



Leveraging Social, Behavioral, and Health Data
Harold Rogers PDMP – National Meeting

June 26, 2019

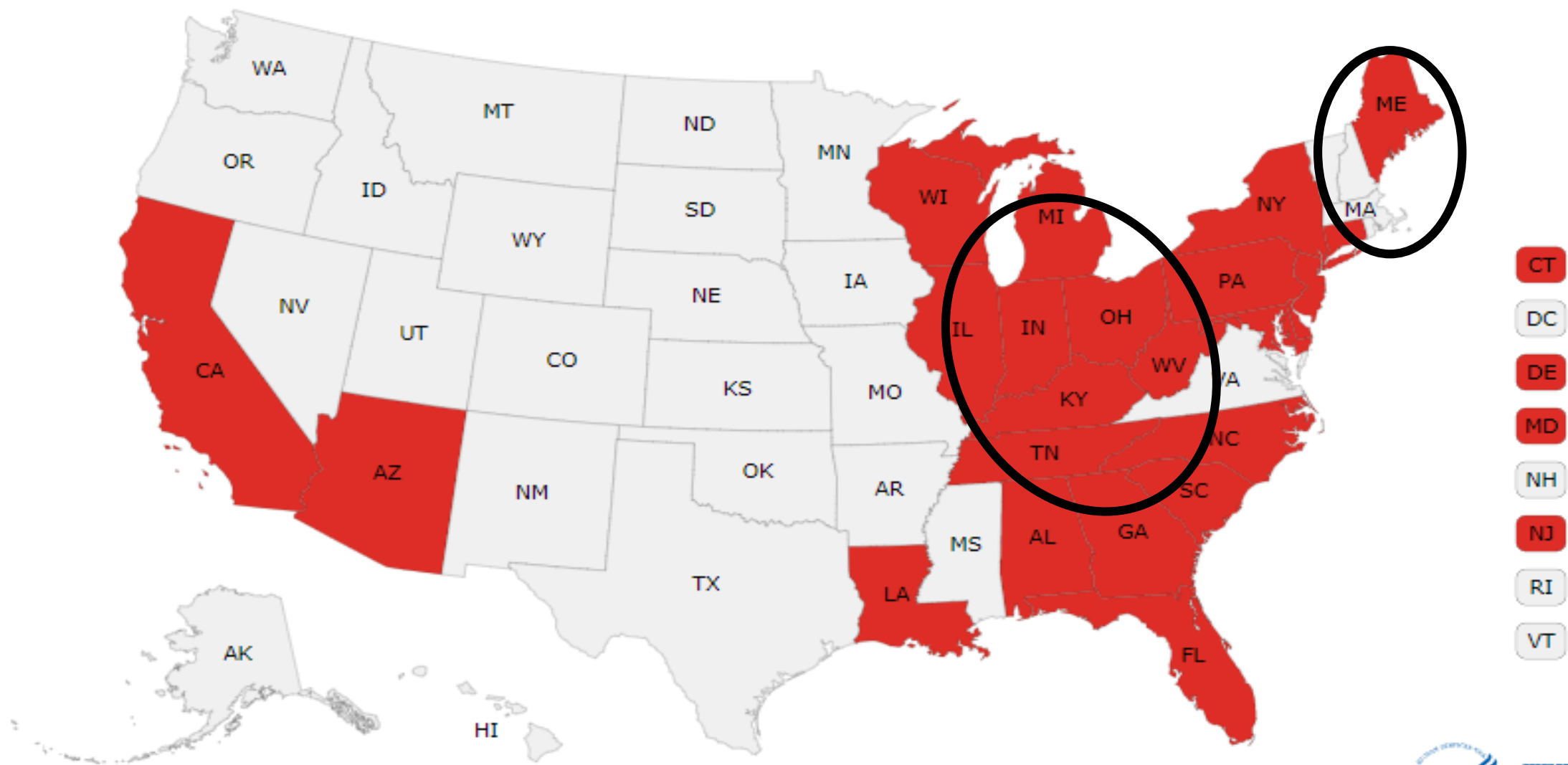
Regional Judicial Opioid Initiatives

Components

- Judicially led effort
- Multi-state
- Champions – Chief Justice of Supreme Court (and State Court Administrators)
- Charter (purpose/membership)
- Recognition of effects (complexity/fatality) on:
 - Criminal dockets
 - Family Court dockets
- Courts are an active part of the solutions
- Responses should be driven by data (when available)

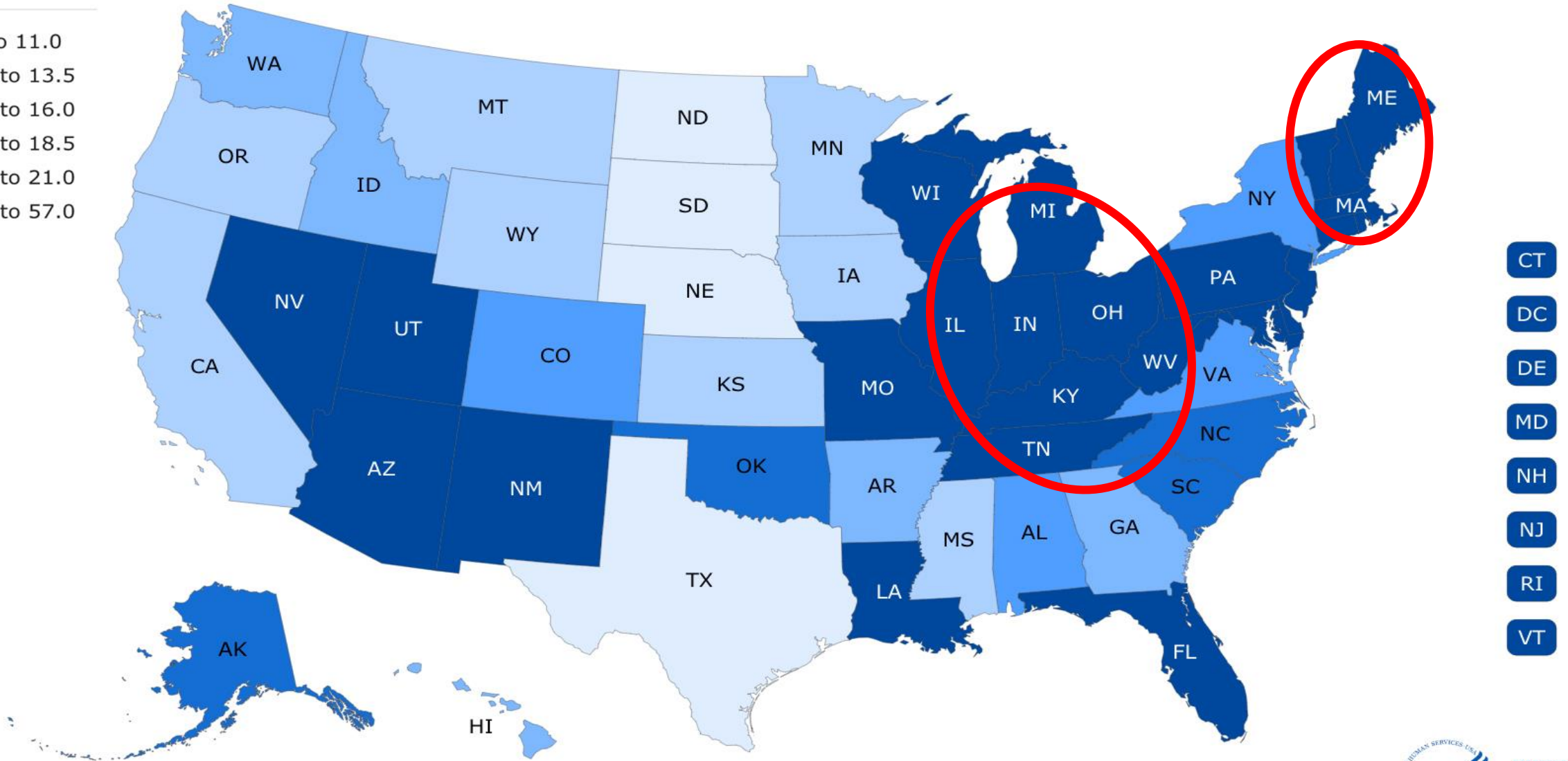
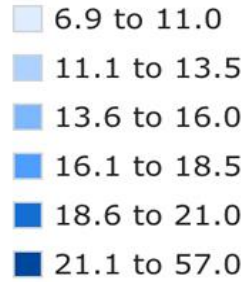


Statistically significant drug overdose death rate increase from 2016 to 2017, US States



Number and age-adjusted rates of drug overdose deaths by state, US 2017

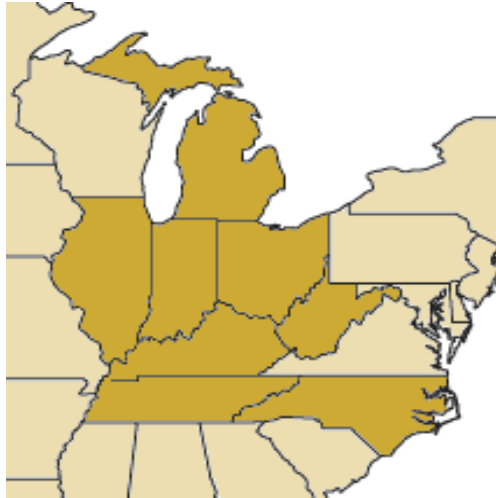
Legend



Age-adjusted death rates were calculated as deaths per 100,000 population using the direct method and the 2000 standard population.

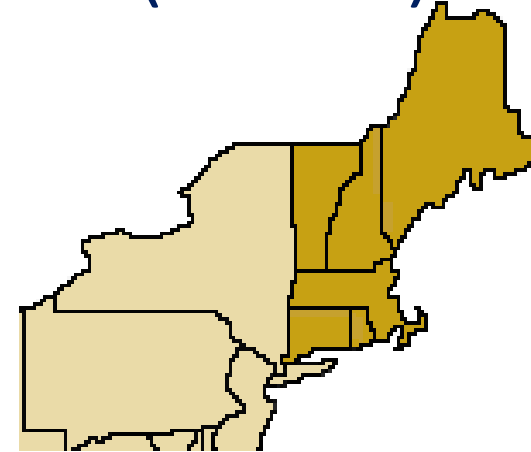
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

Appalachia/ Midwest (2017)



IL, IN, KY, MI, NC, TN, OH, WV

New England (2019)



CT, MA, ME, NH, RI, VT

Attention on areas around state boundary lines (access to treatment or services, data sharing, hot spots)

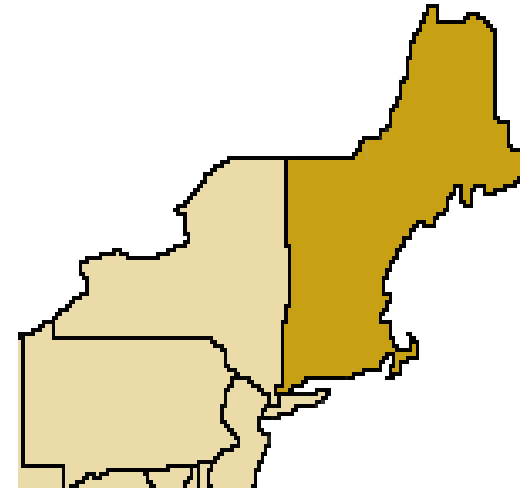


Appalachia/ Midwest (2017)



IL, IN, KY, MI, NC, TN, OH, WV

New England (2019)



CT, MA, ME, NH, RI, VT

Consider data as a region and when appropriate allow regional data to influence decisions.



Data Approach

- **Increase data sharing across state borders and disciplines.**
 - Share aggregate data sets, including multiple systems, within and across the multi-state region. (e.g. OH merge and review of PDMP and Child Welfare data)
 - Share identifiable data across state borders (e.g. PDMPs)
 - Compare “like” data across the region to inform practices (e.g. PDMP data dictionary applied to data)
- **Use data to make decisions.**
 - Identify hot spots areas across the region with a focus on state borders
 - Focus interventions on the identified hot spot areas



Data Call (Researcher – Wayne State University)

Prescription Drug Monitoring Data

- Number of total opioid prescriptions dispensed
- Number of total opioid pills dispensed
- Number of unique patients receiving an opioid
- Number of opioid-benzodiazepine co-prescriptions
- Number of opioid prescriptions with daily dosage (MME) >50

Vital Records

- Number of drug overdose deaths
- Number of overdose deaths with opioids being a contributing factor
- Number of overdose deaths with undetermined substances r

Hospital and Emergency Medicine

- Number of ED visits with opioids as a contributing factor
- Number of hospitalizations with opioids as a contributing factor
- Number of babies born with neonatal abstinence syndrome (NAS)

Naloxone Administration (first responders)

- Number of naloxone administrations by emergency medical services

- Number of naloxone administrations by police
- Number of persons with repeat naloxone administrations

Substance Abuse Treatment

- Number of opioid treatment programs (OTPs)
- Number of substance abuse treatment admissions due to opioids
- Number of patients receiving medication assisted treatment (MAT)

Child Welfare / Family Services

- Number of child welfare referrals
- Number of cases where a child was removed from the home
- Number of cases... because of parental drug use
- Number of cases... because of parental opioid use

Law Enforcement / Courts

- Number of drug related arrests
- Number of opioid related arrests
- Number of drug related prison incarcerations
- Number of opioid related prison incarcerations



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Data Call (Researcher – Wayne State University)

<i>Data Availability by State</i>								
	KY	IL	IN	MI	OH	TN	WV	NC
Prescription Drug Monitoring Program (PDMP)	X		X	X	X	X	X	X
Vital Records (Mortality)	X	X	X	X	X	X	X	
Hospital and Emergency Medicine	X		X	X	X	X	X	
Naloxone Administration	X	X	X	X	X	X	X	
Substance Abuse Treatment	X	X	X	X	X	X	X	
Child Welfare/Family Services	X	X	X	X	X	X	X	X
Criminal Justice	X		X	X	X	X	X	X



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<i>Naloxone Administration (first responders)</i>					
	Availability				
Data Points	by YEAR	RANGE	by MONTH	by COUNTY	by ZIP CODE
Number of naloxone administrations by emergency medical services (EMS)	KY, IN, MI, OH, WV	KY-2017 IN-2014 MI-2015 OH-2010 WV-2015	IN, MI, OH, WV	KY, IN, MI, OH, WV	IN, OH, WV
Number of naloxone administrations by law enforcement	KY, IL, TN, WV	KY-2017 IL-2013 IN-2016 TN-2017 WV-2015	IL, TN, WV	KY, IL, TN, WV	IN, TN, WV
Number of persons with repeat naloxone administrations (different days, not same event)	IL, IN, WV	IL-2013 IN-2015	IL, IN, WV	IL, IN, WV	WV



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Data Call (Researcher – Wayne State University)

- Establish RJOI and RJOI stakeholders as a credible source to request information
- Relationship building
- Data Agreements
- Use the state's Judges to request the data



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Prescription Drug Monitoring Program (PDMP)								
Total opioid prescriptions dispensed								
Total opioid pills dispensed								
Unique patients receiving an opioid								
Opioid-benzodiazepine co-prescriptions								
Opioid prescriptions with daily dosage of MME >50								
... received opioid prescriptions from 4 or more different prescribers in the past month								
Vital Records (Mortality)								
Drug overdose deaths								
Overdose deaths with opioids being a contributing factor								
Overdose deaths with undetermined substances as being a contributing factor								
Hospital and Emergency Medicine								
Emergency department (ED) visits with opioids as a contributing factor								
Hospitalizations with opioids as a contributing factor								
Number of babies born with neonatal abstinence syndrome								
Naloxone Administration (first responders)								
Naloxone administrations by emergency medical services (EMS)								
Naloxone administrations by law enforcement								
Persons with repeat naloxone administrations (different days, not same event)								
Substance Abuse Treatment								
<u>Inpatient</u> opioid treatment programs (OTPs)								
<u>Outpatient</u> opioid treatment programs (OTPs)								
Substance abuse <u>inpatient</u> treatment admissions due to opioids								
Substance abuse <u>outpatient</u> treatment admissions due to opioids								
Patients receiving <u>inpatient</u> medication assisted treatment (MAT)								
Patients receiving <u>outpatient</u> medication assisted treatment (MAT)								
Office-based opioid treatment (OBOT) programs								
Child Welfare / Family Services								
Child welfare referrals								
Cases where a child was removed from the home								
Cases where a child was removed from the home because of parental drug use								
Cases where a child was removed from the home because of parental opioid use								
Criminal Justice (arrests, court cases, incarcerations)								
<u>Adult drug</u> related court cases								
<u>Juvenile drug</u> related court cases								
<u>Adult opioid</u> related court cases								
<u>Juvenile opioid</u> related court cases								
<u>Adult drug</u> treatment courts								
<u>Juvenile drug</u> treatment courts								
Drug related prison incarcerations								
Opioid related prison incarcerations								
Locations of jails with medication-assisted-treatment (MAT) programs								
Locations of prisons with medication-assisted-treatment (MAT) programs								
	Data Received							
	State does not have data							
	Have NOT received from state							

Regional Judicial Opioid Initiative

Choose to display Rate or Count for the below list of socio demographic and economic characteristics.

Select Display Value →

- Rate (per 100K ppl)
- Count

Population Characteristics

Socio Demographic ▼

▼ Age Range

▼ Disabled Status

▼ Educational Attainment

▼ Race/Ethnicity

▼ Race/Ethnicity & Sex

- White (not Hispanic) Male
- White (not Hispanic) Female
- African American Male
- African American Female
- Hispanic Male
- Hispanic Female
- Other Male
- Other Female

Economic ▼

Choose to display Rate or Count for the below list of available measures.

← Select Display Value

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Opioid Measures

▼ Buprenorphine Prescribers

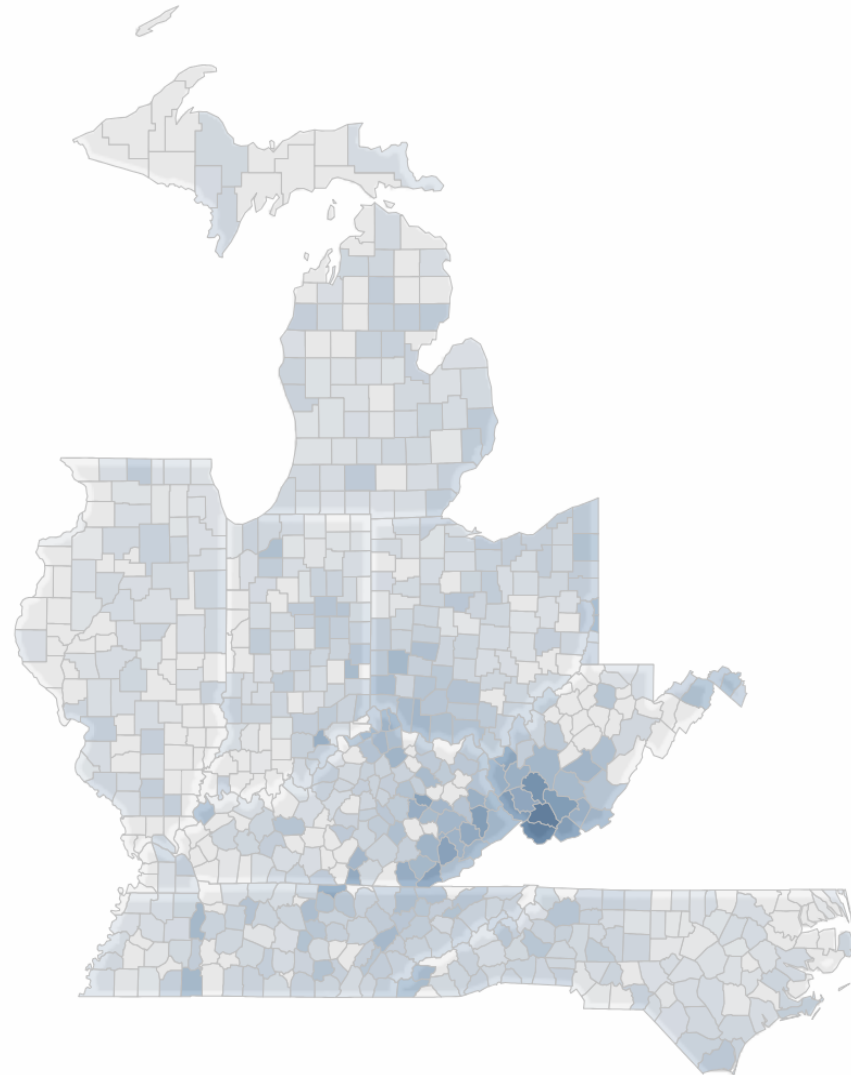
▼ Drug Related Case Filings

▼ Emergency Department Data

▼ Overdose Mortality Statistics

- Age Adjusted Rate*
- Crude Rate*
- Number of Deaths*

▼ Prescription Drug Monitoring Program Stats



Demographic and economic statistics compiled from the 2017 ACS 5-year Estimate dataset from the United States Census Bureau.

Reset Map

Illinois

Indiana

Kentucky

Michigan

North Carolina

Ohio

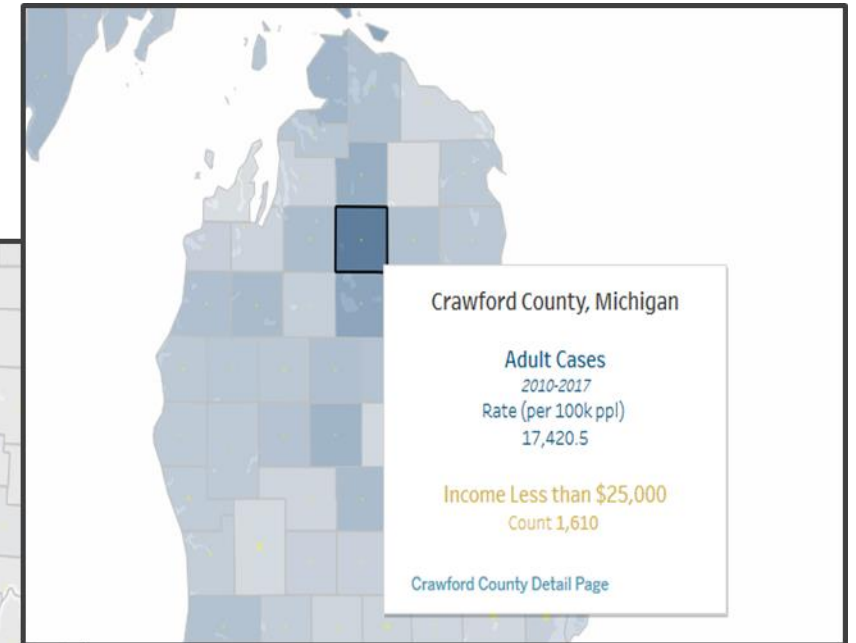
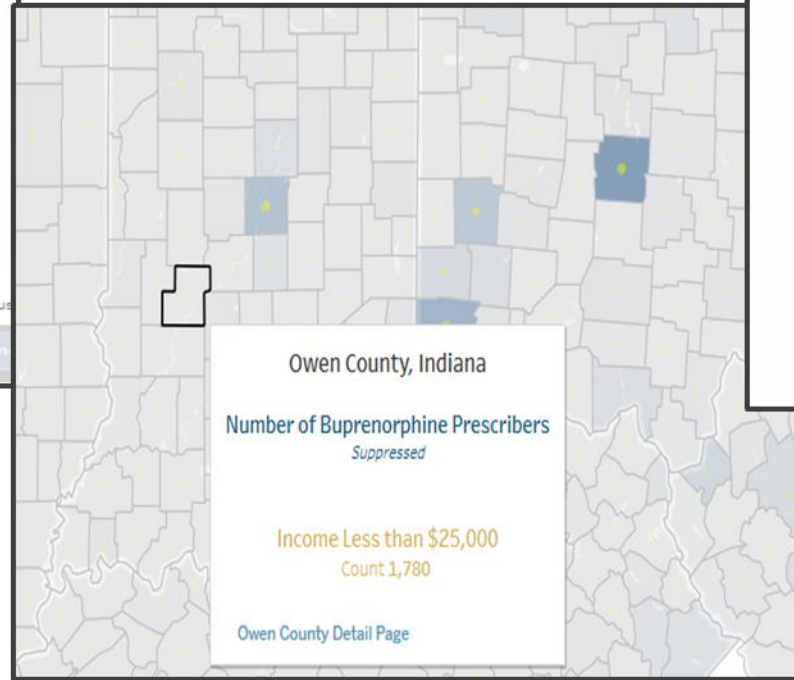
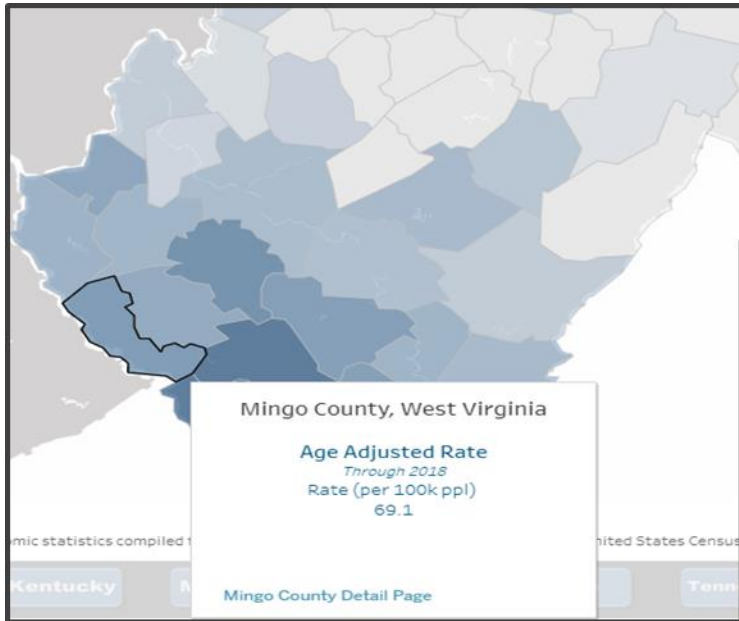
Tennessee

West Virginia

Age Adjusted Rate*
Through 2017

Less  More

Data Call (Researcher – Wayne State University)



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Regional Judicial Opioid Initiative

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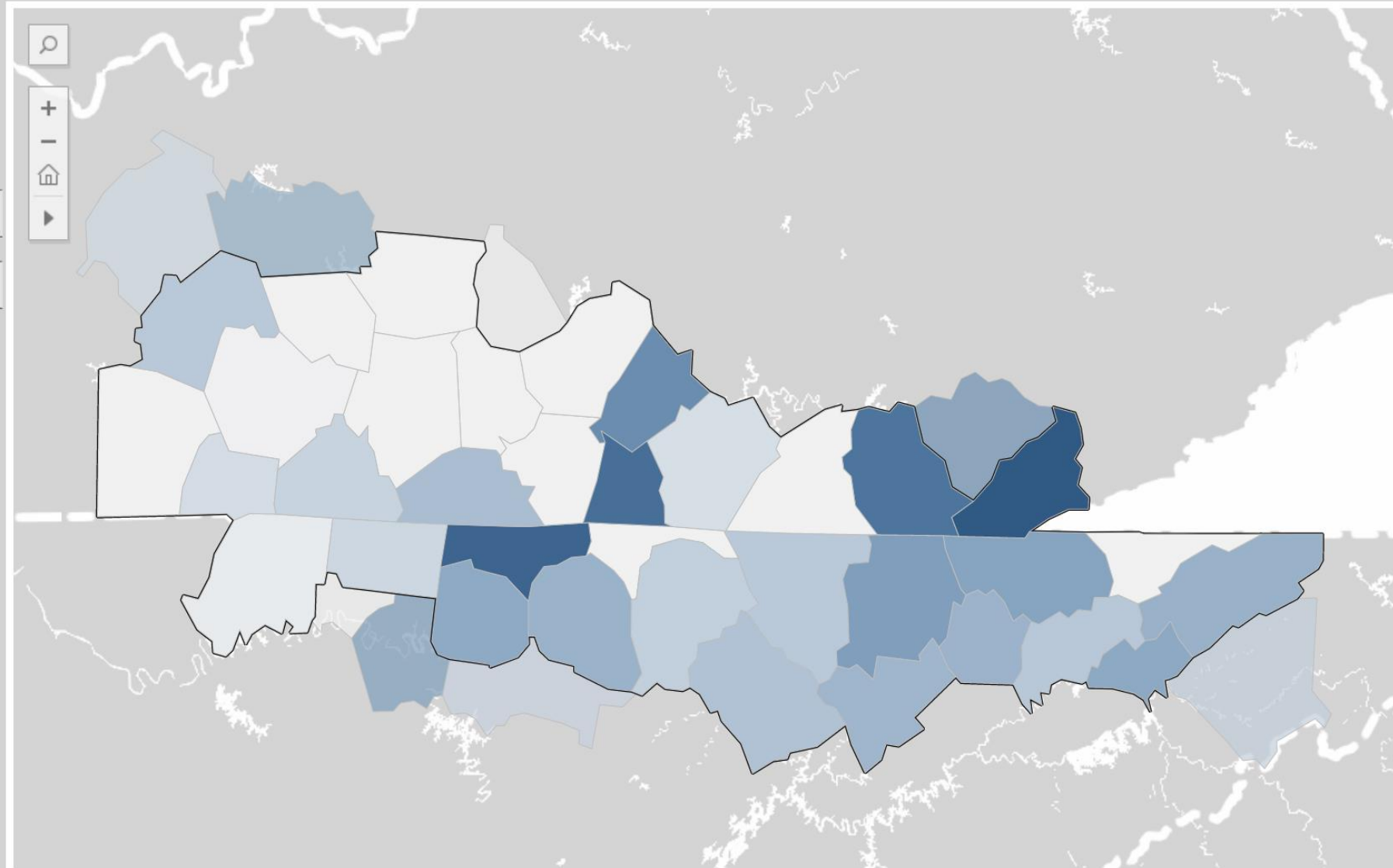
Select Display Value →

- Rate (per 100K ppl)
- Count

Population Characteristics

Socio Demographic ▾

Economic ▾



Demographic and economic statistics compiled from the 2017 ACS 5-year Estimate dataset from the United States Census Bureau.

- Illinois
- Indiana
- Kentucky
- Michigan
- North Carolina
- Ohio
- Tennessee
- West Virginia

Choose to display Rate or Count for the below list of available measures.

← Select Display Value

- Rate (per 100k ppl)
- Count

Opioid Measures

▼ Buprenorphine Prescribers

▼ Drug Related Case Filings

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- Age Adjusted Rate*
- Crude Rate*
- Number of Deaths*

▼ Prescription Drug Monitoring Program Stats

Age Adjusted Rate*
Through 2017

Less More

Data Call (Researcher – Wayne State University)

What we learned about the data:

- Very difficult to leverage data across system/states to better understand trends in overdose epidemic.
- Major gaps in data infrastructure



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Data – Social Network Analysis

Measure - what is the nature and quality of collaboration to address the opioid epidemic among RJOI stakeholders?

SNA is a method to understand a community by mapping the relationships that connect the network.

A network map is a visualization of SNA, where each node represents an individual and each tie represents a social connection between them.

Statistical analyses performed in SNA describe:

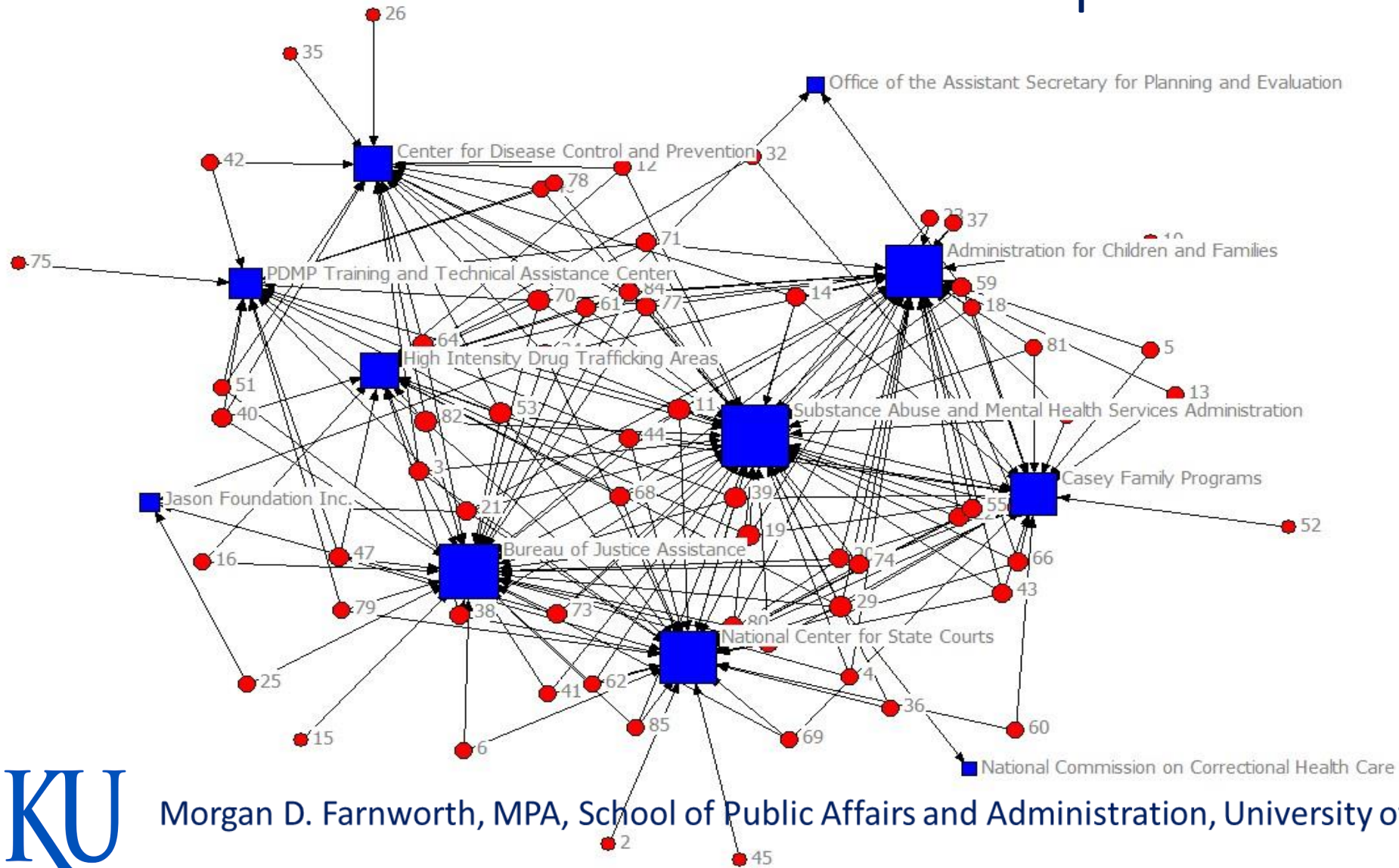
- (1) the size of the network,
- (2) how “busy” the network is,
- (3) the presence of any sub-groups in the network,
- (4) the extent to which individuals are connected/disconnected, and
- (5) key players in the network.



Morgan D. Farnworth, MPA, School of Public Affairs and Administration, University of Kansas



RJOI Network Map - Federal



Morgan D. Farnworth, MPA, School of Public Affairs and Administration, University of Kansas

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