

# High-Decile Prescribers: All Gain, No Pain?

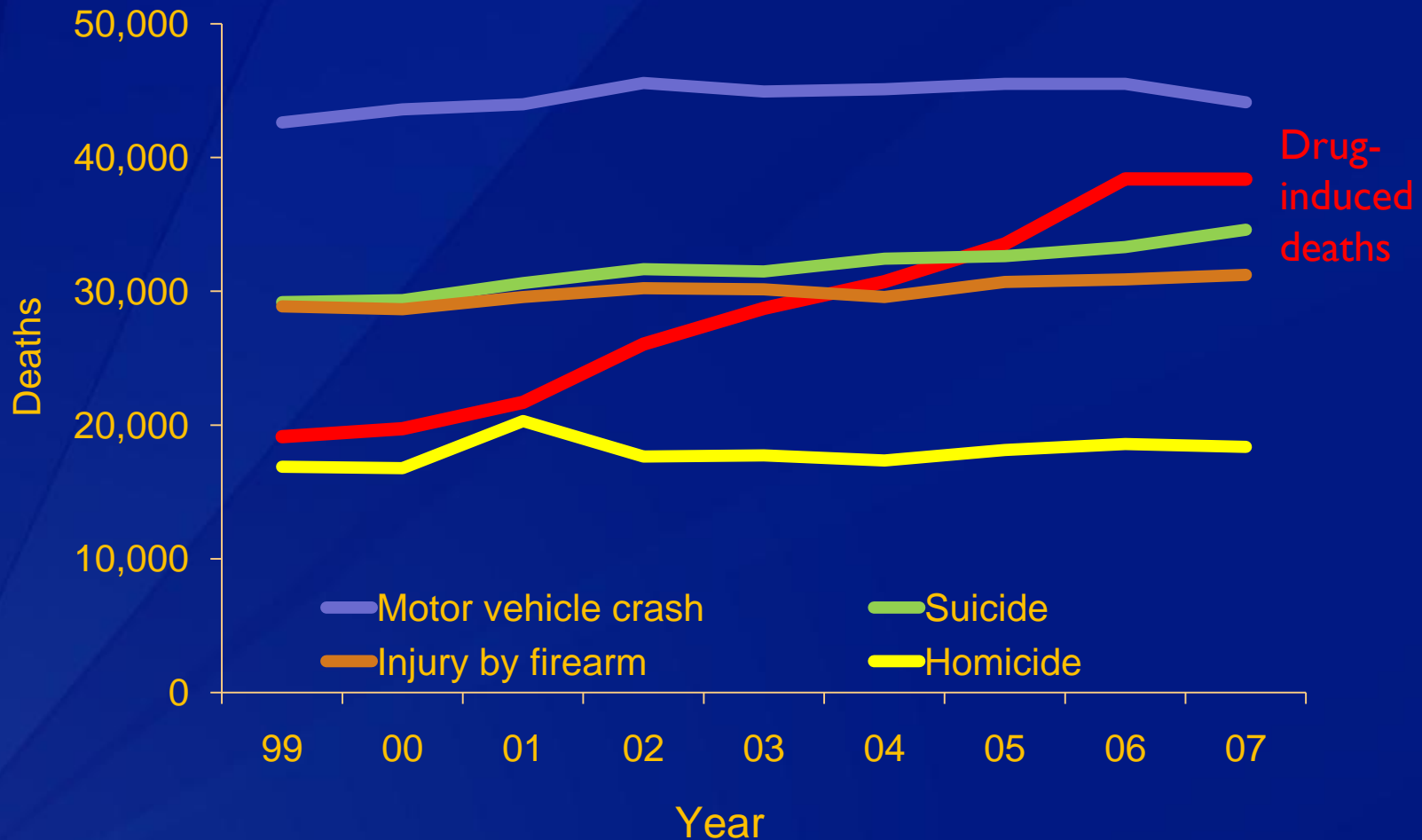
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Centers for Disease Control and Prevention

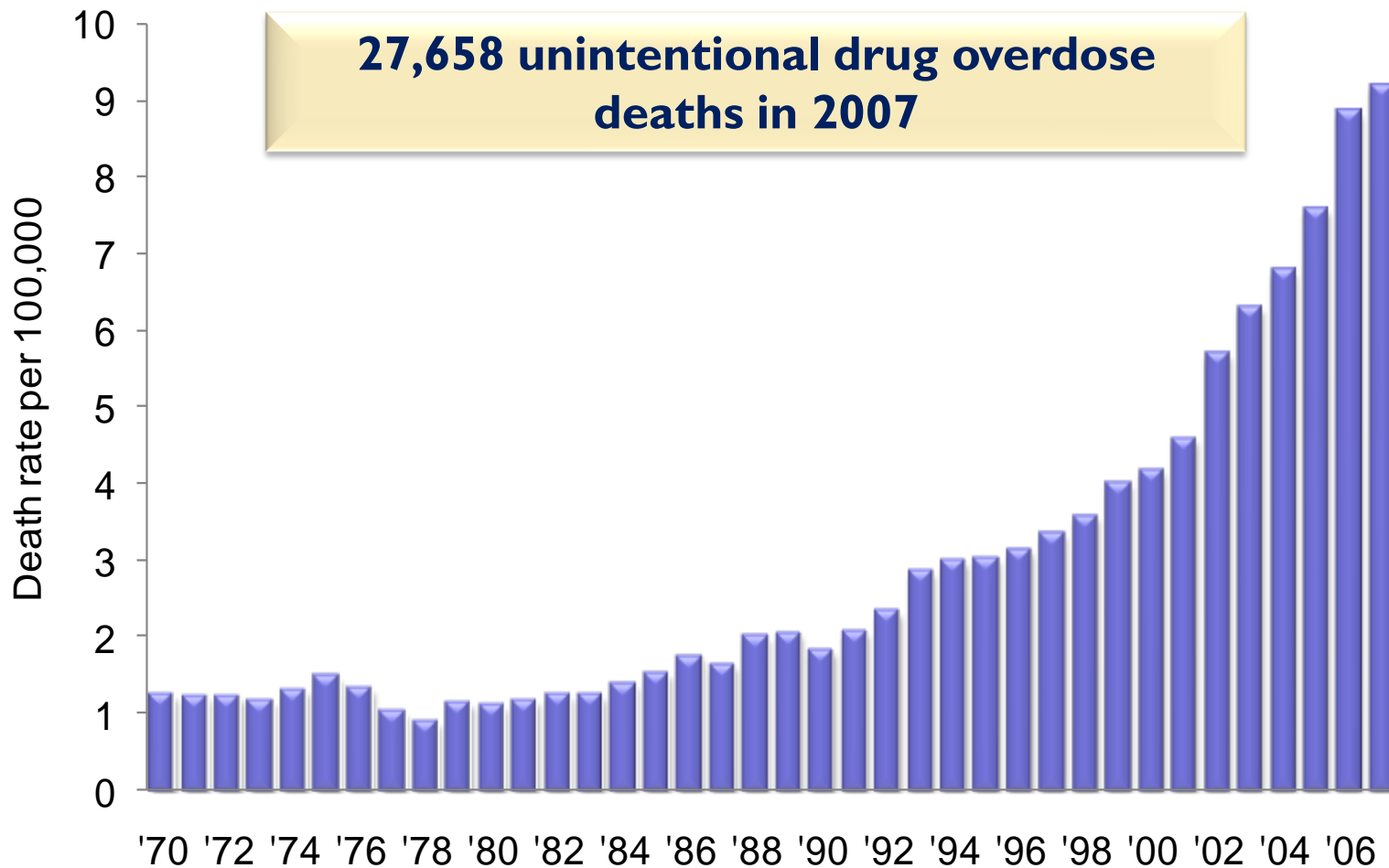
# Outline of Presentation

- ❑ **Background on the problem**
- ❑ **Examples of high-decile prescribers**
- ❑ **Addressing the problem through prescribers**

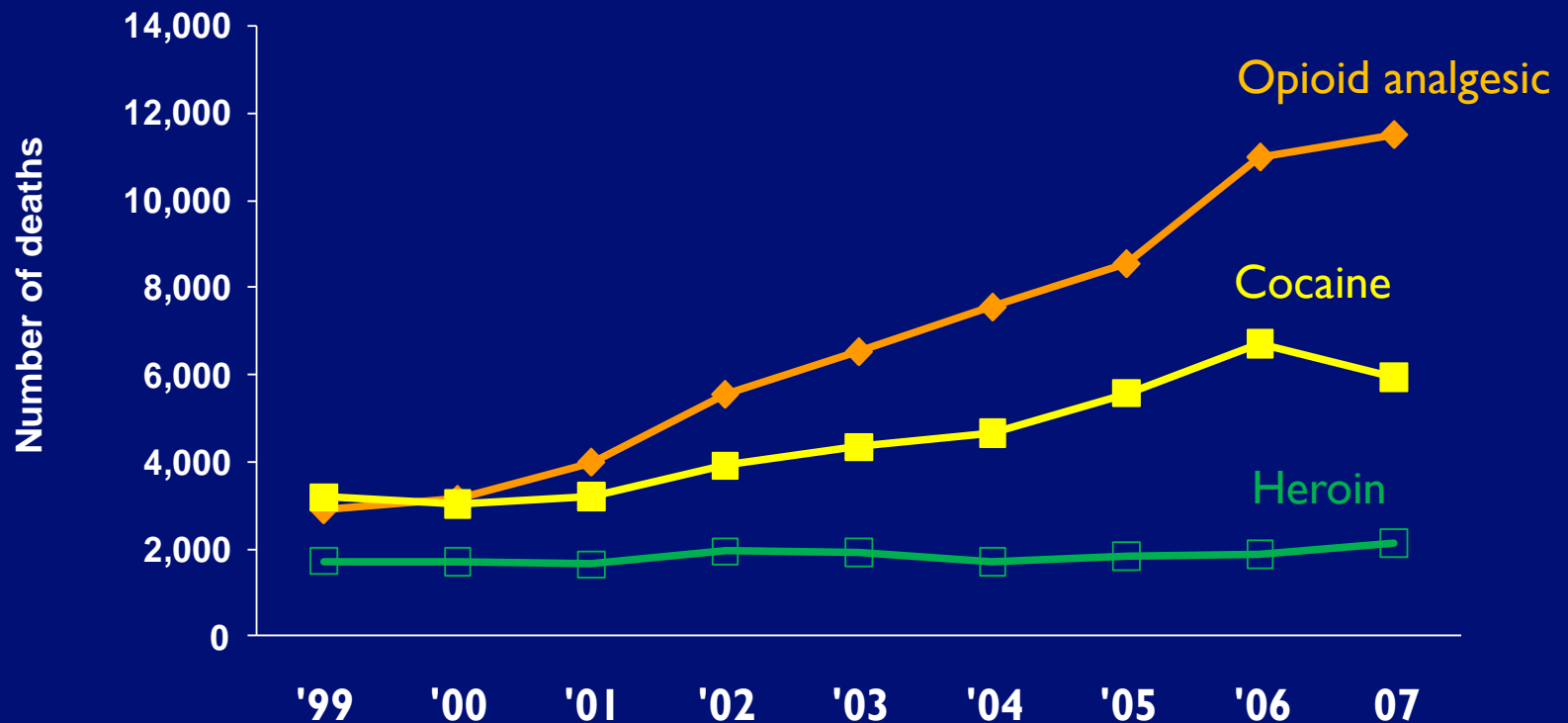
# Drug-induced vs types of injury deaths United States, 1999–2007



# Unintentional drug overdose deaths United States, 1970–2007

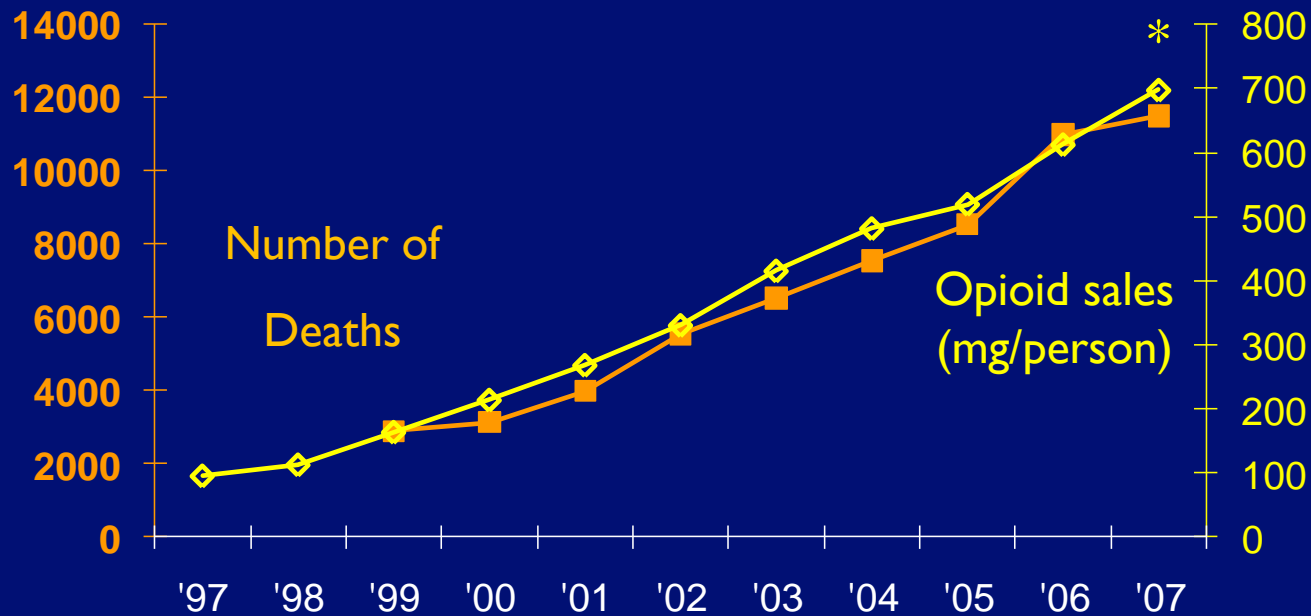


# Unintentional overdose deaths by major drug type, U.S., 1999-2007



Source: National Vital Statistics system, multiple cause of death dataset

# Unintentional opioid overdose deaths and per capita sales of opioid analgesics 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.

# Public Health Impact of Opioid Analgesic Use

For every 1 overdose death there are



Treatment admissions are for primary use of opioids from Treatment Exposure Data set

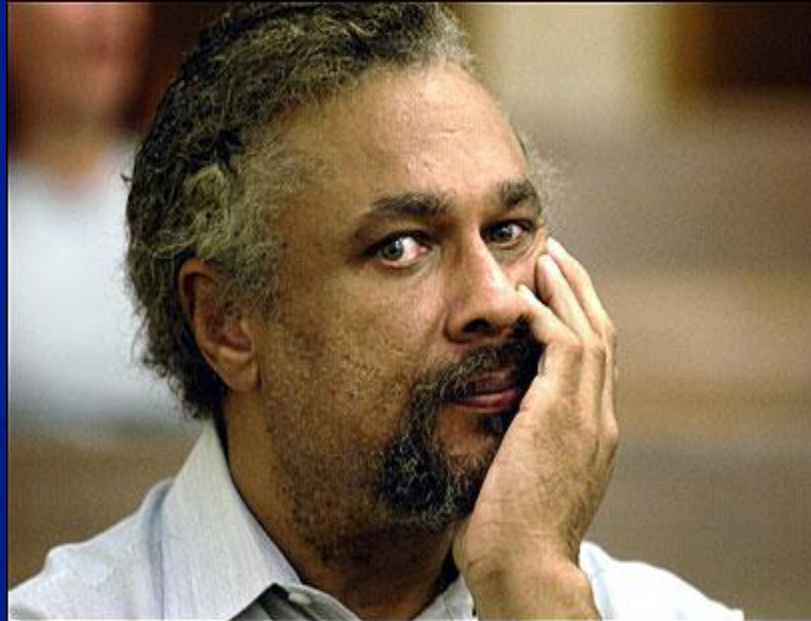
Emergency department (ED) visits are from DAWN, Drug Abuse Warning Network, <https://dawninfo.samhsa.gov/default.asp>

Abuse/dependence and nonmedical use in the past month are from the National Survey on Drug Use and Health

# Far-reaching Public Health Impact of Widespread Opioid Analgesic Use

- ❑ **Mental impairment leads to other types of unintentional injuries**
  - Falls and fractures among elderly
  - Motor vehicle crashes involving “drugged driving”
- ❑ **Substance abuse leads to intentional injuries**
  - Drug-related suicides and drug-crime-related interpersonal violence
- ❑ **Intravenous use of drugs leads to infections**
  - HIV or hepatitis transmission related to injection of dissolved tablets
- ❑ **Use during pregnancy can lead to reproductive health effects**
  - Congenital defects
  - Newborn withdrawal syndrome

## Meet Dr. Michael Brown of Cape Cod, MA



Dr. Brown wrote for a third of all OxyContin pills dispensed in Massachusetts in 2004.

[http://www.boston.com/news/local/massachusetts/articles/2005/08/26/state\\_pulls\\_cape\\_cod\\_doctors\\_license/](http://www.boston.com/news/local/massachusetts/articles/2005/08/26/state_pulls_cape_cod_doctors_license/)

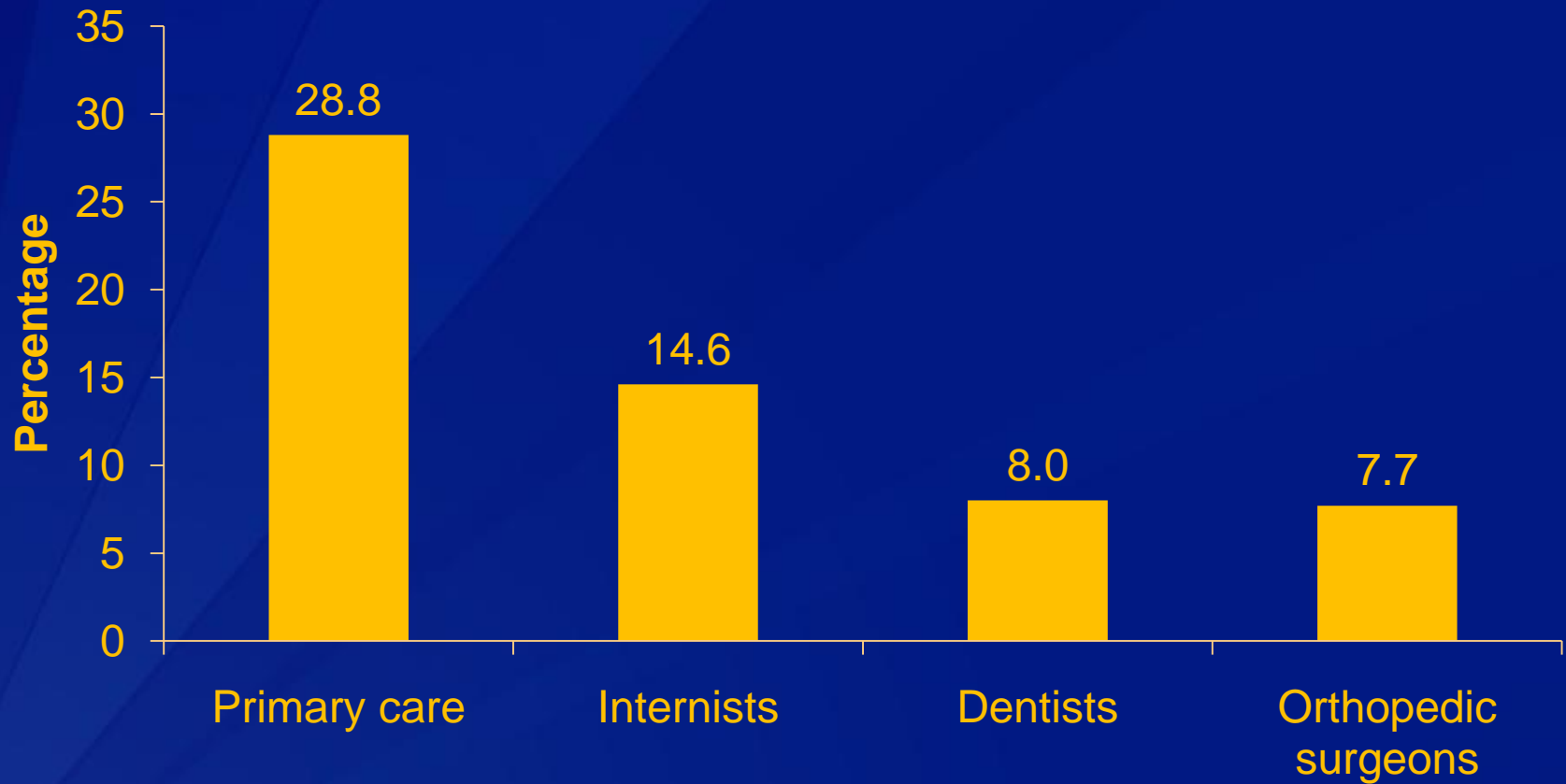
## Meet Dr. Felix Lanting of Staten Island, NY



Dr. Lanting wrote oxycodone prescriptions for 10-15 patients an hour for over two years.

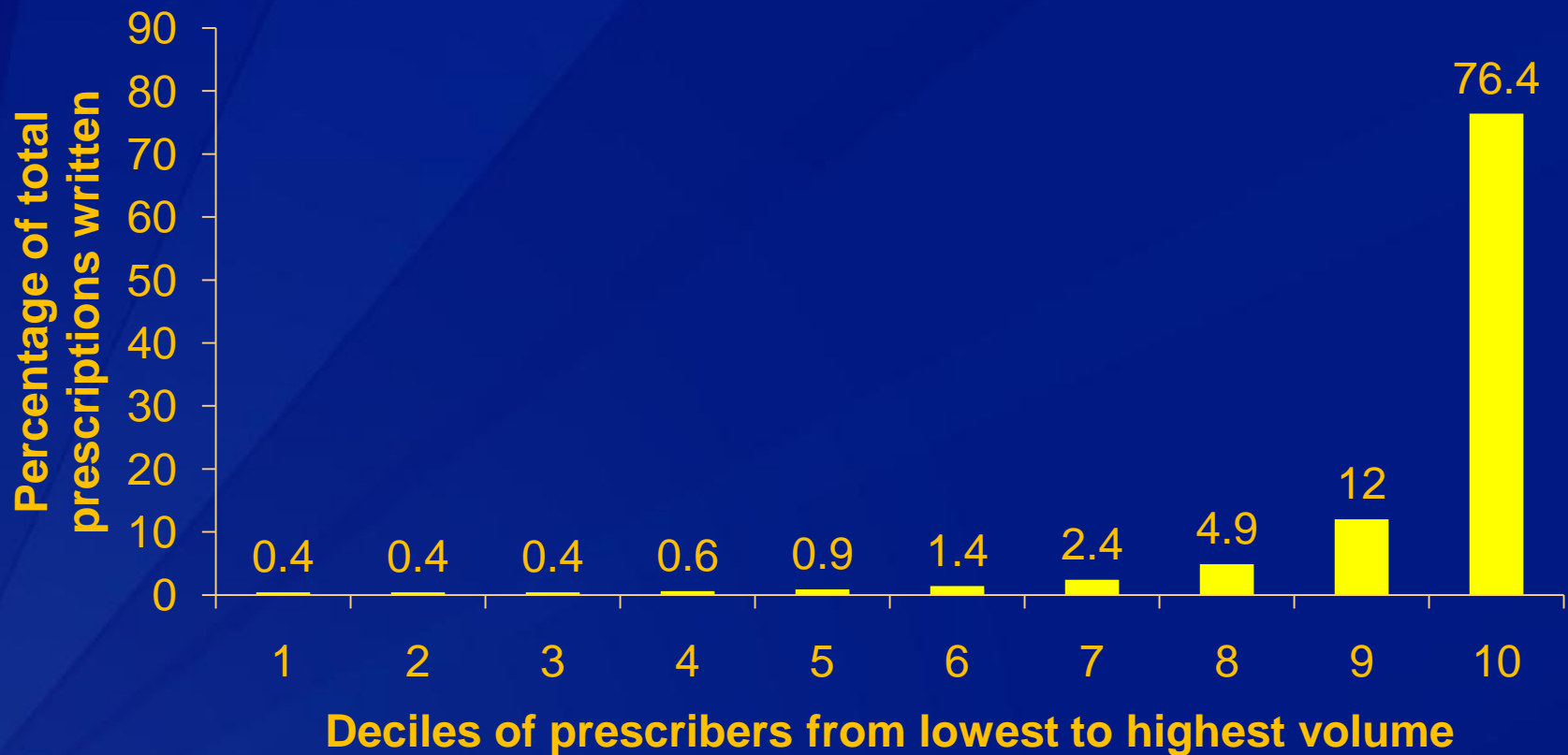
[http://www.silive.com/eastshore/index.ssf/2010/11/staten\\_island\\_doctor\\_felix\\_lan\\_2.html](http://www.silive.com/eastshore/index.ssf/2010/11/staten_island_doctor_felix_lan_2.html)

# Leading types of prescribers of opioid analgesics, U.S., 2009



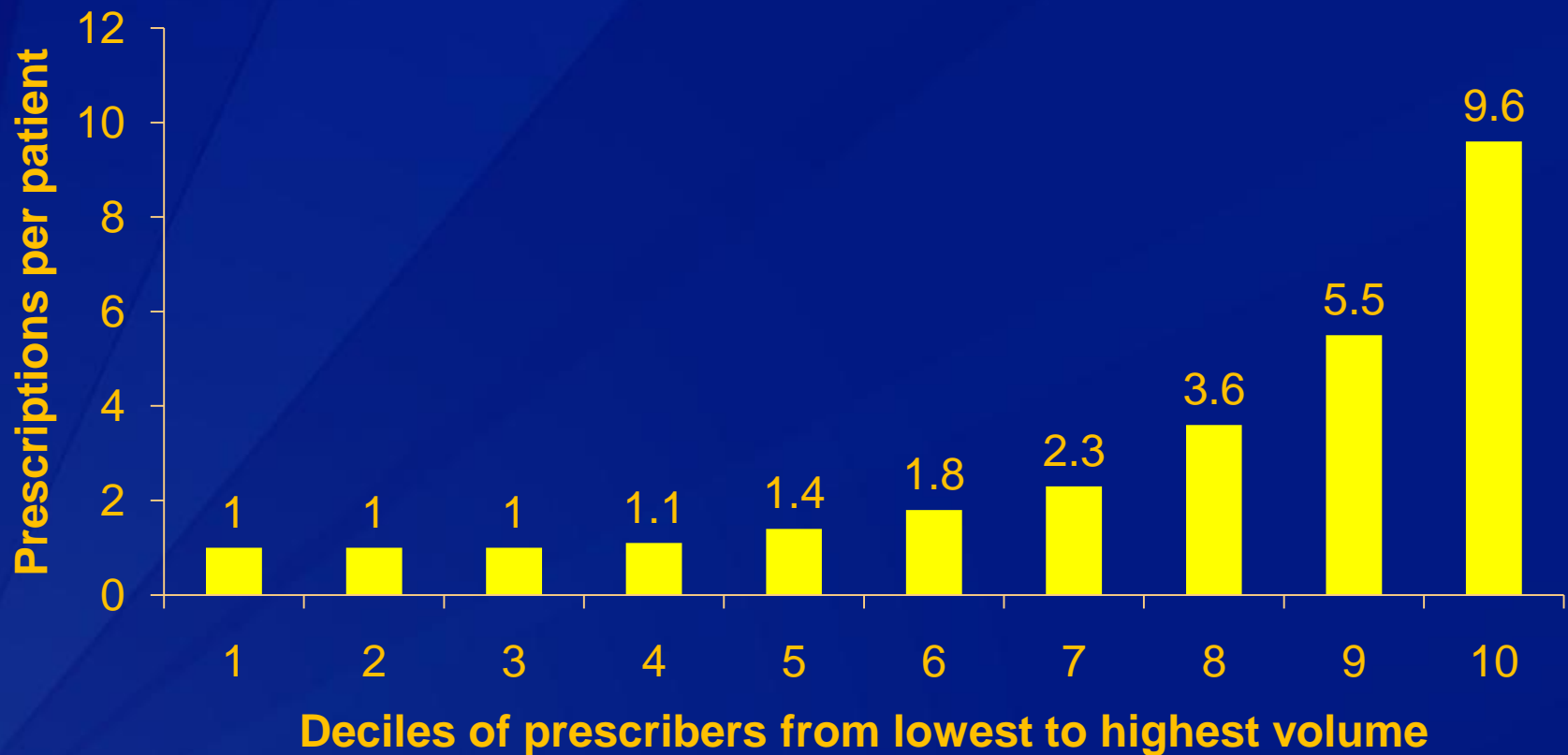
Volkow ND, et al. Characteristics of opioid prescriptions in 2009. JAMA 2011;305:1299-1300.

# Percentage of total CSII opioid prescriptions written by prescribers ranked by volume, CA Workers Compensation, 2005-2009



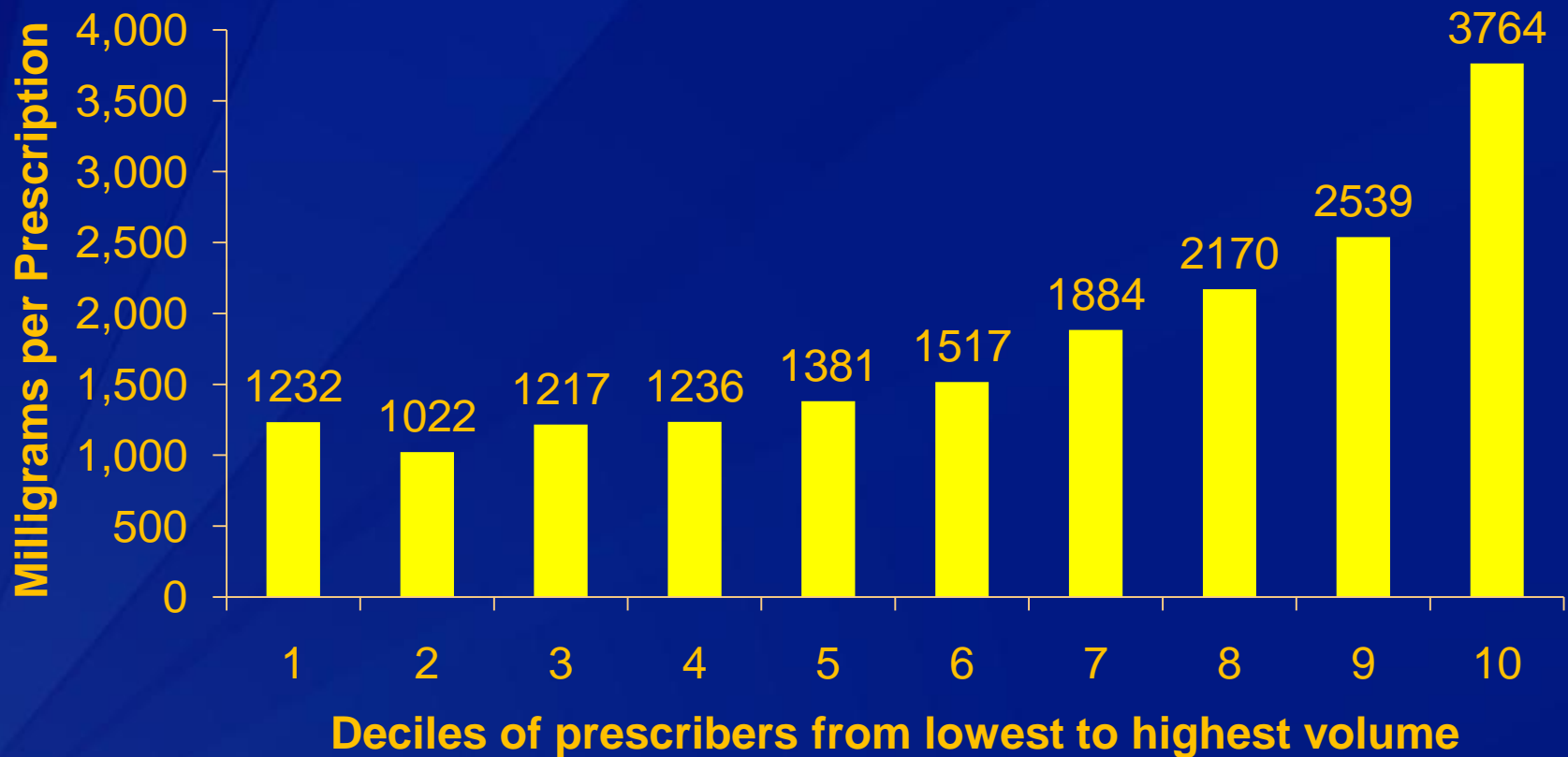
Swedlow et al. Prescribing patterns of schedule II opioids in California Workers' Compensation, CWCI Institute, 2011

# Average number of rx per patient by prescribers ranked by volume, CA Workers Compensation, 2005-2009



Swedlow et al. Prescribing patterns of schedule II opioids in California Workers' Compensation, CWCI Institute, 2011

# Average prescription size by prescribers ranked by volume, CA Workers Compensation, 2005-2009

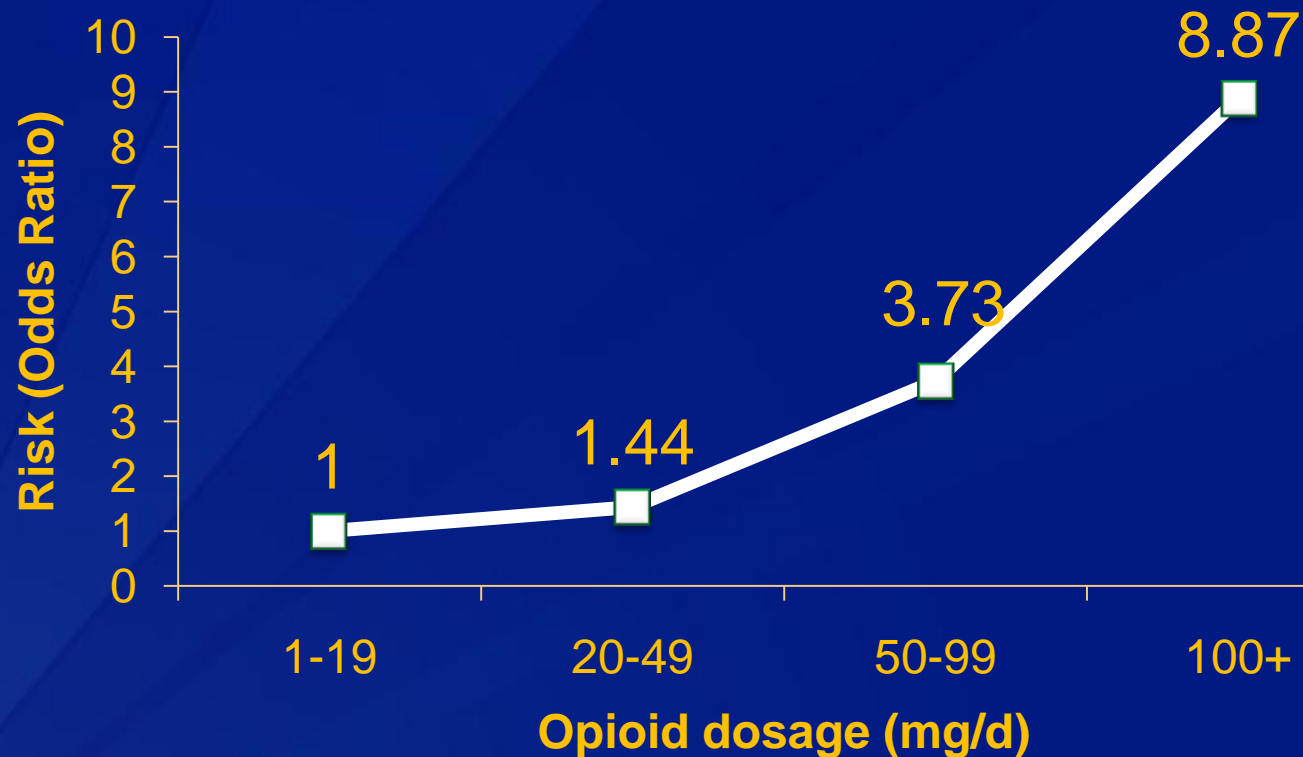


Swedlow et al. Prescribing patterns of schedule II opioids in California Workers' Compensation, CWCI Institute, 2011

## CSII opioid prescriptions written by prescribers by rank, CA Workers Compensation, 2005-2009

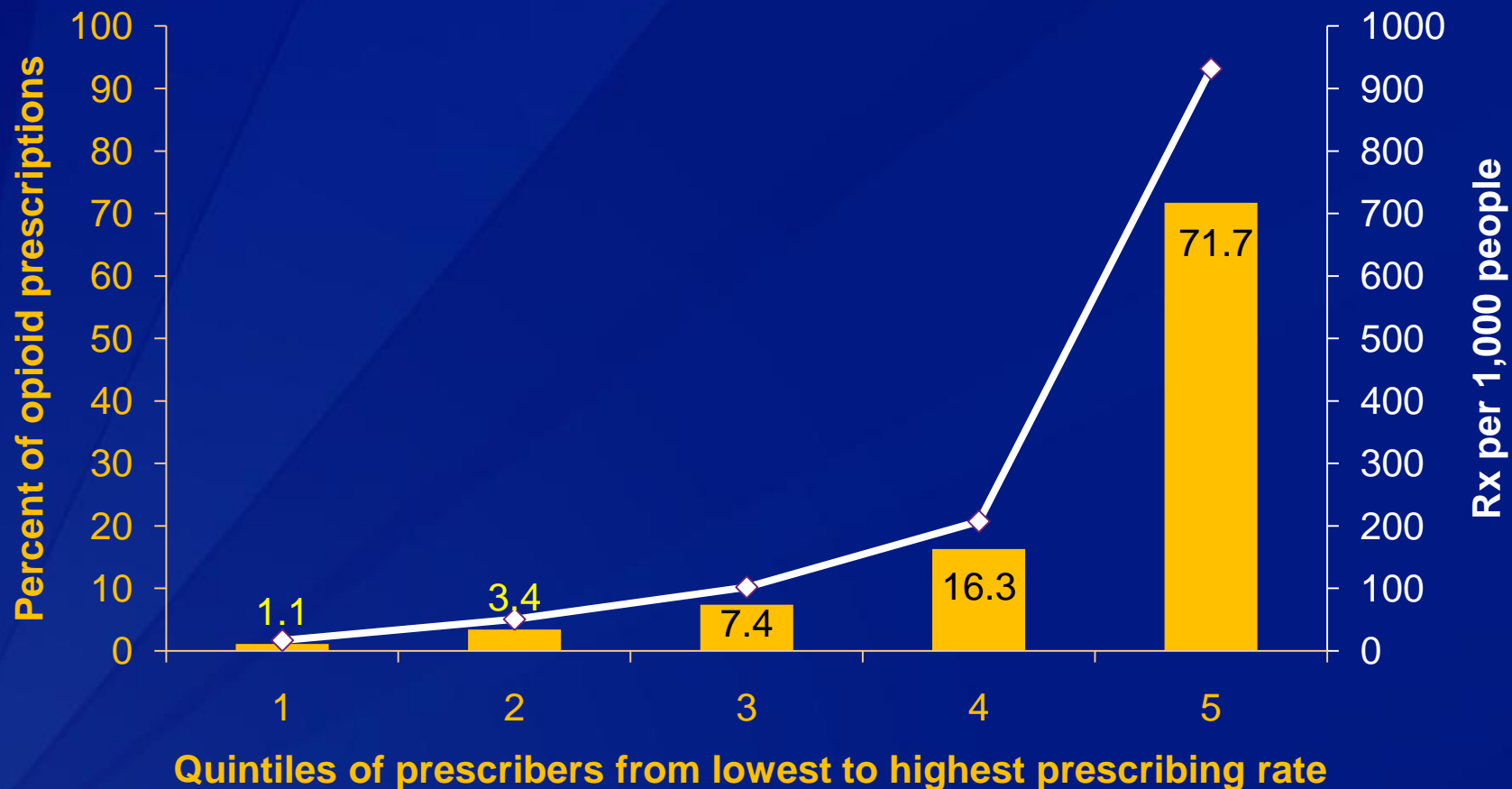
Characteristic	First Percentile (Top 1 Percent)	41 <sup>st</sup> -50 <sup>th</sup> Percentile
Avg. number patients (claims)	53	1.4
Avg. number prescriptions per patient (claim)	15.5	1.8
Avg. morphine equivalent milligrams (mg) per prescription	4,287 mg.	1,517 mg.
Avg. daily dose (assuming 30 days per prescription)	143 mg.	51 mg.
Percent of total morphine mg. accounted for by this group	41%	1%
Percent of prescriptions accounted for by this group	33%	1%

# High opioid dosage is associated with overdose



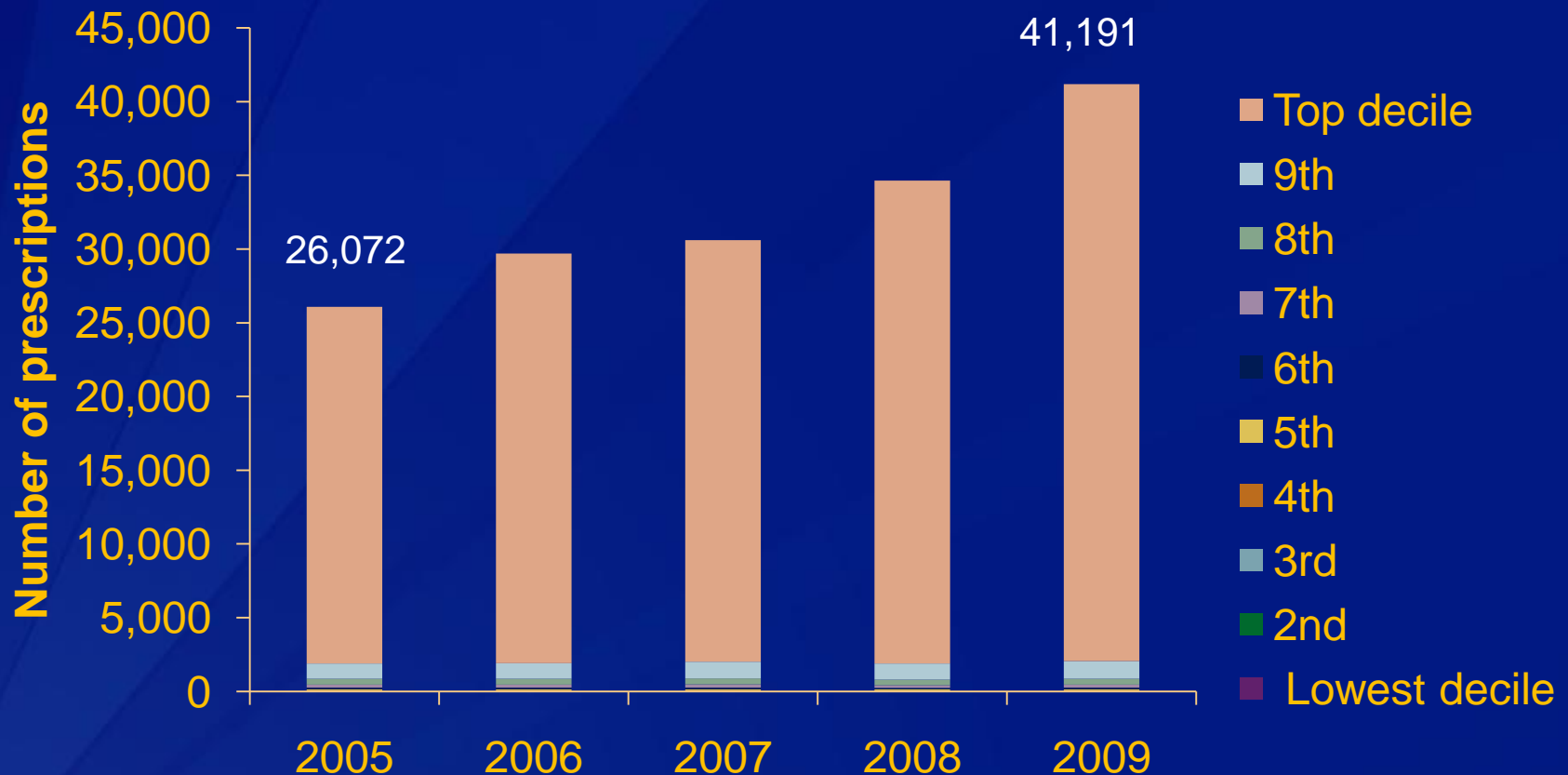
Dunn et al, Opioid prescriptions for chronic pain and overdose. Ann Int Med 2010;152:85-92.

# Prescription rate and percent of opioid prescriptions by prescriber volume, Public Drug Program, Ontario, Canada, 2006



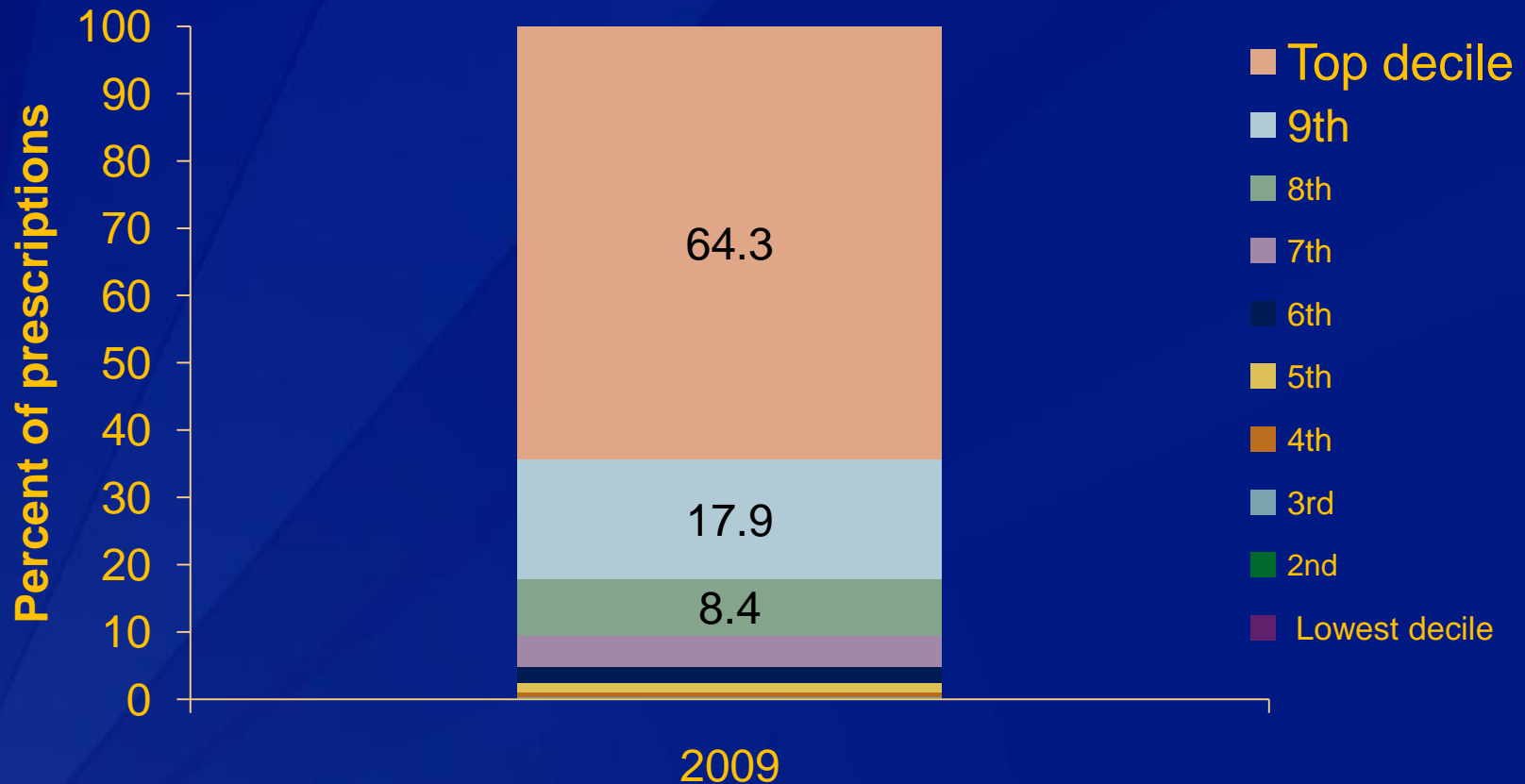
Dhalla, IA et al. Clustering of opioid prescribing and opioid-related mortality among family physicians in Ontario. Can Fam Physician 2011;57:e92-6

# Range of number of CS II-V prescriptions for each prescriber decile ranked by volume, KY



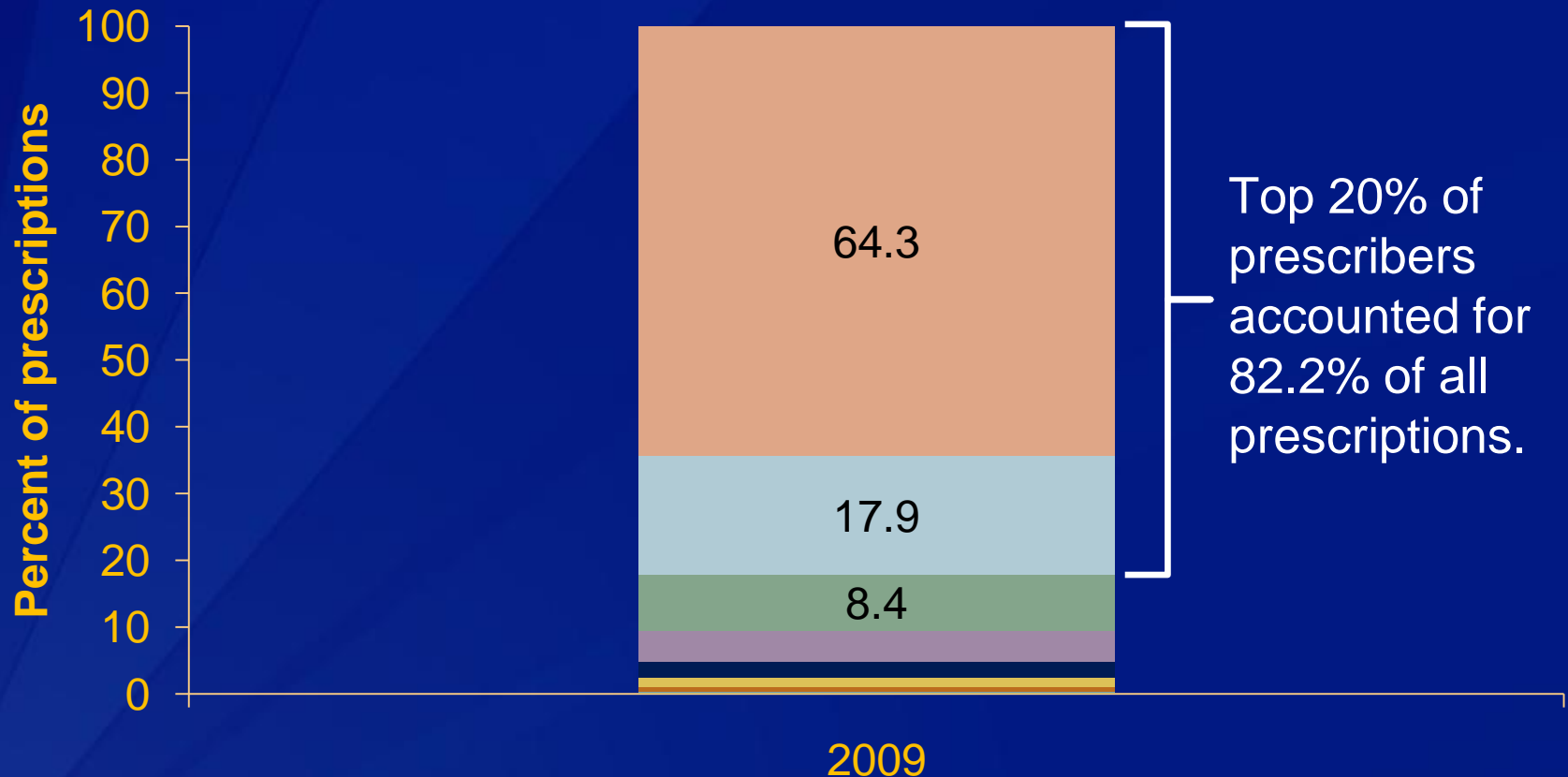
Blumenschein, K, et al. Independent Evaluation of the Impact and Effectiveness of the Kentucky All Schedule Prescription Electronic Reporting Program (KASPER) Institute for Pharmaceutical Outcomes and Policy, Univ of Kentucky, 2010

# Percent of CS II-V prescriptions prescribed by prescriber decile by year, KY, 2009



Blumenschein, K, et al. Independent Evaluation of the Impact and Effectiveness of the Kentucky All Schedule Prescription Electronic Reporting Program (KASPER) Institute for Pharmaceutical Outcomes and Policy, Univ of Kentucky, 2010

# Percent of CS II-V prescriptions by prescriber decile by year, KY, 2009



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## CS II-V controlled substance prescriptions per hour by prescriber rank by year, KY

Year	Median	80th %ile	90th %ile	Highest Prescriber
2005	0.07	0.43	0.94	13.04
2006	0.07	0.43	0.96	14.85
2007	0.07	0.44	1.01	15.30
2008	0.06	0.40	0.95	17.32
2009	0.07	0.43	1.03	20.60

Calculated from Blumenschein et al. Independent Evaluation of the Impact and Effectiveness of the Kentucky All Schedule Prescription Electronic Reporting Program . Institute for Pharmaceutical Outcomes and Policy , Univ of Kentucky, 2010

## **Top prescribers in Medicaid program, Texas, 2009**

- ❑ **Top 72 prescribers wrote 25 rx/week to Medicaid clients for antipsychotics and sedatives**
  - Top prescriber wrote 260/week, 6-7 per hour
- ❑ **~40% of the top 72 had been disciplined by the Texas Medical Board**
- ❑ **By comparison, the Board disciplines fewer than 1% of state physicians each year.**
- ❑ **Suggests that top prescribers are more likely to be engaged in inappropriate prescribing.**

## **Prescribers have not been the focus of the conversation about drug diversion**

- ❑ **Prescribers do not appear as statistics in medical examiner or emergency department files**
- ❑ **Prescribers are not the target of substance abuse surveys**
- ❑ **With the exception of pill mill bills in a few states, most of the recent legislative concern has been with doctor shopping, not patient recruitment.**

## Barriers to focusing on prescribers

- ❑ Numerous state laws now protect prescribers from prosecution, whereas only a few so-called “Good Samaritan” immunity laws protect the patients.
- ❑ Prescribers are often fiercely independent and have higher status, professional organizations, and more legal resources than patients.
- ❑ The “chilling effect” myth that “good” prescribers will be too frightened to prescribe if scrutinized.

# Reasons to focus on prescribers

## ❑ Cost-effectiveness

- Many fewer prescribers than patients.
  - ~700,000 prescribers
  - ~9 million people taking prescribed opioids in a typical month
- Each proactive report on a prescriber goes to one or a few agencies, not every doctor that a patient may have seen, so workload is reduced.
- At least 80% of the proactive reports on patients are going to the doctors prescribing most. They may be less influenced than other prescribers.

## ❑ Social justice

- Why should dated or dishonest prescribers feel none of the pain?

## Reasons to focus on prescribers

- ❑ “High-decile” prescribers are currently targeted by pharmaceutical industry for aggressive marketing and rewarded for high volume.
- ❑ Patients are physiologically dependent, so behavioral change may be more difficult for them than for high-decile providers, who are only financially dependent.
- ❑ Consistency with public health approach to other epidemics...

## **Salmonellosis from eggs**

- **Low risk when providers meet safety standards**
- **Try to prevent by educating consumers re cooking and handling**
- **Some people take risks**
- **Some providers (farms) distribute dirty dozens**

## **Overdoses from opioids**

- **Low risk when prescribed cautiously, eg, low doses**
- **Try to prevent by educating patients re safe use of drugs**
- **Some people take risks**
- **Some prescribers write for dangerous amounts**

## **Approach to Epidemic Salmonellosis**

- **Bad eggs can sometimes be tracked back to farms.**
- **We dispose of unused eggs from bad lots.**
- **We mandate changes among egg providers.**
- **We educate the egg users.**

## **Approach to Epidemic Opioid Overdoses**

- **Drugs can sometimes be tracked back to prescriber.**
- **We dispose of unused drugs.**
- **We recommend educating the prescribers.**
- **We prosecute the drug users.**

## Recommendations for PDMPs for addressing “bad eggs”

- ❑ **Proactive reporting of high-decile prescribers who are using CS inappropriately**
  - Seek authority if PDMP does not have it
  - Evaluate what happens after a report using PDMP data
  - If reporting is not effective, make changes
- ❑ **Sharing PDMP data with state Medicaid programs and peer review organizations**
- ❑ **Requiring dispensing physicians to report to PDMPs**

## Other recommendations for addressing “bad eggs”

### ❑ Changing institutional policies

- Hospital policies for EDs requiring prescriber adherence
- Medicaid /insurers denial of claims
- Enhance reach, authority, and effectiveness of state medical boards

### ❑ Tailoring the approach to the root cause

- Some prescribers require education, others prosecution or economic penalties, e.g., cancellation of state Medicaid contracts
- Do not delay initiating and escalating enforcement actions when necessary

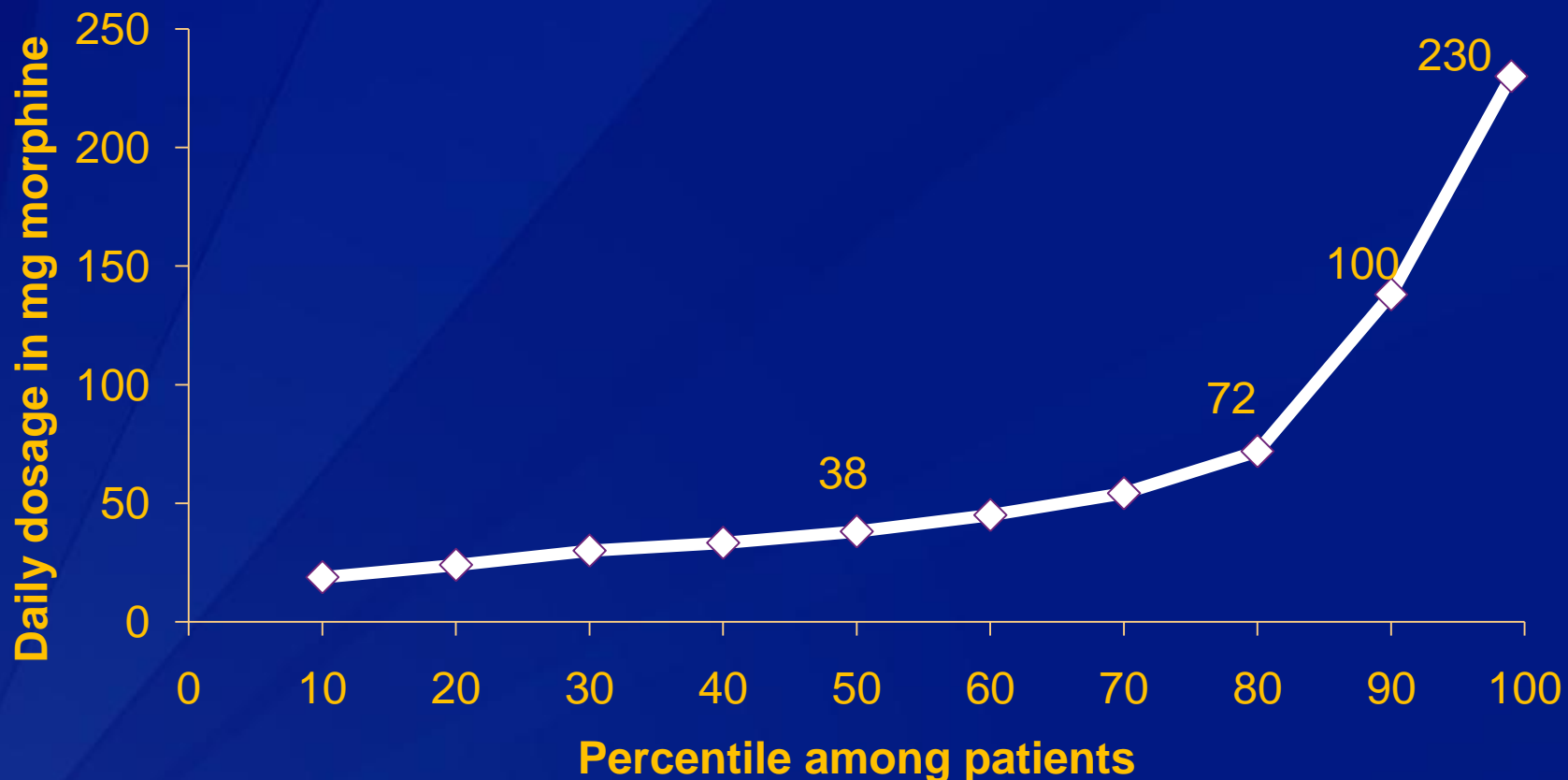
# Thank You

The findings and conclusions in this report are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.

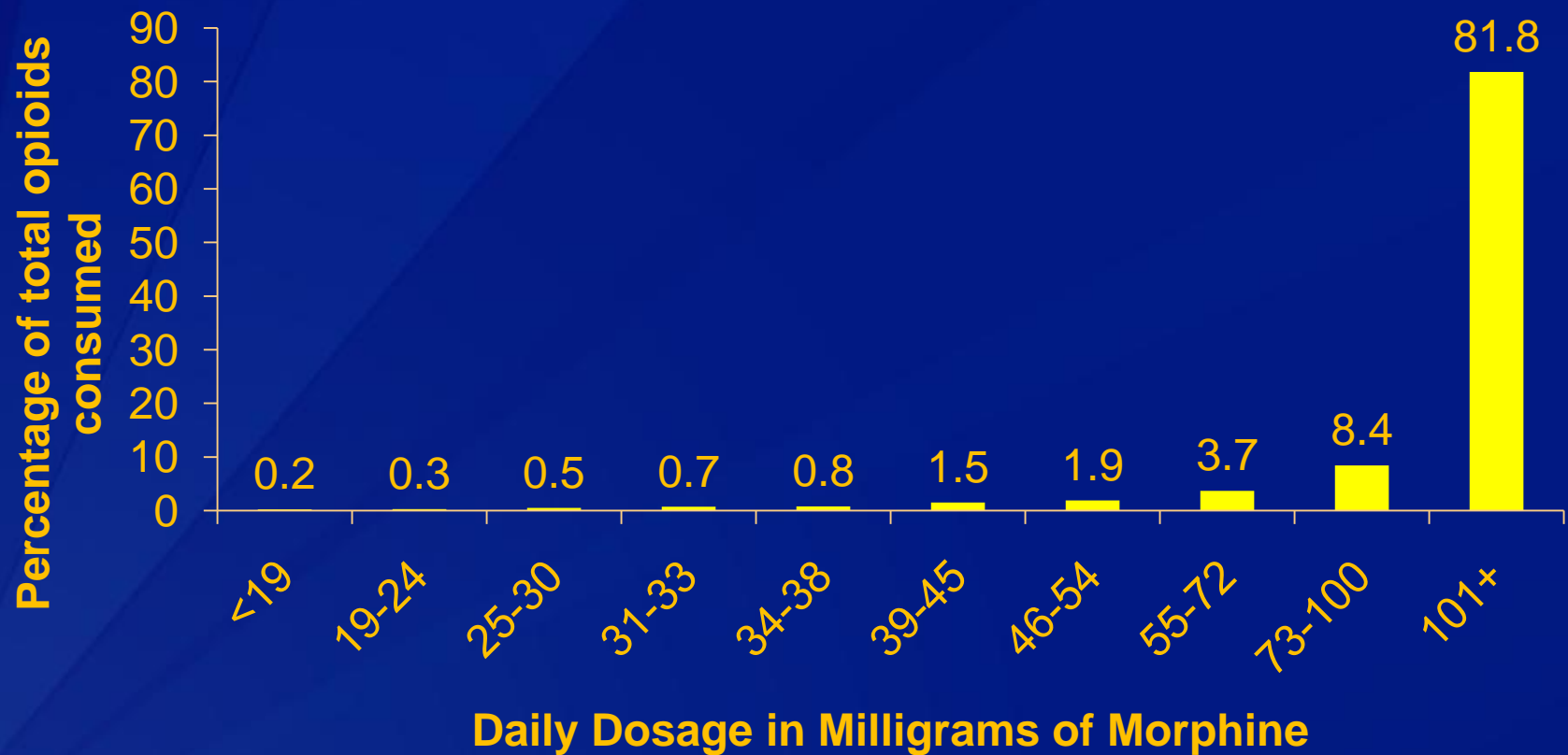


# Extra slides

# Distribution of mean daily opioid dose, patients with chronic pain, private insurance, 2005



# Percentage of total opioids consumed by patient consumption level, patients with chronic pain, private insurance, 2005



Edlund et al. J Pain Symp Manage 2010;40:279289