



# Interorganizational Relationships, Infrastructure Variation, and Public Health System Efforts to Address Prescription Drug Abuse

*Research In Progress Webinar*

*Wednesday, September 6, 2017 12:00-1:00pm ET/ 9:00am-10:00am PT*

*Funded by the Robert Wood Johnson Foundation*

# Agenda

## Interorganizational Relationships, Infrastructure Variation, and Public Health System Efforts to Address Prescription Drug Abuse

**Welcome:**     **CB Mamaril, PhD**, Research Assistant Professor,  
University of Kentucky College of Public Health

**Presenters:**   **Lainie Rutkow, JD, PhD, MPH**, [lrutkow@jhu.edu](mailto:lrutkow@jhu.edu) and  
**Kate Smith, PhD, MA**, [katecsmith@jhu.edu](mailto:katecsmith@jhu.edu), Johns  
Hopkins University Bloomberg School of Public Health

**Commentary:** **Corey Davis, JD, MSPH**, Deputy Director, The  
Network for Public Health Law–Southeastern Region  
[davis@healthlaw.org](mailto:davis@healthlaw.org)

## Questions and Discussion

# Presenters



## **Lainie Rutkow, JD, PhD, MPH**

Associate Professor of Health Policy and Management

Co-Director, Johns Hopkins Center for Law and the Public's Health

Johns Hopkins University Bloomberg School of Public Health [lrutkow@jhu.edu](mailto:lrutkow@jhu.edu)



## **Kate C. Smith, PhD, MA**

Professor of Health, Behavior and Society

Co-Director, Center for Qualitative Studies in Health and Medicine

Johns Hopkins University Bloomberg School of Public Health [katecsmith@jhu.edu](mailto:katecsmith@jhu.edu)



# **Interorganizational Relationships, Infrastructure Variation, and Public Health System Efforts to Address Prescription Drug Abuse**

**Lainie Rutkow, JD, PhD, MPH**

**Kate Smith, PhD, MA**

**Research in Progress Webinar**

**September 6, 2017**

**JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH**

# Study Team

Lainie Rutkow, JD, PhD, MPH (PI)

Kate Smith, PhD, MA (Co-PI)

Caleb Alexander, MD, MS (Co-I)

Jon Vernick, JD, MPH (Co-I)

Beata Debinski, MHS (RA)

Alden Lai, MPH (RA)

## Advisory Group

- Corey Davis, JD, MSPH (Network for Public Health Law)
- Jeanette Manning, JD (National Association of Attorneys General)
- PDMP Center of Excellence at Brandeis University

## Acknowledgement

This research is supported by the Robert Wood Johnson Foundation, Public Health Services and Systems Research.



# Prescription Drug Misuse: An On-going Public Health Challenge

- Opioid overdose deaths continue to increase
  - 1999-2014, over 165,000 prescription opioid overdose deaths in the U.S.
  - Over 15,000 such deaths in 2015
- Epidemic is driven by many factors, including **high volume of opioids prescribed** by healthcare providers
  - Opioids are the most commonly prescribed class of medication
  - Increases in prescribing have been paralleled by increases in opioid misuse and overdose

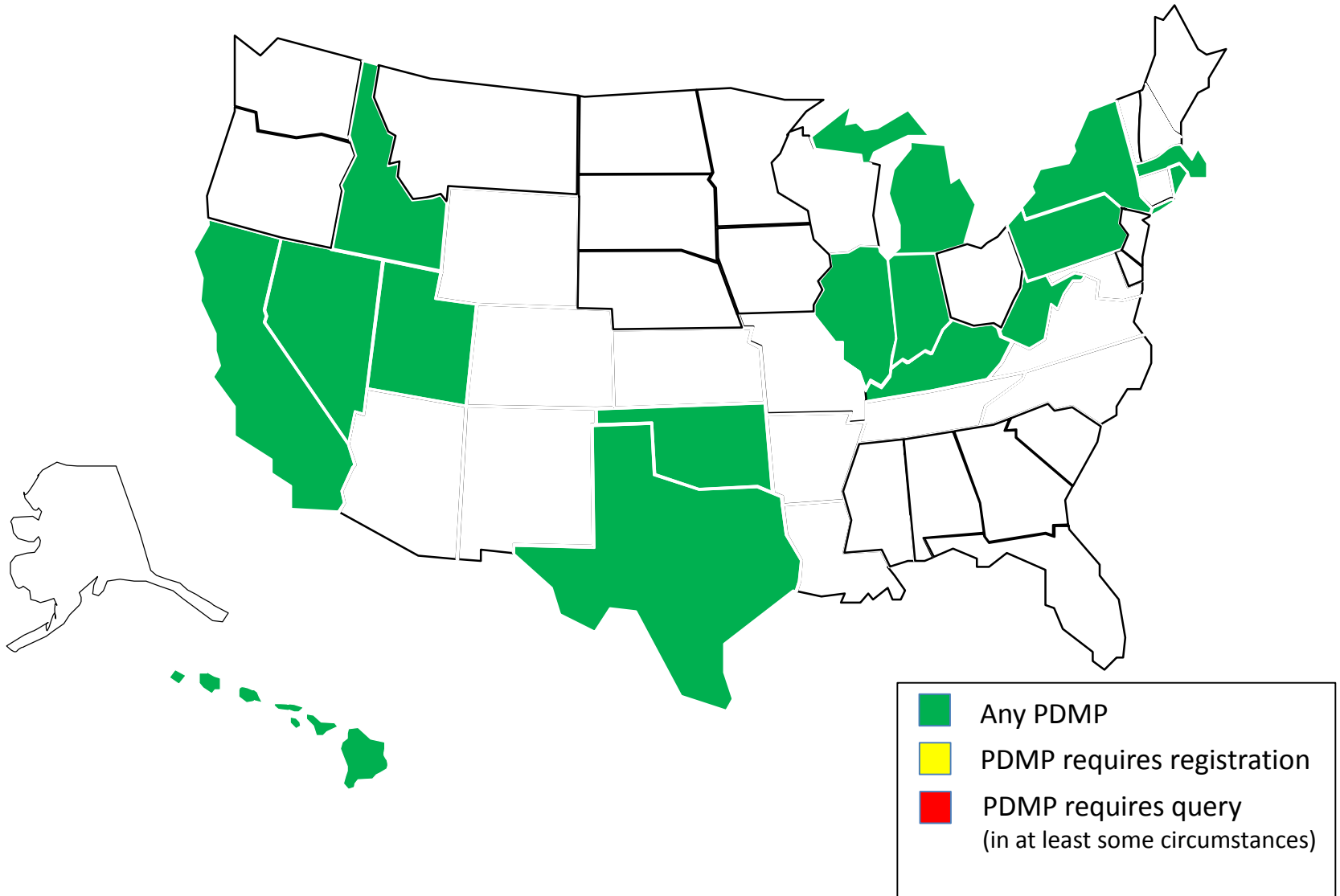


# Prescription Drug Misuse: Dynamic State-Level Legal Environment

- *From 2010-present:*
  - Rapid proliferation of statutes, regulations, guidances, and standards
  - Many laws implemented without an evidence base
  - Relatively little evaluative work
- *Primary law of interest:*
  - Prescription Drug Monitoring Programs (PDMPs)



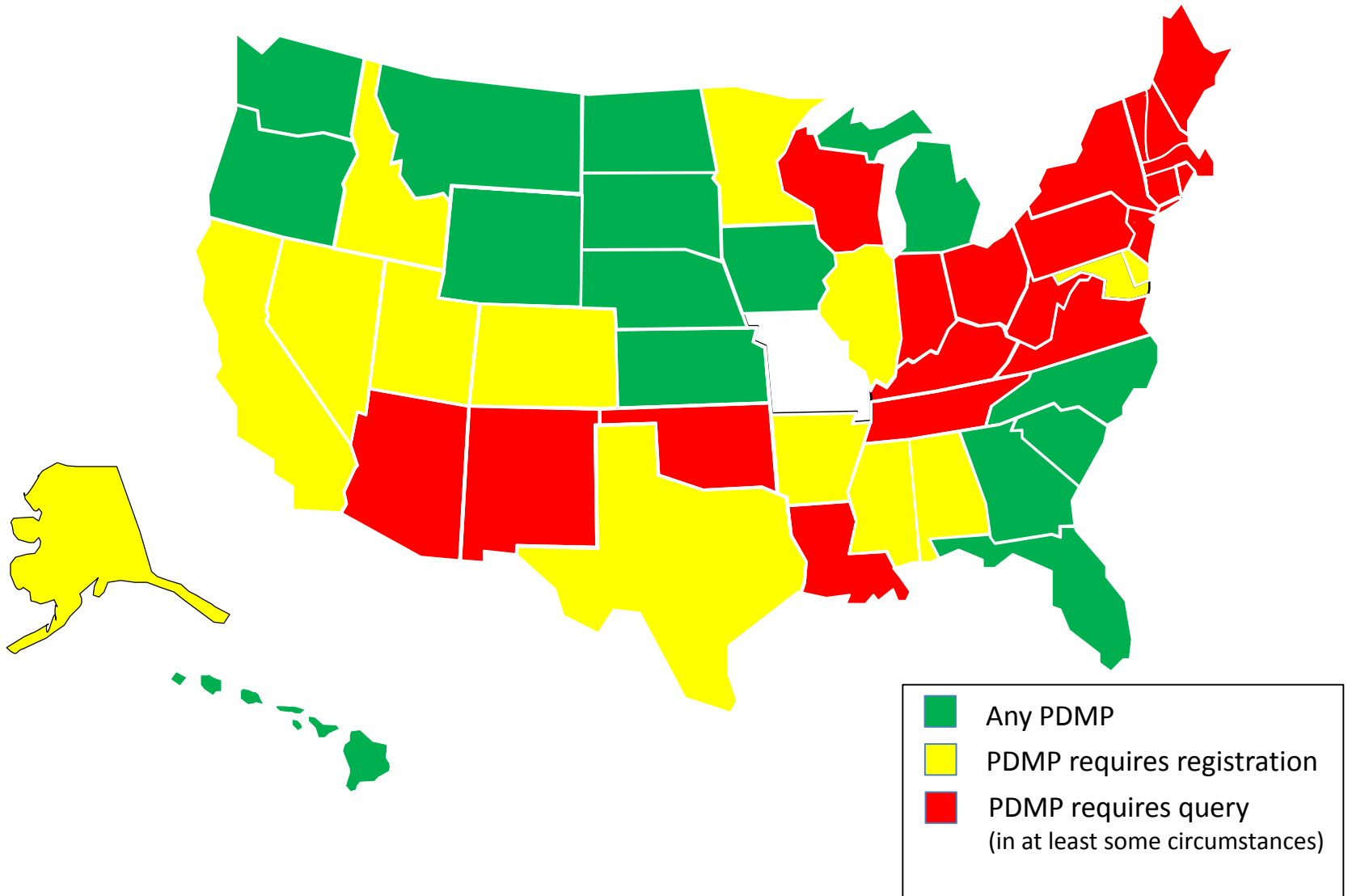
# PDMP Legislation by State, 2000



A CENTURY OF SAVING LIVES—MILLIONS AT A TIME 1916/2016

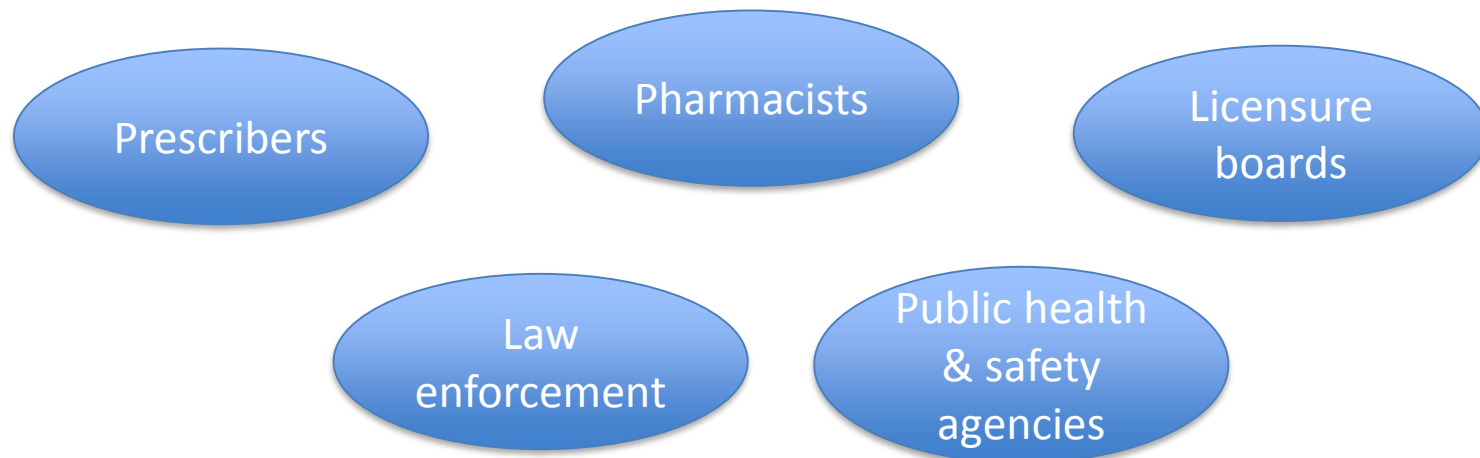


# PDMP Legislation by State, 2017



# Prescription Drug Abuse and the Public Health System

- Prescription Drug Monitoring Programs (PDMPs)
  - Established in 49 states
  - Collect, analyze, and report information about prescribing and utilization of controlled substances
  - **Primary goal: reduce prescription drug abuse and diversion**
- Created via state-level laws
  - With variation among the states, PDMP data may be accessed by:

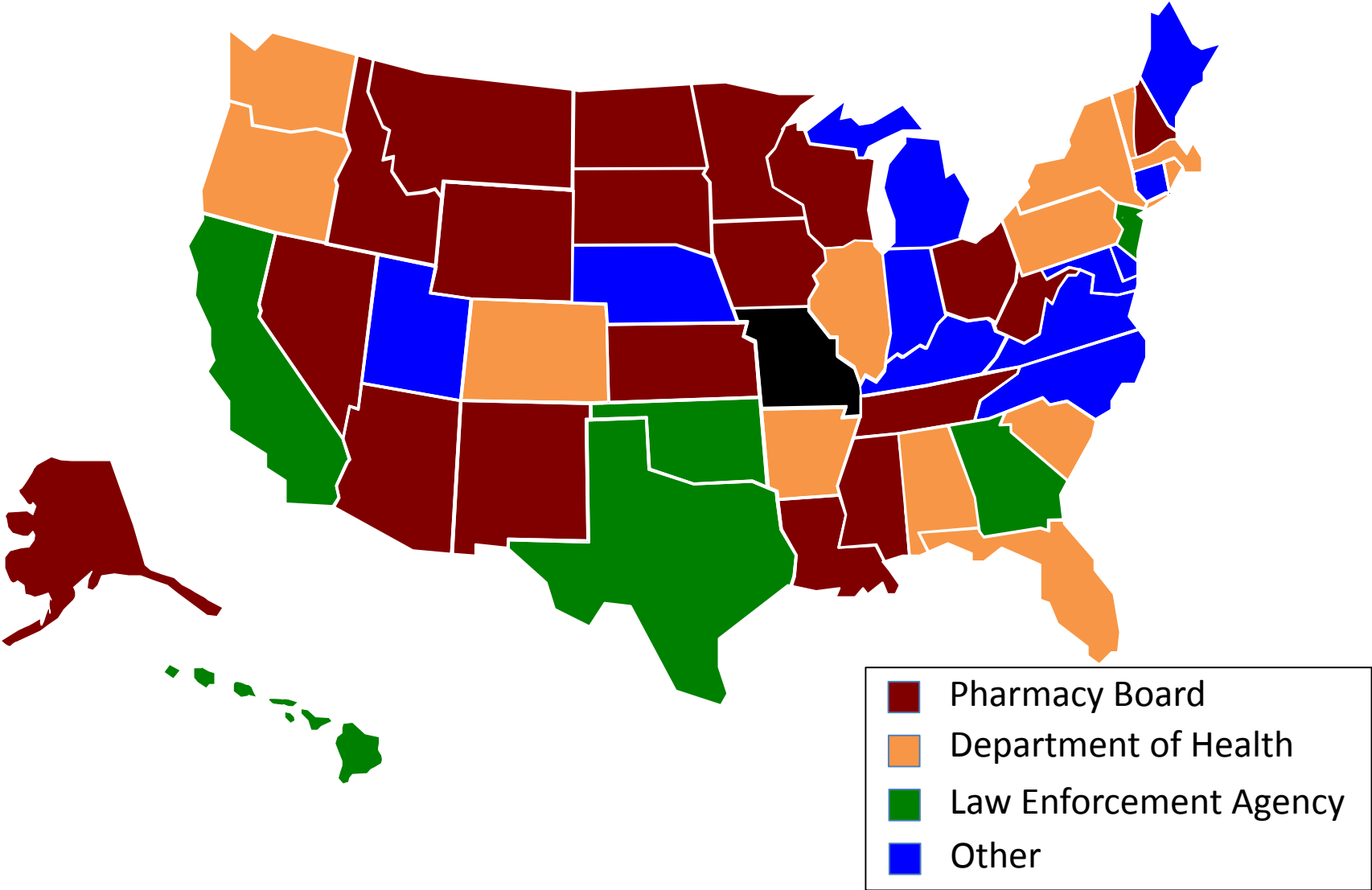


# Prescription Drug Abuse and the Public Health System

- Research about PDMPs
  - Primarily quantitative to measure effectiveness in terms of:
    - Impact on prescribing and dispensing practices
    - Program participation among prescribers and dispensers
    - Identification of doctor shoppers
    - Identification of trends in opioid abuse
- To date, most research has not accounted for the **natural experiment** in legal and structural variation among PDMPs
  - E.g., home agency within the public health system
  - Who may access PDMP data
  - Whether they are proactive or reactive
- Assumption of effective PDMP program function has not yet been explored



# States by Home Agency for PDMP



A CENTURY OF SAVING LIVES—MILLIONS AT A TIME 1916/2016

## Specific Aims

- **Aim 1:** To examine how interorganizational relationships among states' public health, substance abuse, and criminal justice agencies affect the structure and operations of PDMPs.
- **Aim 2:** To assess how the scope and clarity of the legal powers specified in authorizing legislation, enforcement authority, and assigned duties of PDMPs affect their ability to function effectively within the public health system.
- **Aim 3:** To determine how PDMPs' infrastructure affects their ability to address diversion of prescription drugs and associated morbidity and mortality.
- *Influenced by questions from **PHSSR Research Agenda** re: cross-jurisdictional models; legal powers and duties; and interorganizational relationships*

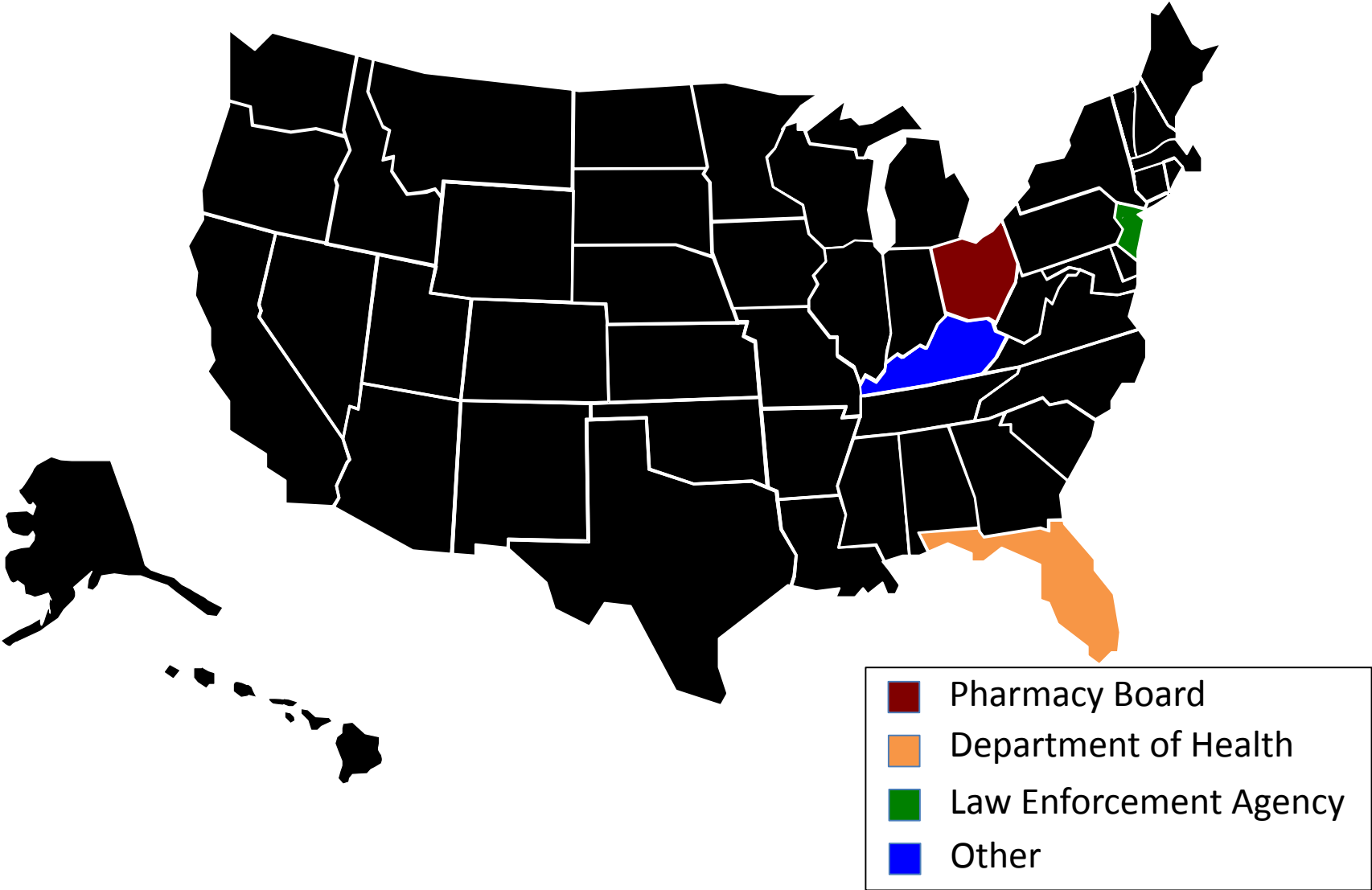


# Methods

- *Analytic goal*: better understand the role of complex state-level public health system factors that contribute to the ability of PDMPs to serve as an effective solution to the policy problem of prescription drug abuse and diversion
- *Case state selection*:
  - Purposive selection of four states to reflect a range of PDMP infrastructure, interorganizational relationships, and intra- and inter-state information sharing arrangements
  - *Primary sampling characteristics*: duration of PDMP; agency housing PDMP; state population



# States by Home Agency for PDMP



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# Methods: Interviews

- Semi-structured interviews in each case state
  - Sample: PDMP stakeholders
    - Purposeful sampling (AG's Office; PDMP administrator)
    - Snowball sampling
  - Interviews conducted until data saturation
  - With permission, interviews are recorded and transcribed
- Development of interview guide
  - Domains
    - PDMPs and the problem of prescription drug abuse
    - Interorganizational relationships
    - Information sharing
    - Impact of legal structure
    - Infrastructure and resources
  - Advisory group





# Methods: Interviews

- Semi-structured interviews: analysis
  - Coding transcript data
    - Staged approach
  - Initial codes based on:
    - Literature review
    - A priori knowledge
    - Early data collection
  - Development and refinement of codes
    - Participation of full research team
    - Double-code sub-set of transcripts
  - Qualitative software
  - Identification of themes within and across states



# Results: Interviews

## Sample: 37 interviews conducted

- *Florida*: 9 individuals interviewed
  - Health-oriented (5)
  - Law enforcement-oriented (4)
- *Kentucky*: 8 individuals interviewed
  - Health-oriented (6)
  - Law enforcement-oriented (2)
- *New Jersey*: 11 individuals interviewed
  - Health-oriented (5)
  - Law enforcement-oriented (6)
- *Ohio*: 9 individuals interviewed
  - Health-oriented (6)
  - Law enforcement-oriented (3)



# Results: Interviews

- *Interorganizational relationships*
  - Intra- and inter-agency relationships
  - Data quality and protection
  - Integration with EMRs
- *Scope and clarity of legal powers*
  - Regulatory/enforcement authority of home agency
  - Required registration vs. required use
  - Clarifying access/use for potential users
- *Infrastructure and function*
  - Tool for health care providers
    - Improve patient treatment decisions
  - Identify doctor shoppers



# Why study news coverage of PDMPs?

*News media shape people's interpretation of the world – especially health issues with which they have little first hand experience*

Holmes (2008)

- News coverage of health and health policy can serve to draw people's attention to an issue. Topics that get covered tend to become seen as important. **(Agenda Setting Theory)**
- How an issue is presented (what aspects are included, what gets left out, who gets to talk on an issue, what topics it is related to) shapes how people understand the nature of the problem. **(Framing Theory)**
- How an issue is presented (see above) shapes what people come to see as possible and plausible solutions. **(Framing Theory)**



# Creating the news sample (I)

- Newspapers still serve as a good proxy for media coverage of health and health policy issues (at the state level)
- Pragmatic sample: 1 major newspaper with a publicly available, searchable archive selected per state
  - **Tampa Bay Times (FL)**
  - **Lexington Herald (KY)**
  - **Cleveland Plain Dealer (OH)**
  - **Newark Star-Ledger (NJ)**



**The Star-Ledger**



## Creating the news sample (II)

- Time frame for coverage collection depends on when PDMP was introduced:
  - Kentucky (1997-2015)
  - Ohio (2002-2015)
  - New Jersey (2007-2015)
  - Florida (2008-2015)
- Key words: some common (e.g. PDMP) and some state-specific (e.g. Kasper)



# Coding news: Process

- Article sample cleaned to remove stories that do not discuss the PDMP in any depth
- Mixture of inductive and deductive codes
- Coding framework initially developed around Florida coverage and refined over next 2 states
- The article is the unit of analysis
- Coding developed by team of 3 and applied by 2 coders independently



# Coding news: Content

- What event spurred news coverage?
- Is coverage neutral, supportive or oppositional (towards PDMP)?
- Mention of agencies running PDMP?
- Mention of data sharing?
- Mention of privacy concerns?
- Framing of issue as an 'epidemic' and mention of # of pills prescribed or of overdoses/deaths?
- Discussion of national problem or other states as context?
- Mention of specific drugs; drug manufacturers; online prescribing?
- Mention of Board of Medical Licensure or Pharmacy
- Quotes from politicians, civil servants, law enforcement & judiciary, physicians or pharmacists





# Coding news: Results

- Across states, most articles discussed PDMPs:
  - In relation to prescription opioid use disorders
  - As a pressing social problem
  - Frequent use of term “epidemic”
  - As part of a systems-level solution
- Focus on PDMP-related legislation
  - PDMP establishment, modification, funding
  - Framed PDMP as a system
- PDMPs and data sharing
  - Privacy concerns
- Coverage more frequently included law enforcement and politicians vs. health care providers and civil servants



# Translation and Dissemination

## Translation

- Peer-reviewed publications
- Presentations for NAAG and ASTHO
- Conference presentations

## Dissemination

- Project website
- Blog posts
- Social media

## Center for Law and the Public's Health



Alcohol  
Analyzing Laws  
Corporations and  
Public Health  
Firearms  
Litigation as a Tool  
Motor Vehicles  
Obesity  
Preparedness  
Tobacco  
Vaccines

### Effect of Interorganizational Relationships and Infrastructure Variation on Public Health System Efforts to Address Prescription Drug Abuse

This study's goal is to understand the role of interorganizational relationships, information sharing, and legally established infrastructure on prescription drug monitoring programs' (PDMPs) function and impact within the public health system. The study's aims are: 1) examine how interorganizational relationships among states' public health, substance abuse, and criminal justice agencies affect PDMPs' structure and operations; 2) assess how the scope and clarity of legal powers specified in authorizing legislation, enforcement authority, and assigned duties of PDMPs affect their ability to function effectively within the public health system; and 3) determine how PDMPs' infrastructure affects their ability to address diversion of prescription drugs and associated morbidity and mortality. Support for this research is provided by a grant from the Robert Wood Johnson Foundation ([Public Health Services and Systems Research](#)).

# Anticipated Impact

- Anticipated impact
  - Findings may assist:
    - State-level policymakers to revisit PDMP's legally established infrastructure
    - State-level executive branch leadership to refine information sharing arrangements or interorganizational linkages
    - PDMP administrators and staff as they implement their programs and advocate for more resources or authority
- Questions
  - Lainie Rutkow ([lrutkow@jhu.edu](mailto:lrutkow@jhu.edu))
  - Kate Smith ([ksmit103@jhu.edu](mailto:ksmit103@jhu.edu))
- Thank you!



# Commentary



**Corey Davis, JD, MSPH**

Deputy Director

The Network for Public Health Law –  
Southeastern Region

Staff Attorney, National Health Law  
Program

[davis@healthlaw.org](mailto:davis@healthlaw.org)

## Questions and Discussion

# Webinar Archives

<http://systemsforaction.org/research-progress-webinars>

## Upcoming Webinars

Thursday, September 14, 12-1pm ET/ 9-10am PT

**AFIX: A MULTI-STATE RANDOMIZED CONTROL TRIAL TO INCREASE ADOLESCENT HPV IMMUNIZATION THROUGH PROVIDER BEST PRACTICES**

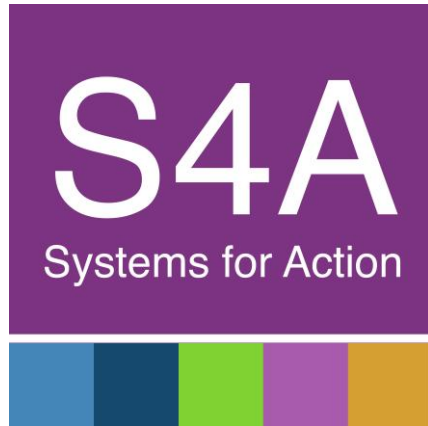
*Melissa B. Gilkey, PhD, MPH, Harvard College of Medicine, and Jennifer MacKinnon, University of North Carolina Gillings School of Global Public Health*

Wednesday, October 18, 12-1pm ET/ 9-10am PT

**FINANCING AND SERVICE DELIVERY INTEGRATION FOR MENTAL ILLNESS & SUBSTANCE ABUSE**

*William Riley, PhD, College of Health Solutions, and Michael Shafer, PhD, College of Public Service and Community Solutions, Arizona State University*

Thank you for participating in today's webinar!



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*For more information about the webinars, contact:*

Ann Kelly, Project Manager [Ann.Kelly@uky.edu](mailto:Ann.Kelly@uky.edu) 859.218.2317

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# Acknowledgements

***Systems for Action*** is a National Program Office of the Robert Wood Johnson Foundation and a collaborative effort of the Center for Public Health Systems and Services Research in the College of Public Health, and the Center for Poverty Research in the Gatton College of Business and Economics, administered by the University of Kentucky, Lexington, Ky.



# Speaker Bios

**Lainie Rutkow, JD, PhD, MPH**, is an Associate Professor of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health and Co-Director of the Johns Hopkins Center for Law and the Public's Health. She is jointly appointed in the School's Department of Health, Behavior and Society, core faculty of the School's Office of Public Health Practice and Training, and is affiliated with the School's Public Health Preparedness Programs. Dr. Rutkow's work concerns the use of law as a tool to protect and promote the public's health in areas such as emergency preparedness, injury prevention, food and obesity policy, and the regulation of industries. She has published numerous articles in these and related areas, and is affiliated with the Eastern Region of the Network for Public Health Law.

**Katherine Clegg Smith, PhD, MA**, is a Professor of Health, Behavior and Society at the Johns Hopkins Bloomberg School of Public Health and co-directs the MHS in Social Factors in Health program. Dr. Smith also directs the Center for Qualitative Studies in Health and Medicine. She is a sociologist with research interests around the social determinants of health behavior. Her particular area of expertise is communication of health information, and much of her research is organized around individual and collective understanding of health issues and experiences. Dr. Smith was an author of the NIH Best Practices in Mixed Methods Research for the Health Sciences.

**Corey Davis, JD, MSPH**, serves as the deputy director at the Network for Public Health Law's Southeastern Region and staff attorney at the National Health Law Program. Before joining NHeLP, Corey served as an employment rights attorney at Equality Advocates Pennsylvania, and previously oversaw a street-based legal clinic sited at Philadelphia's syringe exchange program. In both of these positions he provided direct legal representation as well as education, outreach and strategic advocacy. Corey has also worked for the North Carolina Institute of Medicine, the University of Pennsylvania and the Drug Control and Access to Medicines Consortium in both research and management capacities.