

A Call to Action

Preventing and Reducing Opioid-Related Poisonings and Death

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National Center for Injury Prevention and Control
Division of Unintentional Injury Prevention



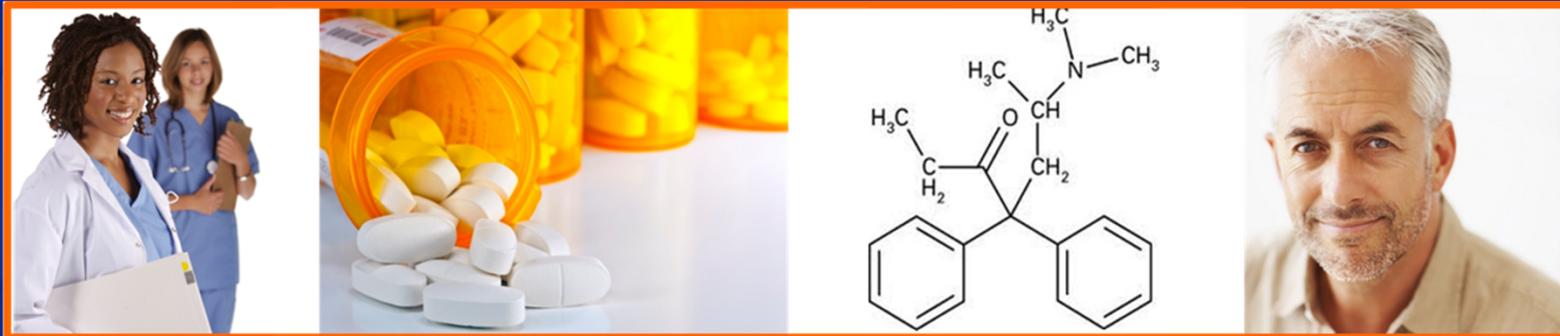
Outline of Presentation

- ❑ CDC's Injury Prevention Center Goal
- ❑ Opioid Abuse Trends
- ❑ Complexity of the Problem
- ❑ CDC's Approach
- ❑ Policy Recommendations
- ❑ Conclusion



Goal

- ❑ Reduce abuse and overdose of opioids and other controlled prescription drugs while ensuring patients with pain are safely and effectively treated.



What We Know About Opioids

- ❑ Help many people lead functional, productive lives
- ❑ Est. 10-12 million patients on long-term opioid tx¹
- ❑ Clinicians now have multiple options of short- and long-acting opioids to select from when determining treatment
- ❑ Products with abuse-deterrent qualities are becoming more common

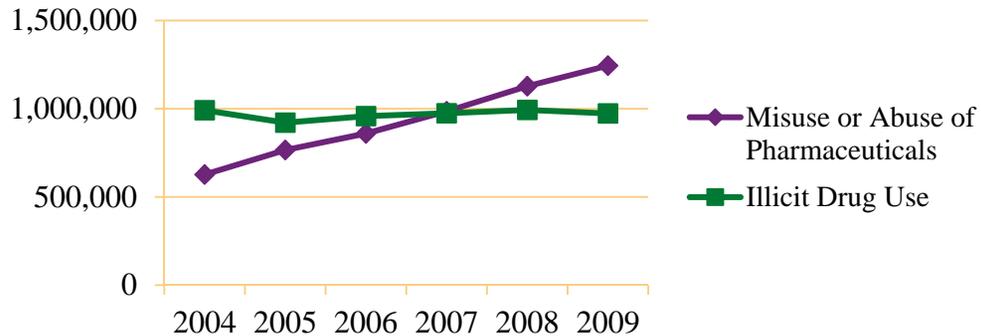
1. Boudreau et al. Trends in long-term opioid therapy for chronic non-cancer pain. *Pharmacoepidemiol Drug Saf.* 2009;18(12):1166-1175.

What We Know About Opioids

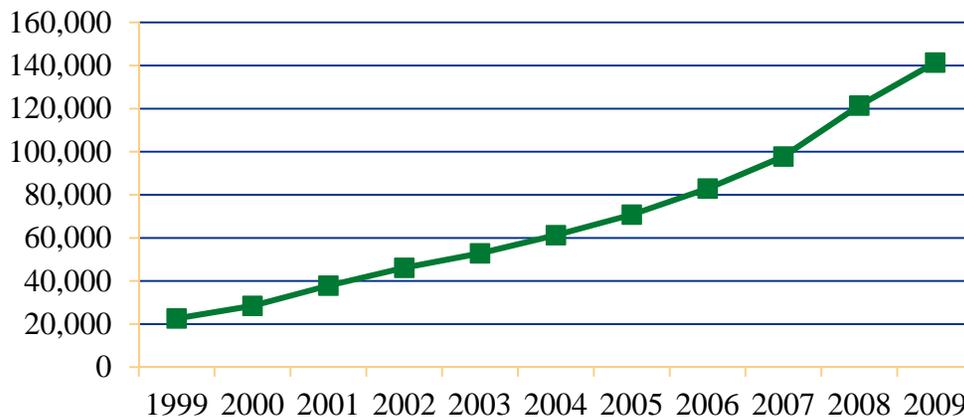
- ❑ Non-medical users
- ❑ New Initiates
- ❑ Emergency Department Visits
- ❑ Treatment Admissions
- ❑ Overdose Deaths
- ❑ Opioid Sales
- ❑ Economic Costs
- ❑ High-Risk Populations



ED Visits Involving Misuse or Abuse of Pharmaceuticals or Illicit Drug Use, 2004-2009²



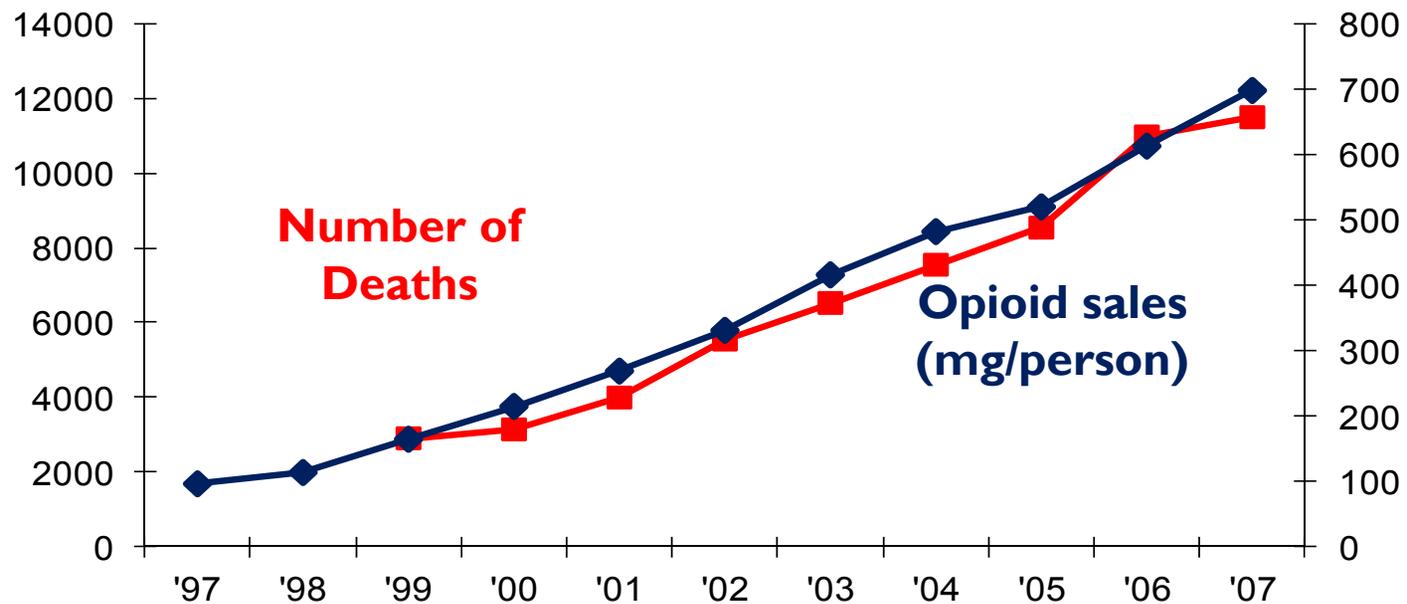
"Other Opiates" Treatment Admissions, 1999-2009³



- **Est. 12 million NON-MEDICAL users last year¹**
- **New Initiates for non-medical use of opioids similar to new initiates for marijuana¹**

1. SAMHSA, *2009 National Survey on Drug Use and Health* (2010).
 2. SAMHSA. *Highlights of the 2009 Drug Abuse Warning Network (DAWN) Findings on Drug-Related ED Visits*, (2010).
 3. SAMHSA. *Substance Abuse Treatment Admissions Involving Abuse of Pain Relievers: 1998 and 2008*, (2010).

Unintentional opioid overdose deaths and per capita sales of opioid analgesics by year, U.S., 1997-2007¹



1. National Vital Statistics System, multiple cause of death dataset, and DEA ARCOS.

Economic Costs

- ❑ **\$55.7 billion in costs for prescription drug abuse in 2007¹**
 - \$24.7 billion in direct healthcare costs
- ❑ **Opioid abusers generate, on average, annual direct health care costs 8.7 times higher than nonabusers²**



1. Birnbaum HG, White, AG, Schiller M, Waldman T, et al. Societal Costs of Prescription Opioid Abuse, Dependence, and Misuse in the United States. *Pain Medicine*. 2011;12:657-667.
2. White AG, Birnbaum, HG, Mareva MN, et al. Direct Costs of Opioid Abuse in an Insured Population in the United States. *J Manag Care Pharm*. 11(6):469-479. 2005

High Risk of Overdose Populations

- ❑ “Doctor Shoppers”¹
- ❑ People on high daily dosages of opioid painkillers and poly-drug abusers²
- ❑ Low-income people and those living in rural areas³
- ❑ Medicaid populations⁴
- ❑ People with mental illness or history of substance abuse⁵

1. White AG,; Birnbaum HG, Schiller M, Tang J, Katz NP. Analytic models to identify patients at risk for prescription opioid abuse. *Am J of Managed Care* 2009;15(12):897-906.

2. Green TC, Graub LE, Carver HW, Kinzly M, Heimer R. Epidemiologic trends and geographic patterns of fatal opioid intoxications in Connecticut, USA: 1997–2007. *Drug and Alcohol Dependence* 2011;115:221-8.

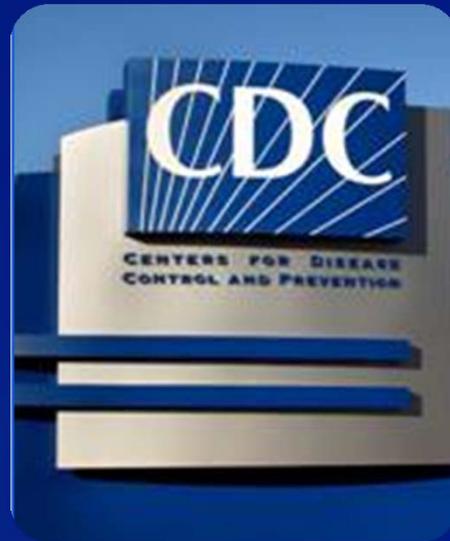
3. Hall AJ, Logan JE, Toblin RL, Kaplan JA, Kraner JC, Bixler D, et al. Patterns of abuse among unintentional pharmaceutical overdose fatalities. *JAMA*. 2008;300(22):2613–20.

4. CDC. Overdose deaths involving prescription opioids among Medicaid enrollees-Washington, 2004-2007. *MMWR*. 2010;59:705-9..

5. Bohnert ASB, Valenstein M, Bair MJ, Ganoczy D, McCarthy JF, Ilgen MA, et al. Association between opioid prescribing patterns and opioid overdose-related deaths. *JAMA*. 2011;305(13):1315–21.

CDC's Approach

- ❑ Enhance Prescription Drug Abuse Surveillance
- ❑ Strengthen Policy
- ❑ Improve Clinical Practice



Enhance Surveillance

Goal: Enhance surveillance on the national, state, and local level to better inform policy makers, practitioners, and stakeholders

- ❑ **PDMP Surveillance Tool**
- ❑ **CDC Biosense Program**
- ❑ **Data Analysis Projects**



Strengthen Policy

Goal: Build a multi-component action plan of promising policies and practices for states to use in addressing prescription drug abuse

- ❑ **Patient Review and Restriction Programs**
- ❑ **Survey of State Laws**
- ❑ **PDMP 2.0**
- ❑ **Stakeholder Engagement**



Improve Clinical Practice

Goal: Improve clinical practice so abuse and overdose of opioids and other controlled prescription drugs are reduced while ensuring patients with pain are safely and effectively treated.

- ❑ **Evaluation of Prescribing Behaviors**
- ❑ **ACEP Clinical Guidelines**
- ❑ **Reimbursement Incentives**



Policy Recommendations

- ❑ **Maximize PDMPs**
- ❑ **Implement Patient Review and Restriction programs**
- ❑ **Improve clinical practice by holding healthcare providers accountable for responsible use of opioids and other controlled prescription drugs**
- ❑ **Enact and enforce pill mill, doctor shopping, and other laws aimed at reducing prescription drug overdose**

Maximize PDMPs

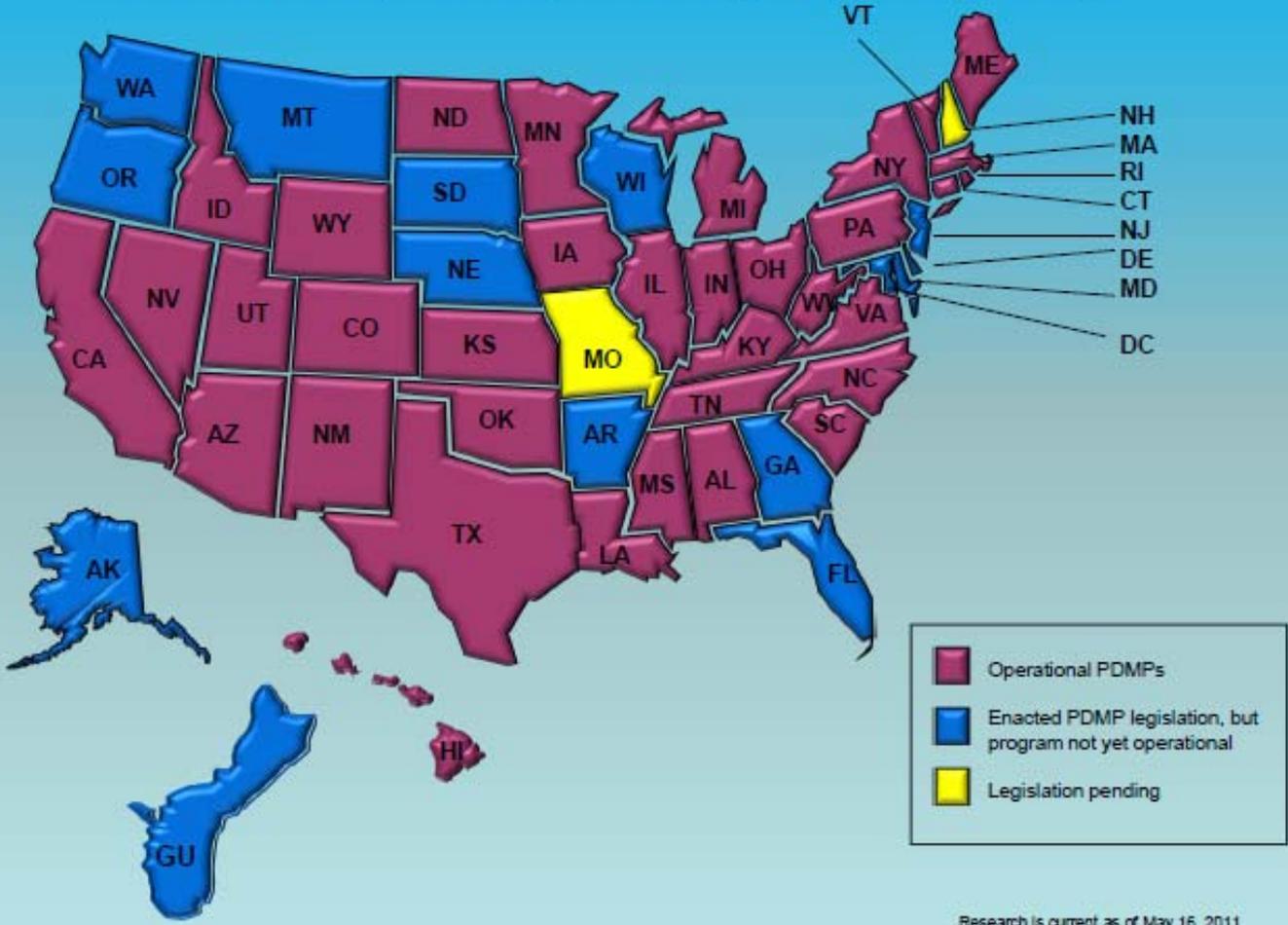
- ❑ Allow prescribers/dispensers access to PDMP data**
- ❑ Achieve interoperability with other states**
- ❑ Incorporate PDMP data into state Health Information Exchanges and electronic health record systems**
- ❑ Identify patients at highest risk for abuse and proactively report this to healthcare providers**
- ❑ Identify prescribers deviating from accepted medical practice and relay this information to appropriate licensing board and law enforcement (when applicable)**

Current PDMP Status Map



Alliance of States with Prescription Monitoring Programs

Status of Prescription Drug Monitoring Programs (PDMPs)



Research is current as of May 16, 2011

Implement Patient Review and Restriction programs

- ❑ Ensure patients' medical needs are met
- ❑ Ensure patients who need access to controlled prescription drugs can get them
- ❑ Reduce amount of controlled prescription drugs obtained for non-medical purposes
- ❑ Produce cost savings to the program while improving patient care and coordination



Improve clinical practice by holding healthcare providers accountable for responsible use of opioids

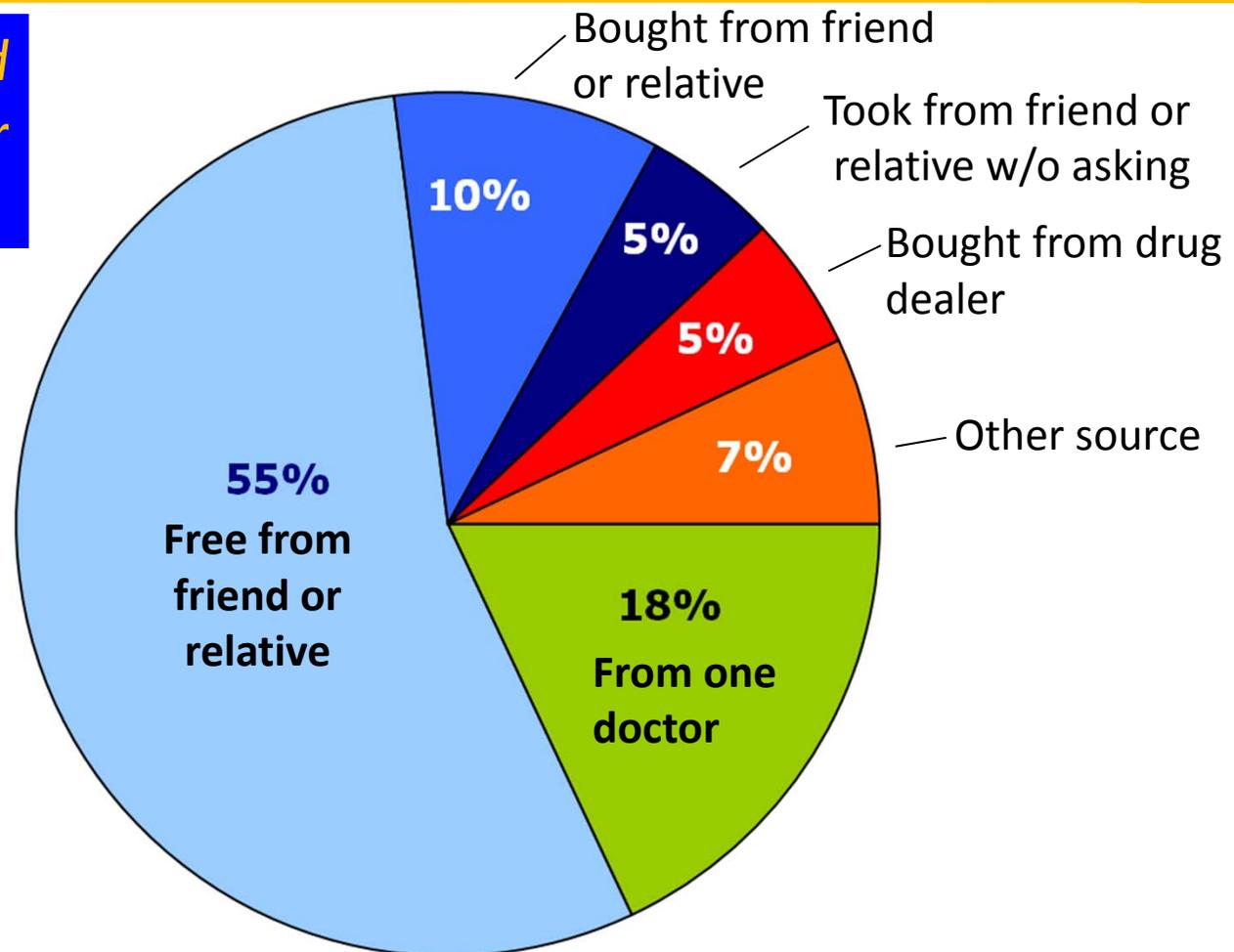
- ❑ Follow evidence-based guidelines**
- ❑ Set clear expectations prior to opioid therapy**
- ❑ Screen and monitor for substance abuse and other mental health problems**
- ❑ Use PDMPs to identify patients who are misusing opioids or other controlled prescription drugs,**
- ❑ Use patient-provider agreements combined with urine drug screens**
- ❑ Discuss proper storage and disposal of opioids**

Healthcare Provider Accountability

- ❑ Source of pain relievers
- ❑ Top prescribers
- ❑ Epidemiological data
- ❑ Adherence to guidelines and risk reduction strategies for opioid abuse

Source of Pain Relievers for Most Recent Nonmedical Use Among Past Year Users

70% obtained from friend or relative*

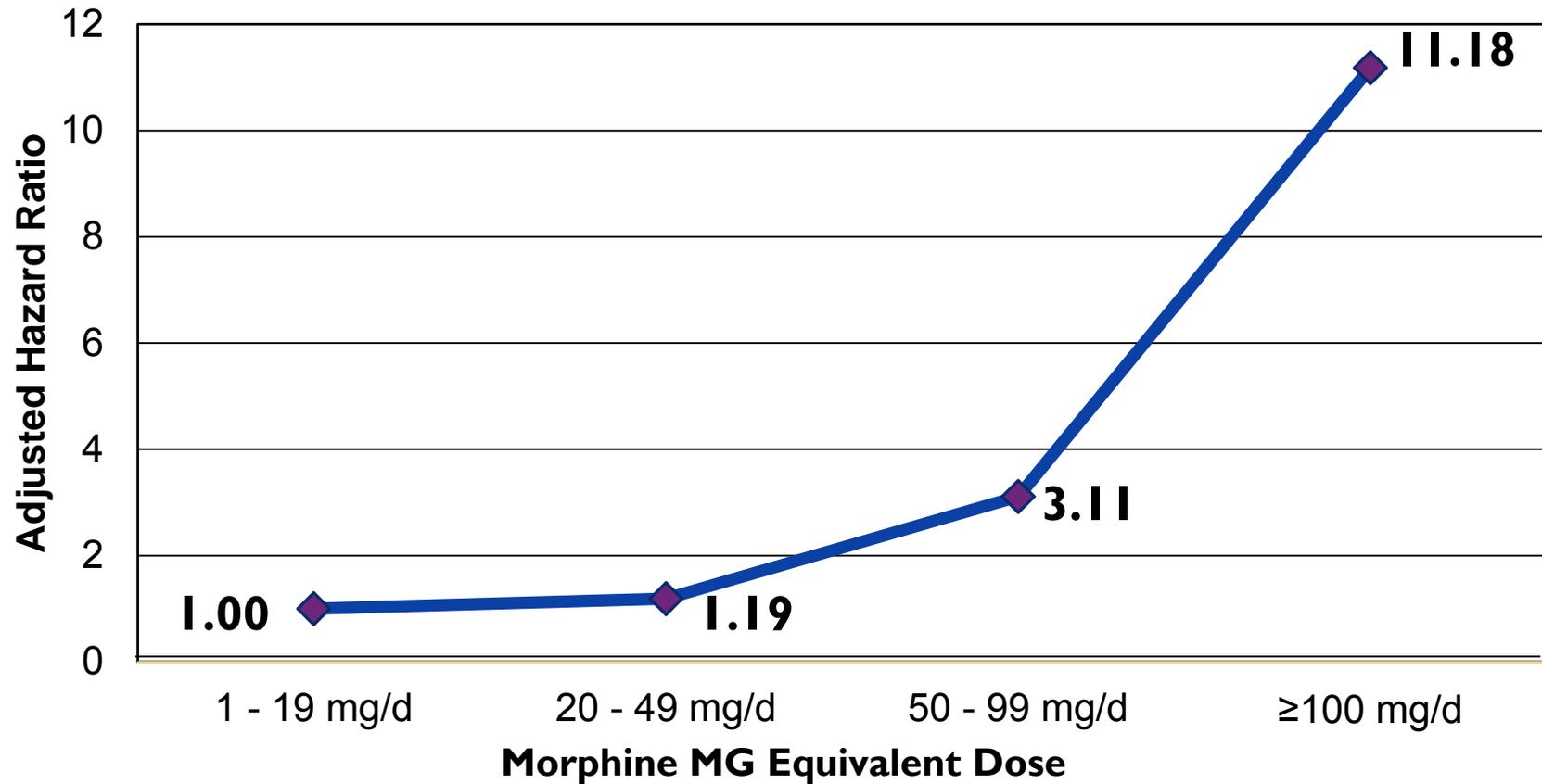


*Percentage from friend or relative is derived before rounding of individual components.

Source: SAMHSA, 2009 National Survey on Drug Use and Health (September 2010).

High Opioid Dose and Overdose Risk

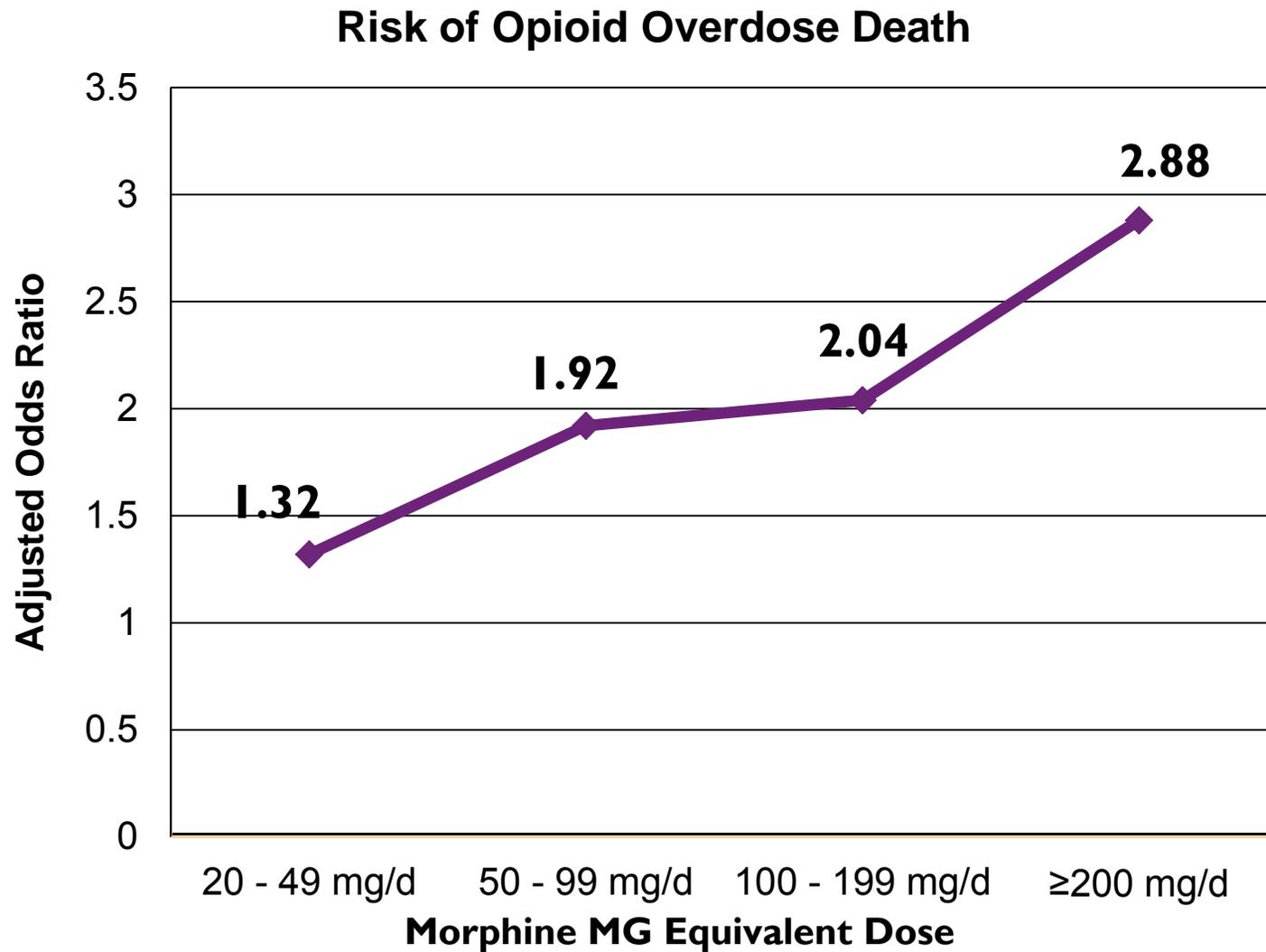
Risk for Serious Overdose Events* in Patients with CNCP



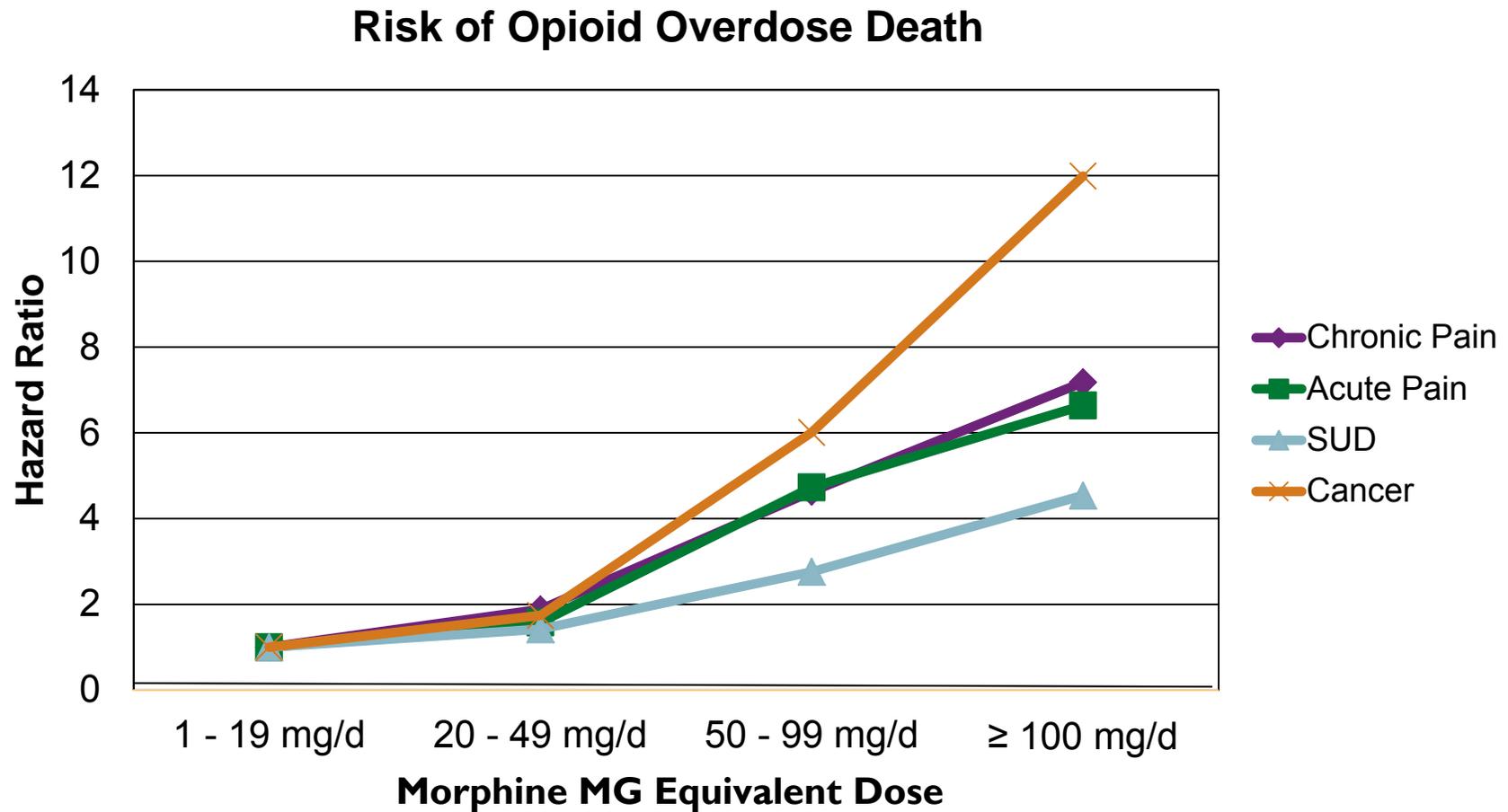
* Defined as death, hospitalization, unconsciousness, or respiratory failure

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

High Opioid Dose and Overdose Risk

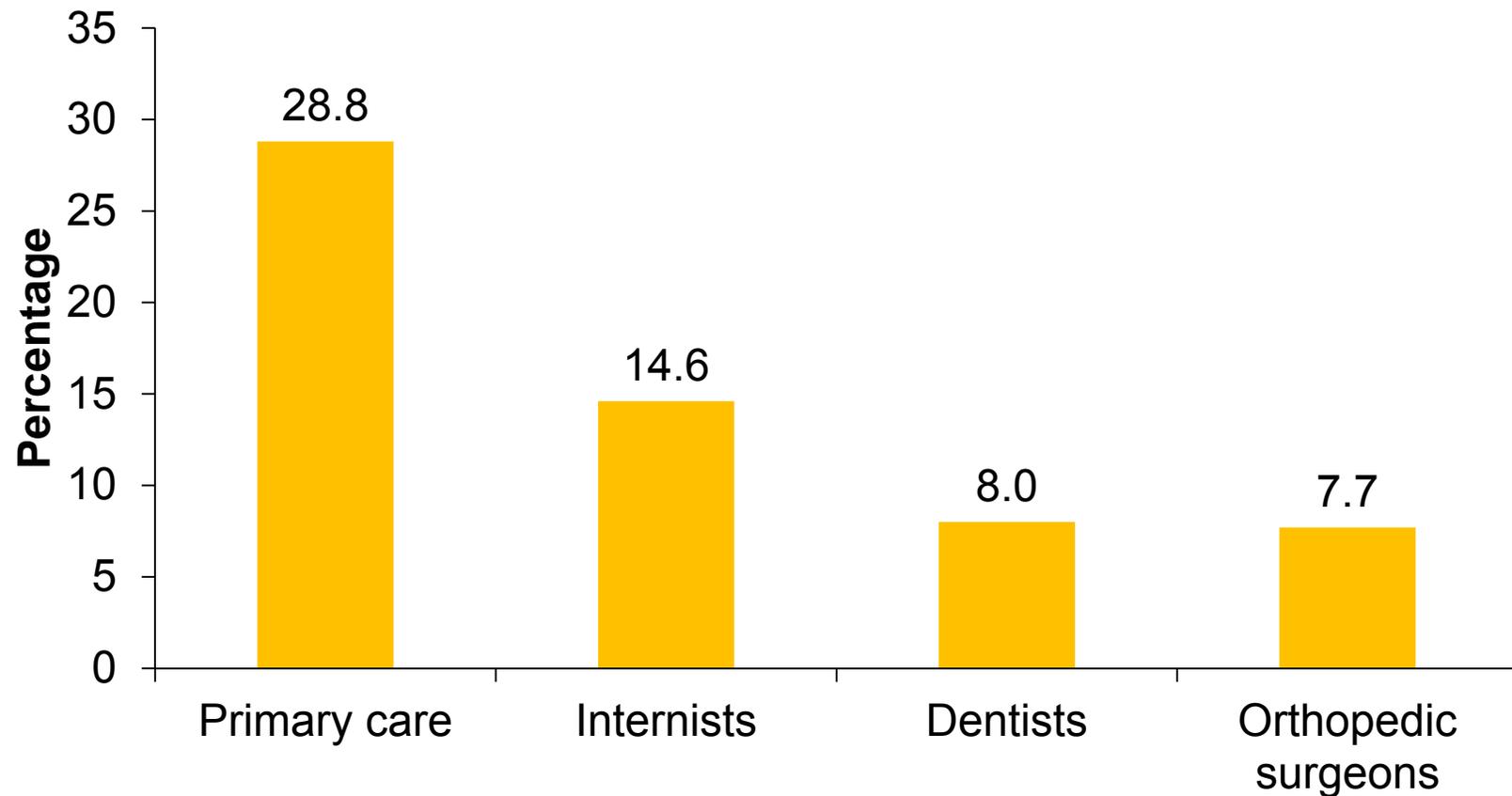


High Opioid Dose and Overdose Risk



Bohnert et al. Association between opioid prescribing patterns and opioid overdose-related deaths. JAMA. 2011;305(13):1315-1321

Leading types of prescribers of opioid analgesics, U.S., 2009¹



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

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

Characteristic	First Percentile (Top 1 Percent)	41 st -50 th 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%

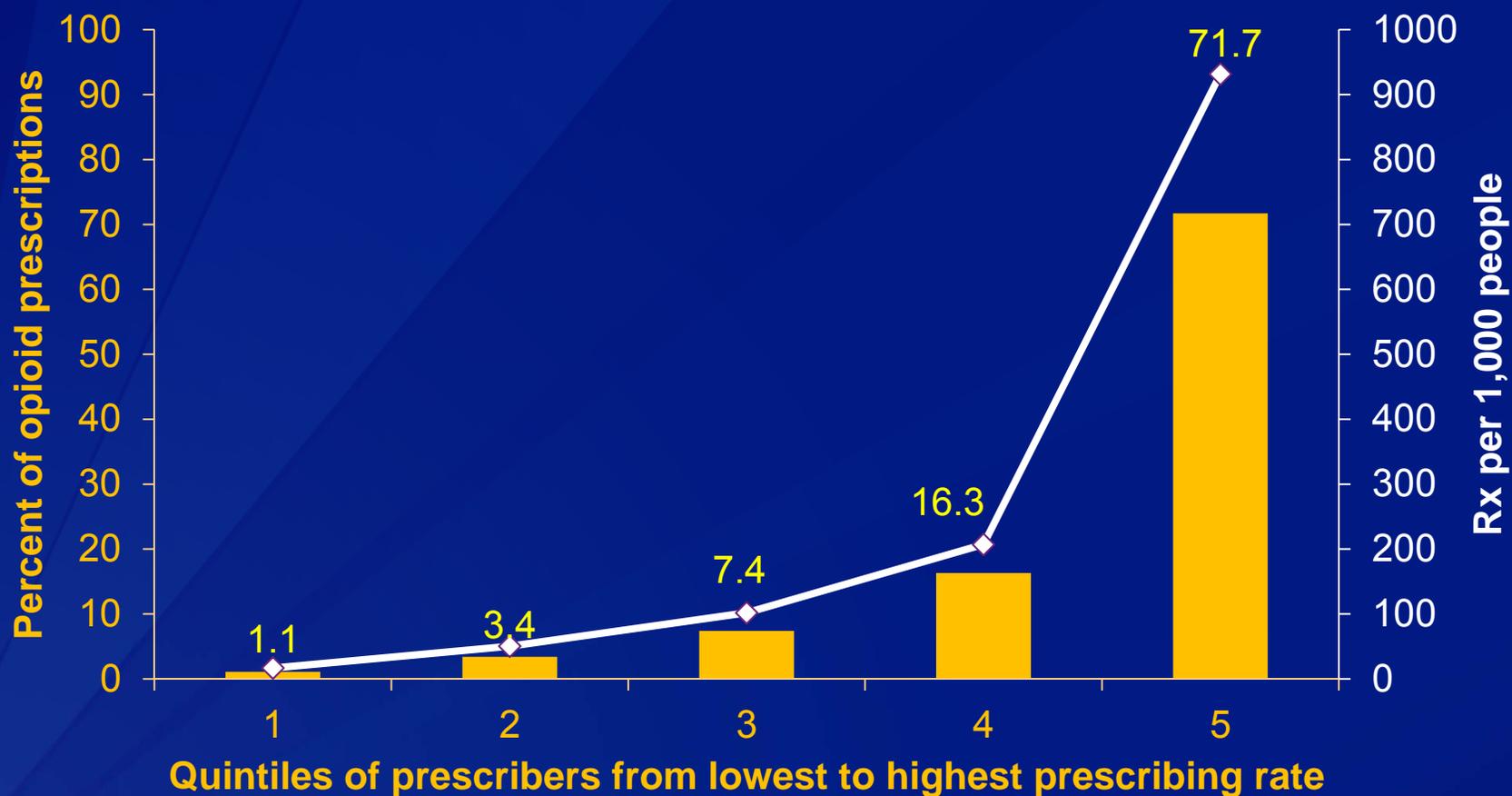
Swedlow et al. Prescribing patterns of schedule II opioids in California Workers' Compensation, CWC Institute, 2011

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, CWC Institute, 2011

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

Adherence to Risk Reduction Strategies for Opioid Abuse

□ Patients on opioids for CNCP¹

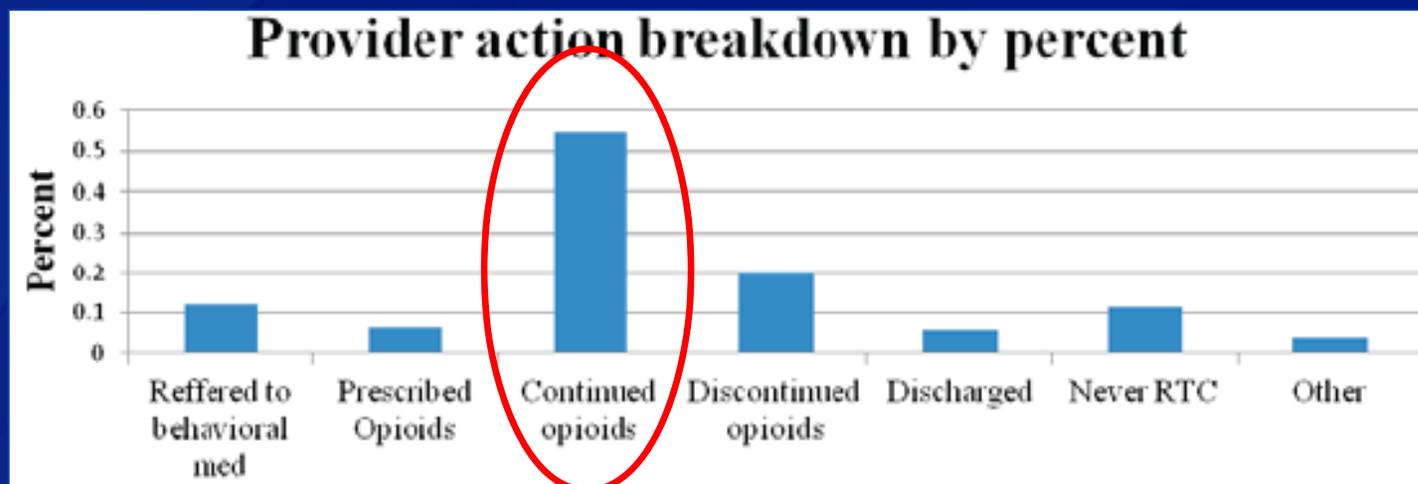
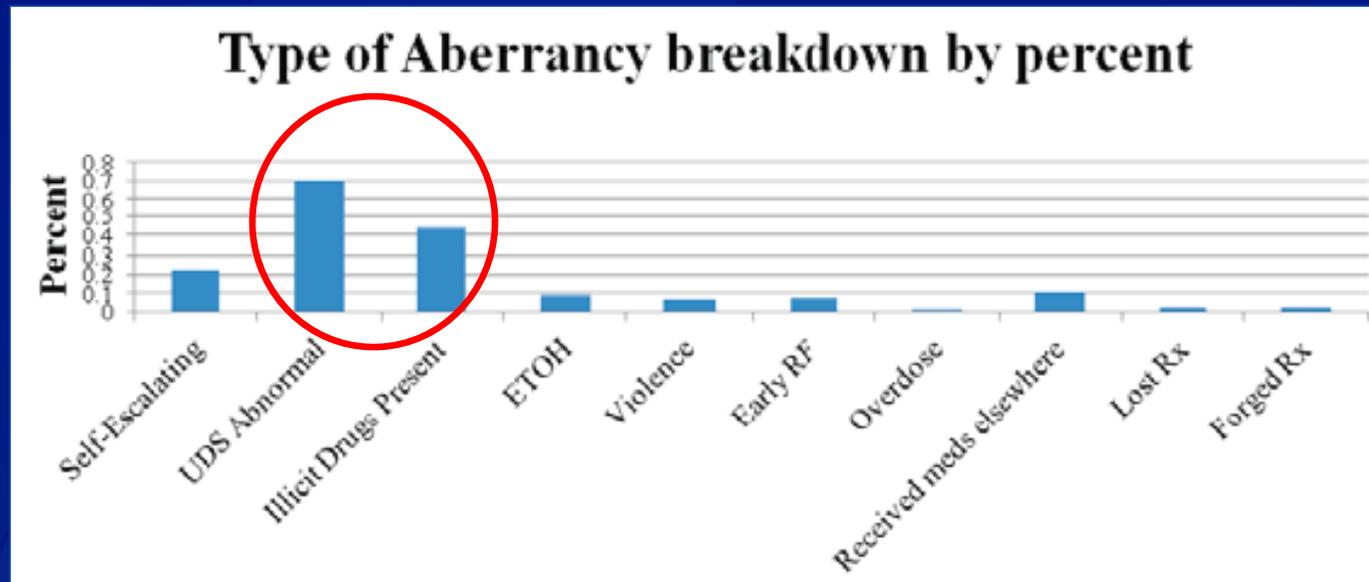
- 8% received UDS (24.4% in highest-risk pts)
- 49.8% had regular office visits (no difference in highest risk pts)
- 23.4% had at least one early refill (highest risk pts more likely to get early refill)

□ Comparing patients with and without SUD on opioids for CNCP²

- UDS
 - 47% vs. 18.2%
- Mental health visit
 - 29.7% vs. 17.2%
- Intensive PCP Treatment
 - No difference
- Physical Therapy
 - No difference

1. Starrels et al. Low use of opioid risk reduction strategies in primary care even for high risk patients with chronic pain. J Gen Intern Med. 2011; 26(9):958-964.
2. Morasco et al. adherence to clinical guidelines for opioid therapy for chronic pain in patients with substance use disorder. J Gen Intern Med. 2011; 26(9):965-971.

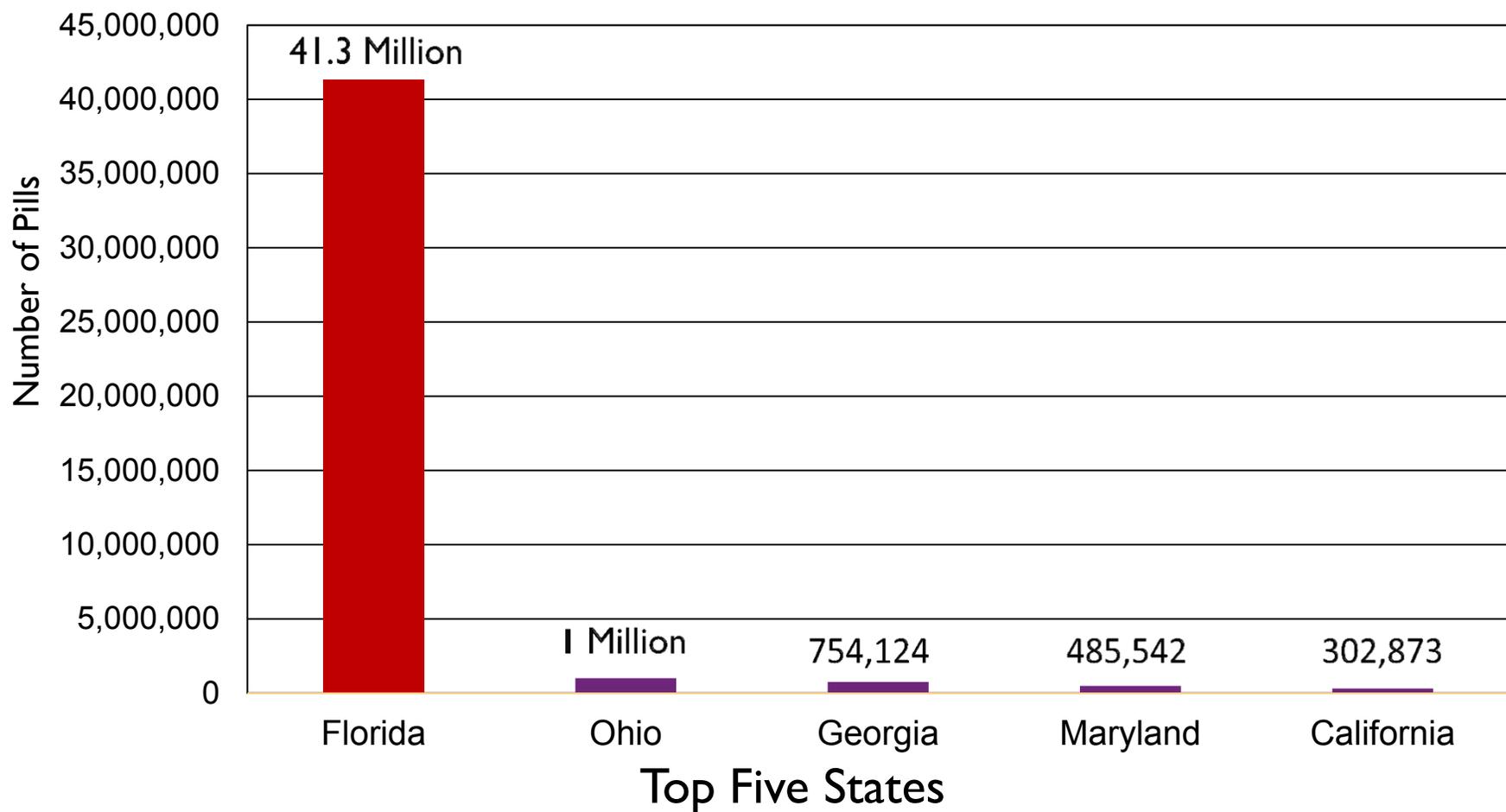
Physician Response to Aberrant Behaviors



Gupta et al. Retrospective review of physician opioid prescribing practices in patients with aberrant behaviors. *Pain Physician*. 2011;14:383-389.

Enact and enforce pill mill, doctor shopping, and other laws aimed at reducing prescription drug overdose

Oxycodone pills purchased by practitioners, January-June 2010



Drug Enforcement Administration, unpublished data from ARCOS [Automation of Reports and Consolidated Orders System] (February 2011).

Conclusions

- ❑ **Striking the balance between reducing abuse and overdose while ensuring pain is treated safely and effectively is essential**
- ❑ **Approach must be multifaceted – government, stakeholders, clinicians, industry, patients and others all have a role to play**
- ❑ **CDC is focusing its efforts to enhance surveillance, strengthen policy, and improve clinical practice**

Questions?

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

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