# California Opioid Safety Coalitions: Data and Data Dashboards

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Peter Kreiner, Ph.D.

PDMP Center of Excellence, Brandeis University

#### Overview

- Prescription Drug Monitoring Program (PDMP) data: strengths and limitations
- The data dashboard measures: evidence-based?
- How can the PDMP dashboard data be useful to you?
  - Needs assessment: Geographic variation
  - Tracking progress: Trends

## Strengths of PDMP Data for Public Health Surveillance and Evaluation

- Timeliness vs. health outcome data
- Patient, prescriber, and pharmacy identifiers
- Transactions located in time and space
- Detailed information on controlled substance dispensed – name, dosage, days' supply, refills
- Includes all methods of payment

## Limitations of PDMP Data for Surveillance and Evaluation

- No unique identifier for patients: record linking procedures vary by PDMP
  - Probabilistic vs. deterministic record linking
- PDMP relies on submitting pharmacies for data accuracy
- Practices to assess and ensure data quality vary by PDMP
- Recording of PRN prescriptions subject to pharmacist discretion (e.g., 30 pills may be recorded as 30 days' supply)

#### The Data Dashboard Measures

- Descriptive measures
  - # of opioid prescriptions (minus buprenorphine prescriptions) per 1,000 residents, per year
  - Morphine milligram equivalents (MME) opioid dosage per resident, per year
  - Opioid dosage as # of 5 mg. 'Norco' equivalents per resident, per year
  - # of buprenorphine prescriptions per 1,000 residents, per year
- Protective indicators
  - # of physicians waivered for medically-assisted treatment, per year
  - # of actively prescribing waivered physicians (i.e., at least one buprenorphine prescription during the year)

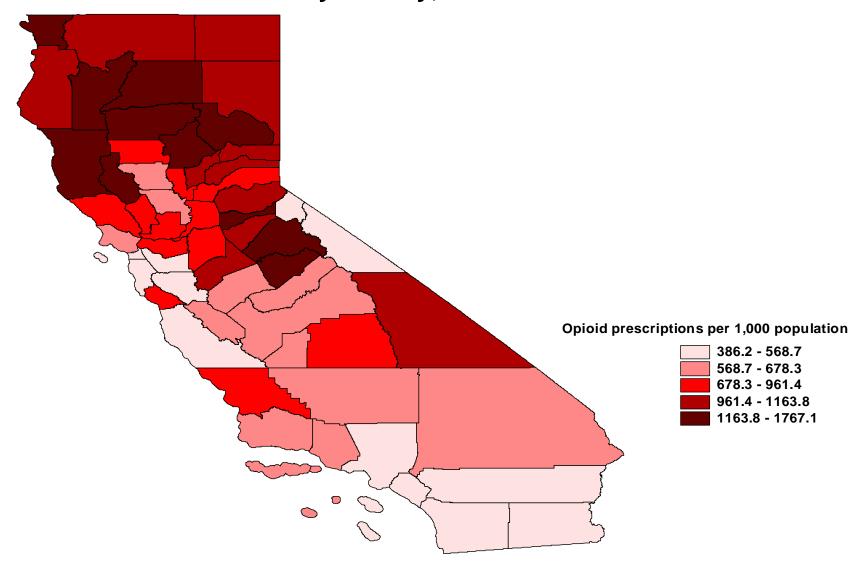
#### Data Dashboard Measures Continued

- Risk indicators
  - # of residents per 1,000 with an average daily opioid dosage of > 100
     MME for at least a 30-day period during the year
  - # of residents per 1,000 with an average daily morphine dosage of > 40 mg. for at least a 30-day period during the year
  - # of residents per 1,000 receiving both opioid and benzodiazepine prescriptions during at least a 30-day period during the year
  - # of residents per 1,000 who have obtained controlled substance prescriptions from 6 or more prescribers <u>OR</u> 6 or more pharmacies in a 6-month period during the year
- All measures are generated yearly for 2010 2013
- All measures are generated at both county and zip code levels

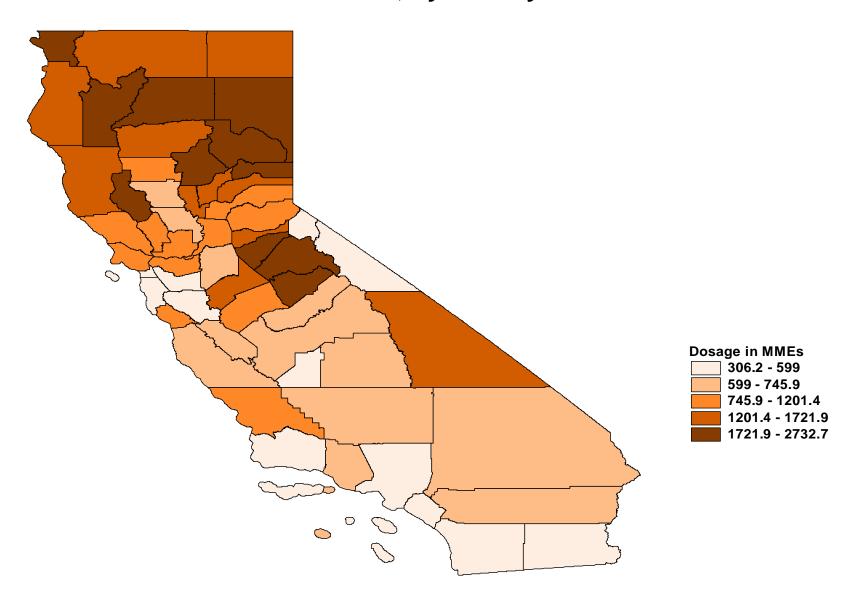
## Examples: CURES California County Data Shared with State and County Departments of Public Health

- Opioid prescribing rates (minus buprenorphine formulations thought to be associated with MAT)
- Average opioid dosage/Percent of residents with high (> 100 MME) average daily dosage
- Concurrent opioid and benzodiazepine prescriptions
- Change in opioid prescribing rates, 2010 2013
- Change in average opioid dosage, 2010 2013
- Change in number of waivered physicians, 2010 2013

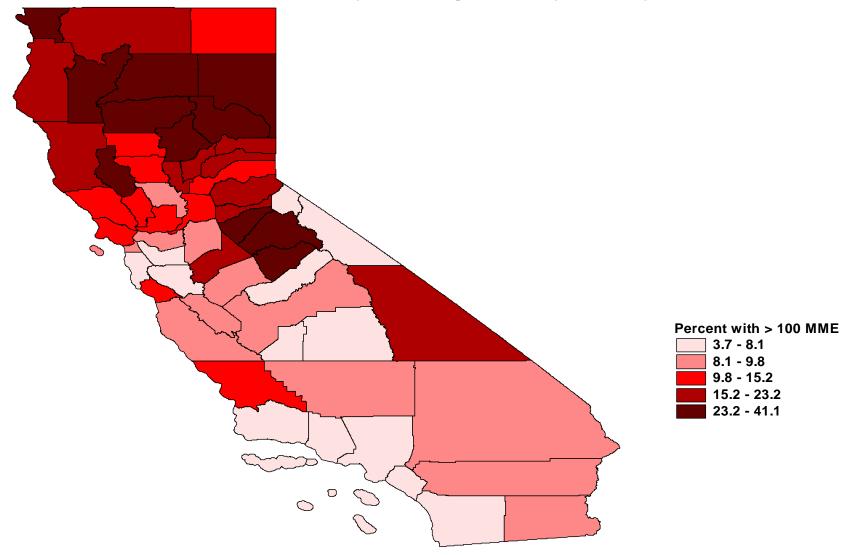
### California Opioid Prescribing Rates per 1,000 Residents, by County, 2013



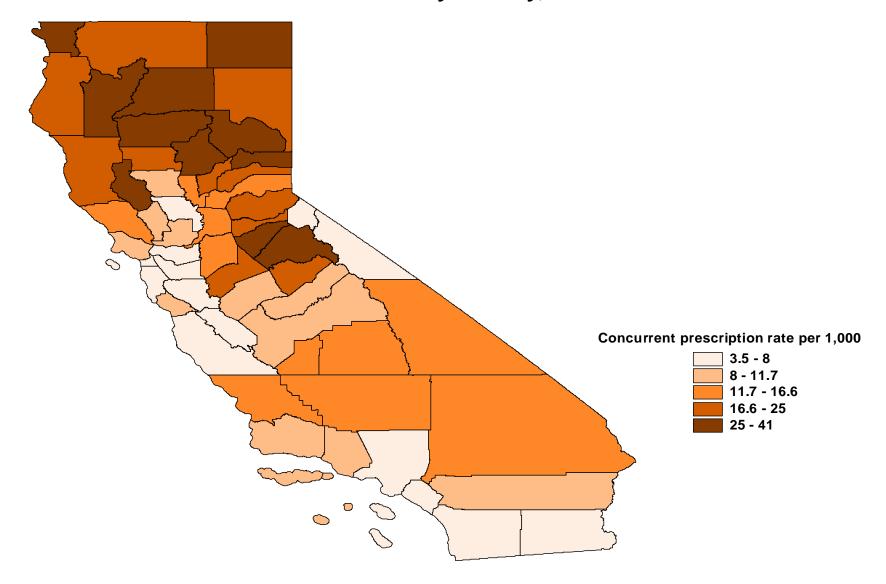
## California: Average Opioid Dosage per Resident in 2013, by County



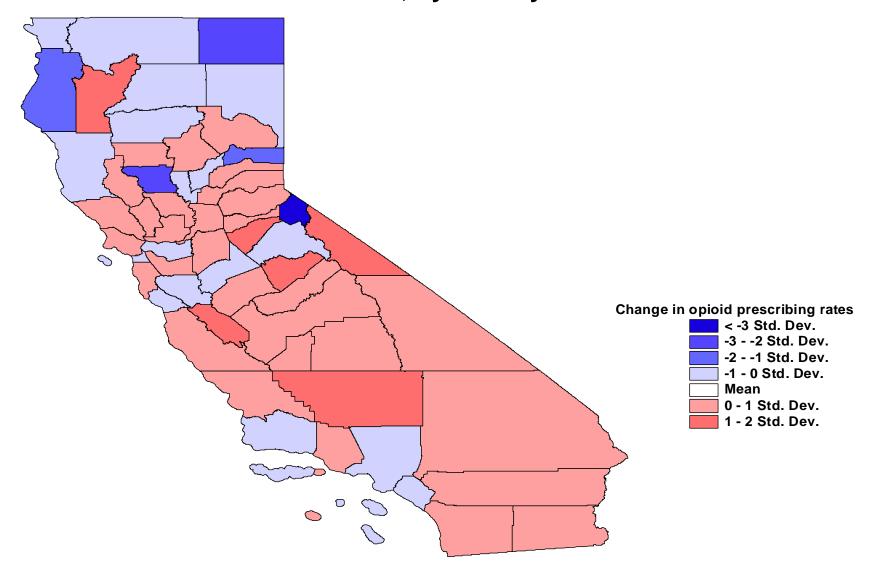
California: Number of Residents per Receiving > 100 MME For at Least 30 Days During 2013, by County



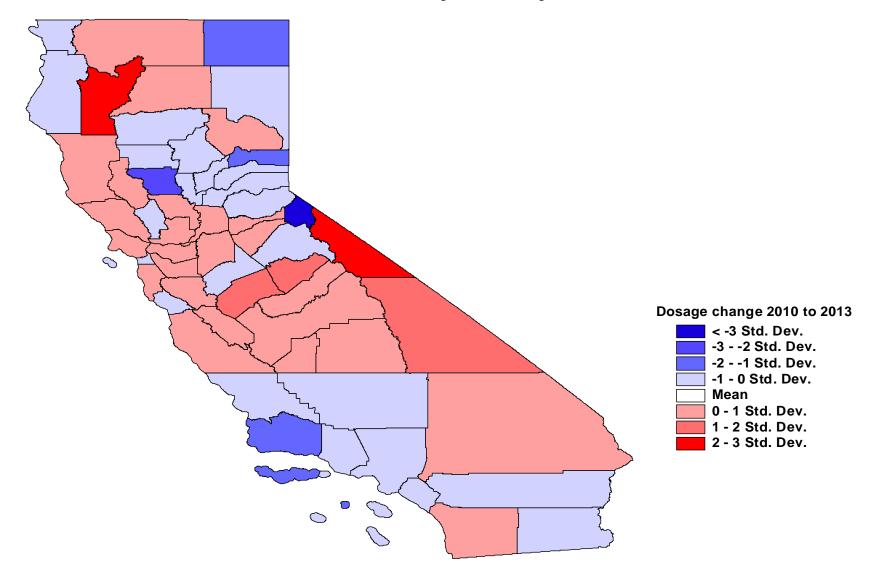
### California Residents per 1,000 with Opioid and Benzodiazepine Prescriptions, by County, 2013



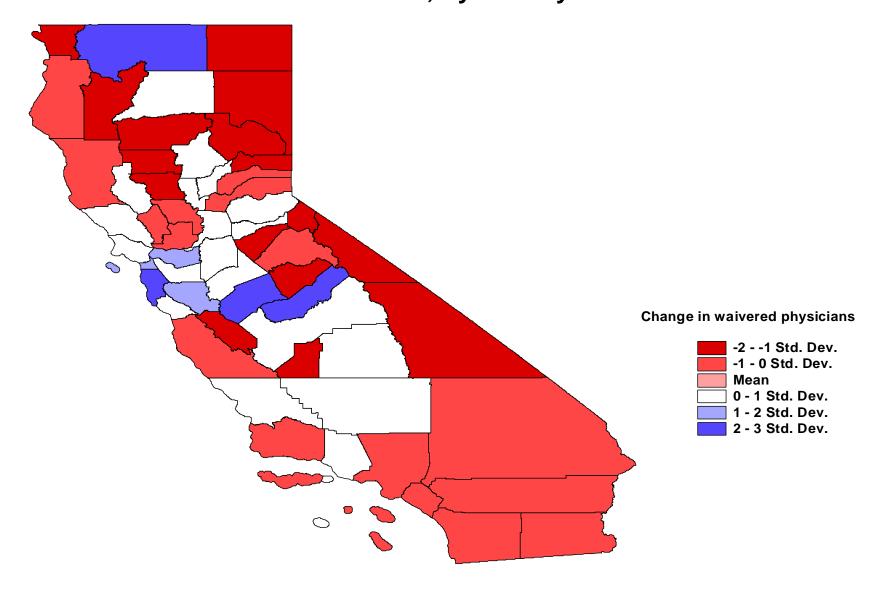
### California: Change in Opioid Prescribing Rates, 2010 to 2013, by County



### California: Change in Average Opioid Dosage Rate, 2010 to 2013, by County



#### California: Change in Number of Waivered Physicians, 2010 to 2013, by County



#### **Observations**

- Several northern counties with relatively small population were highest in rates of risk indicators (e.g., Del Norte, Lassen, Plumas, Tehama, Trinity), suggesting need for treatment and prevention
- Two of these (Plumas and Trinity) also had high percent increases in average MMEs per resident, 2010 – 2013, and low percent increases in number of physicians waivered to prescribe buprenorphine for medically-assisted treatment over the same period

**Contact Information** 

Peter Kreiner, Ph.D.

Principal Investigator

PDMP Center of Excellence

**Brandeis University** 

781-736-3945

pkreiner@brandeis.edu

www.pdmpexcellence.org