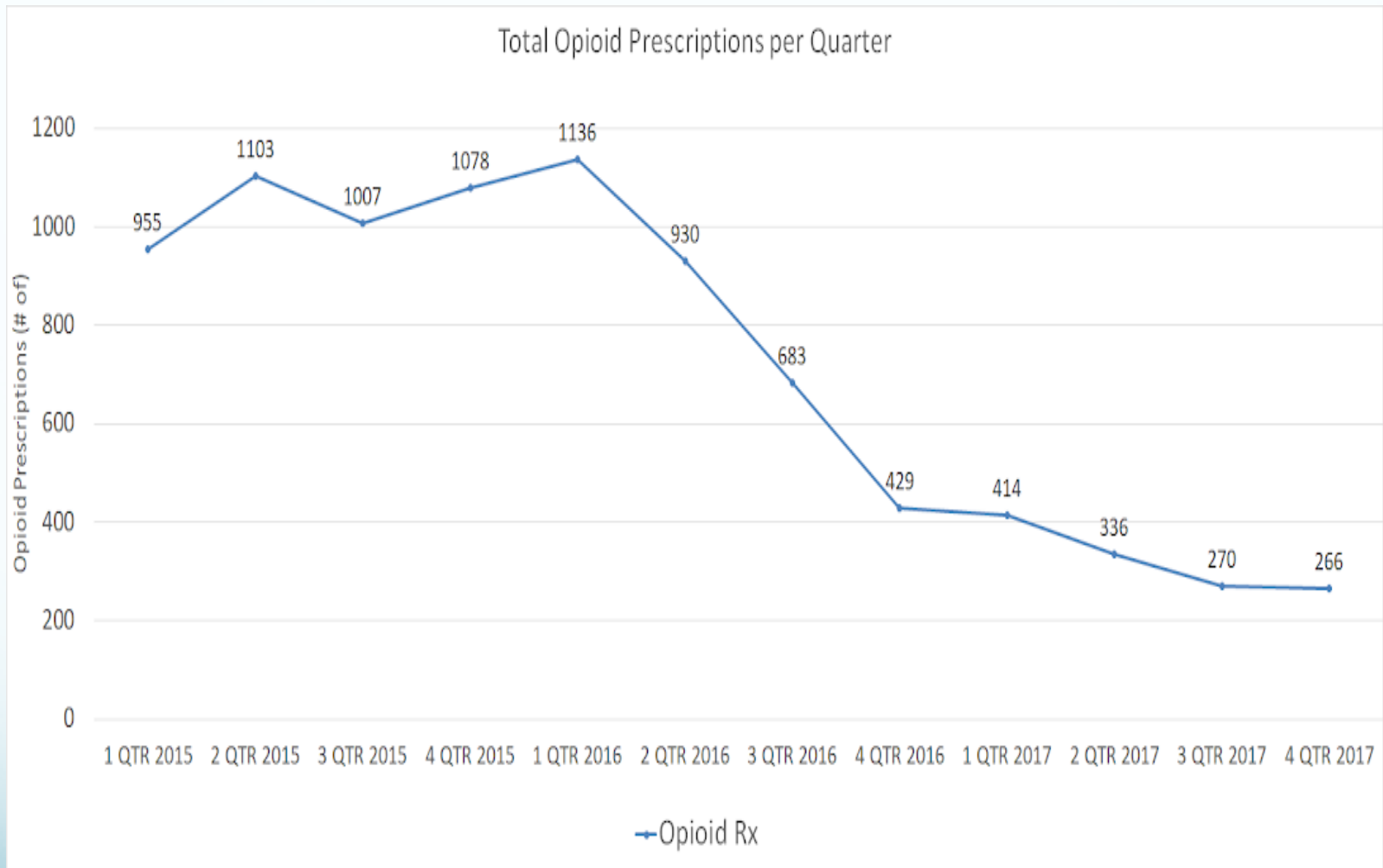
EVIDENCE BASE:

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



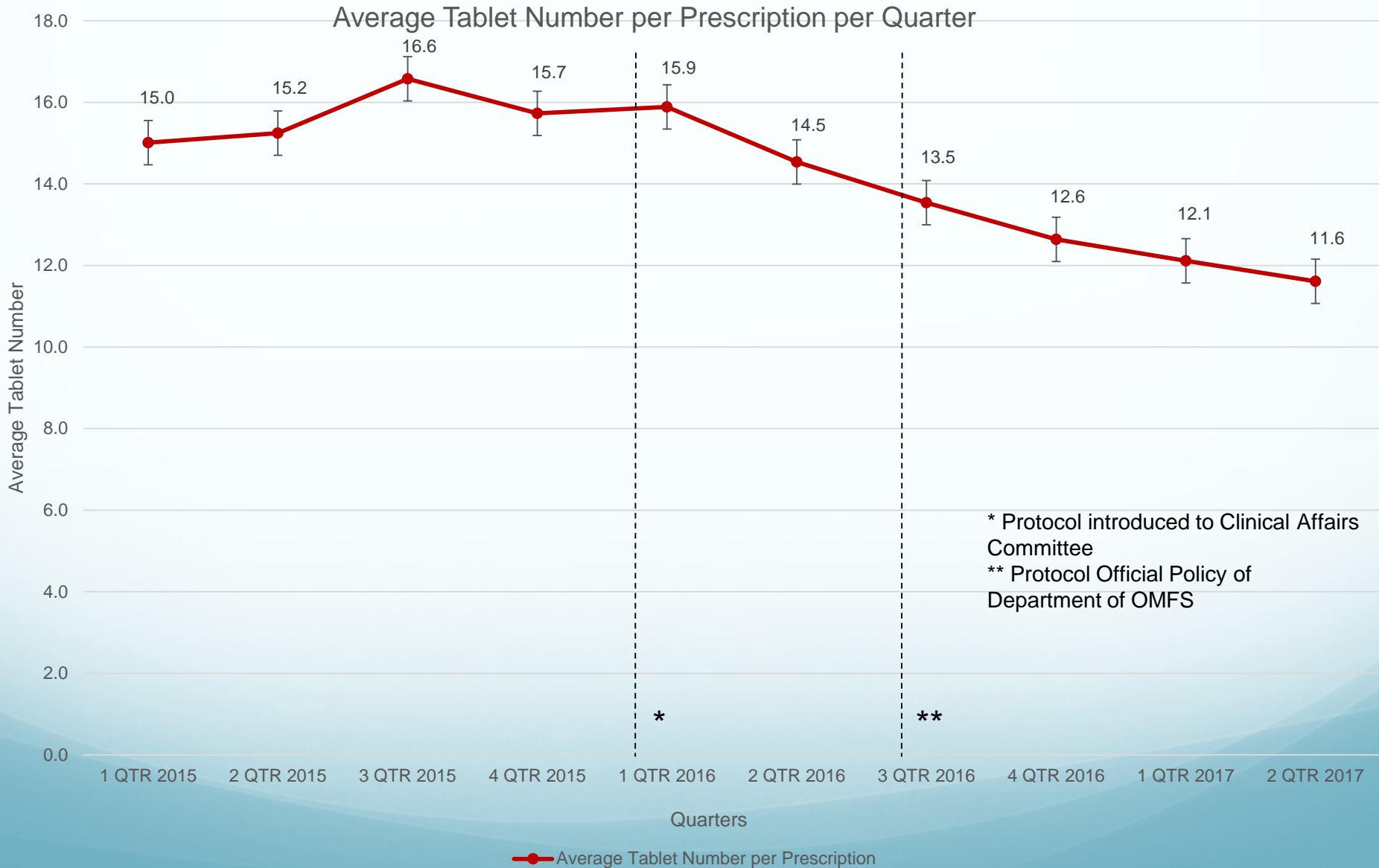
JADA 2013

TOTAL UM SOD OPIOID Rx per QUARTER

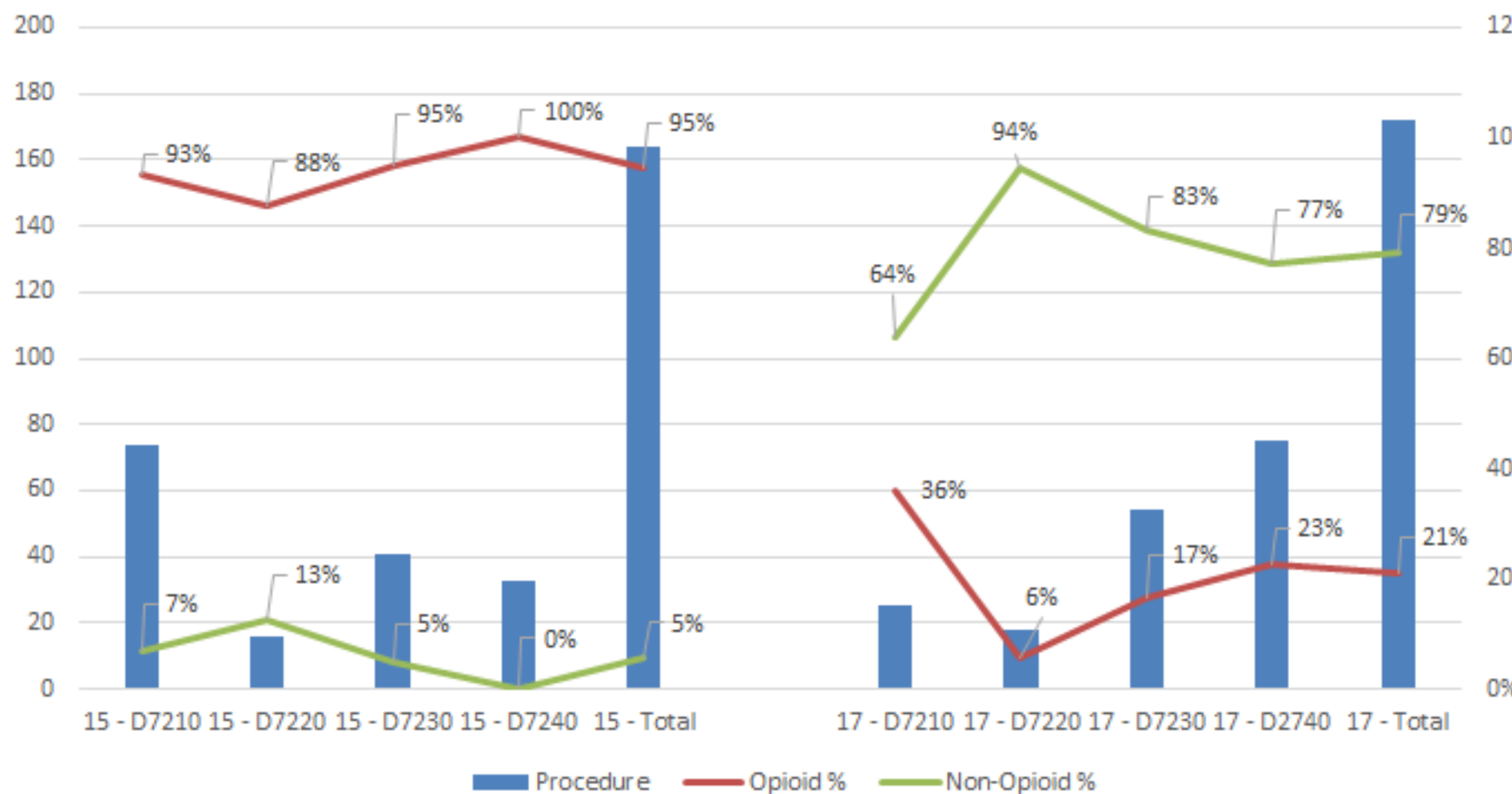


DECREASED OPIOID Rx: 77%

OPIOID Rx Tab/Quarter



Opioid vs Non-Opioid



PRESCRIBER BEHAVIOR:

**“SHOULD AND CAN CHANGE
IN A SCHOOL OF DENTISTRY”**