

Geographic Trends of Opioid Related Hospitalizations among Mississippi Residents, 2010-2011

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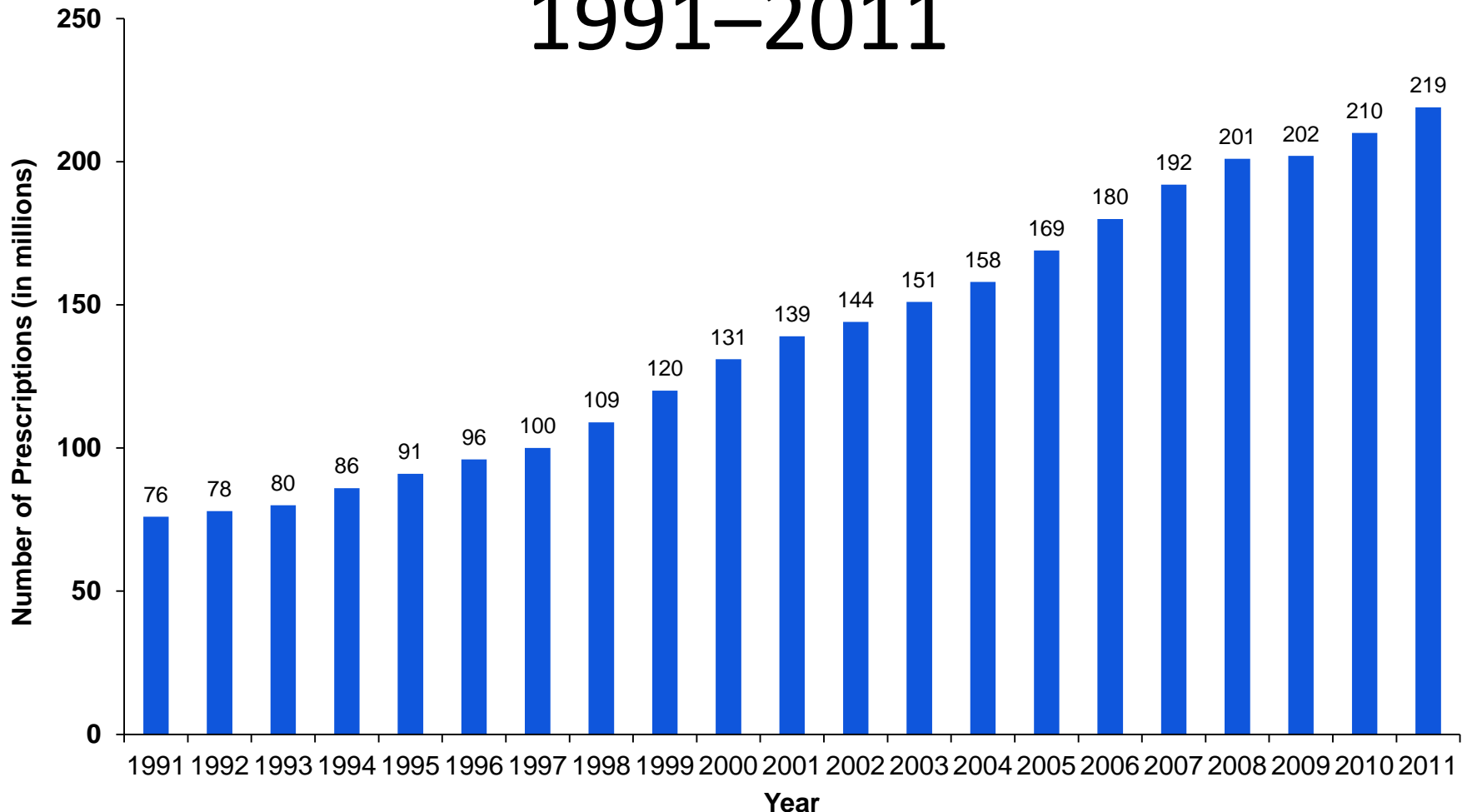
Presentation Overview

- US Opioid Abuse Impact
- MS Opioid Related Hospitalizations
- MS Intervention Strategies
- Future Plans

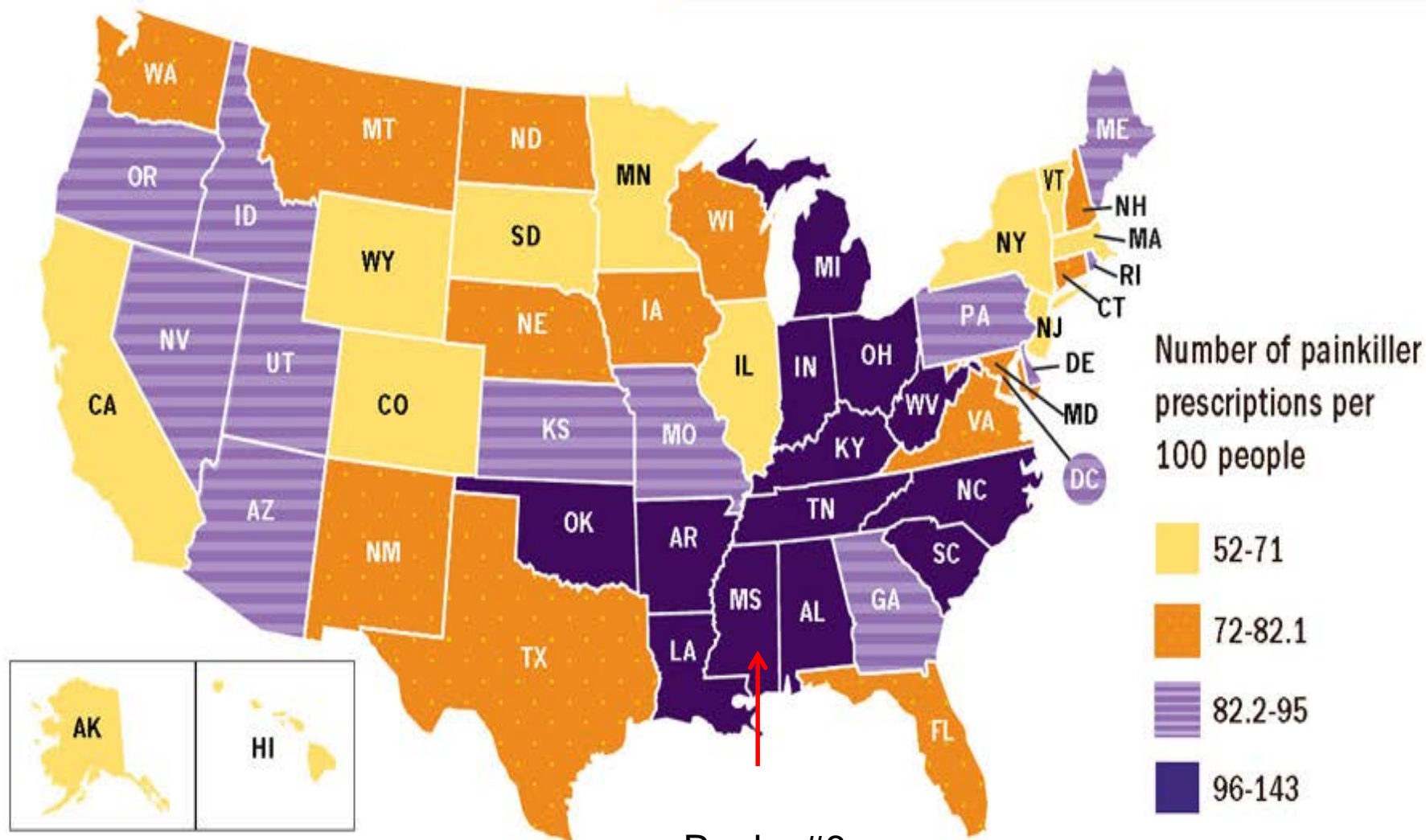
United States Opioid Problem

- Drug overdose was the leading cause of injury death, 2012 (CDC)
 - 72% of deaths relating to pharmaceutical overdose in 2012 involved opioids
- Widespread use of opioids nationally

Opioid Prescriptions Dispensed by Retail Pharmacies—United States, 1991–2011



Some states have more painkiller prescriptions per person than others.



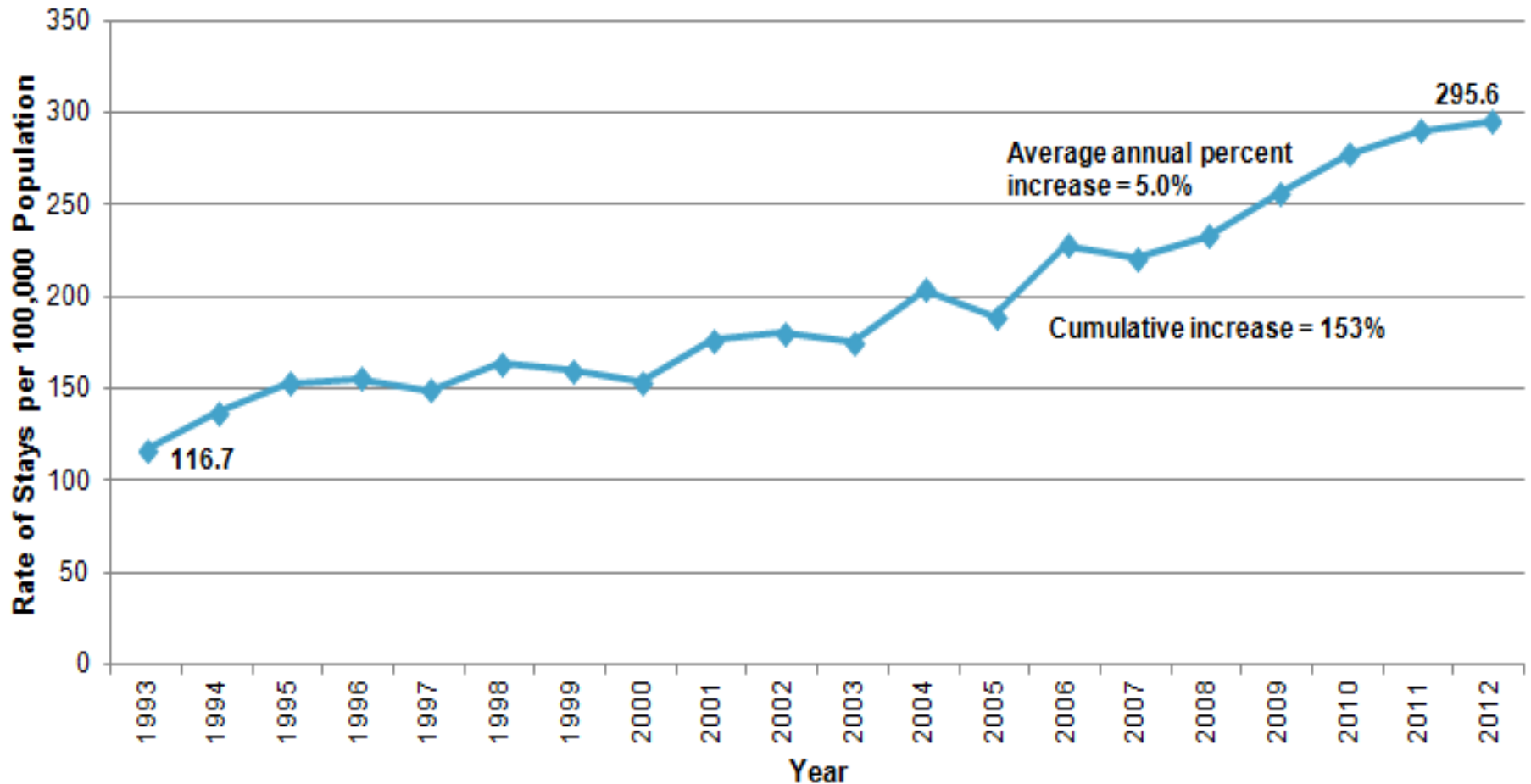
SOURCE: IMS, National Prescription Audit (NPA™), 2012.

Opioid Misuse and Abuse

- Intentional misuse
- Dependence (chronic exposure)
- Adverse health effects (addiction, overdose, death)
 - Hospital costs \$1.6-\$5.6 billion annually¹

¹ Birnbaum HG, White AG, Schiller M, Waldman T, Cleveland JM, and Roland CL. Societal costs of prescription opioid abuse, dependence, and misuse in the United States. Pain Medicine 2011; 12: 657-667.

Hospital Inpatient Stays Related to Opioid Misuse-United States 1993-2012



Objective

- Categorize and identify the leading residential areas of Mississippi residents hospitalized due to opioid related illnesses

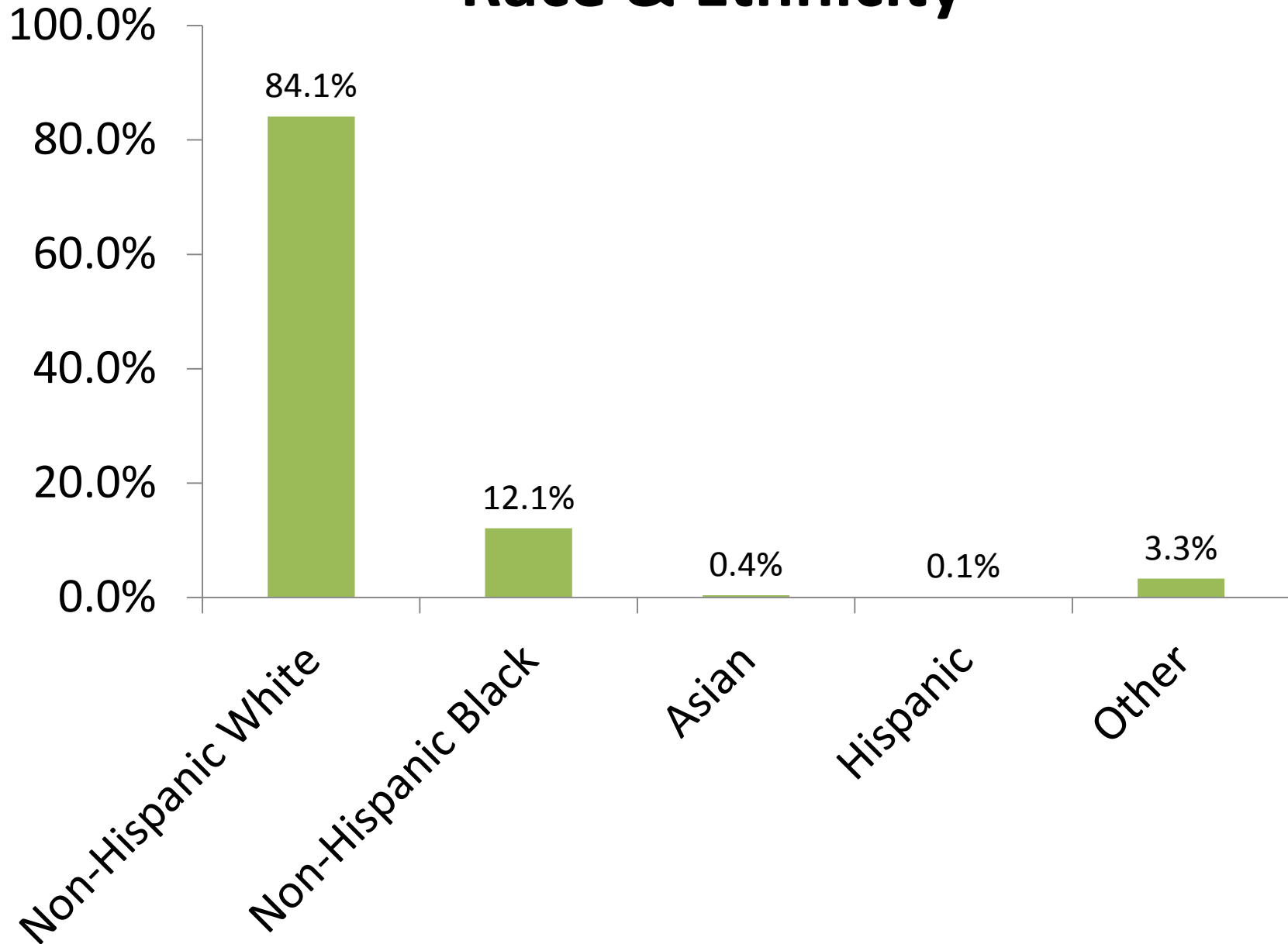
Methods

- MS residents
 - Dx: Opioid dependence, abuse, poisoning
- MSDH hospital inpatient database 1/1/2010-12/31/2011
 - Location of residence
 - Age
 - Sex
 - Race/ethnicity
 - Method of payment

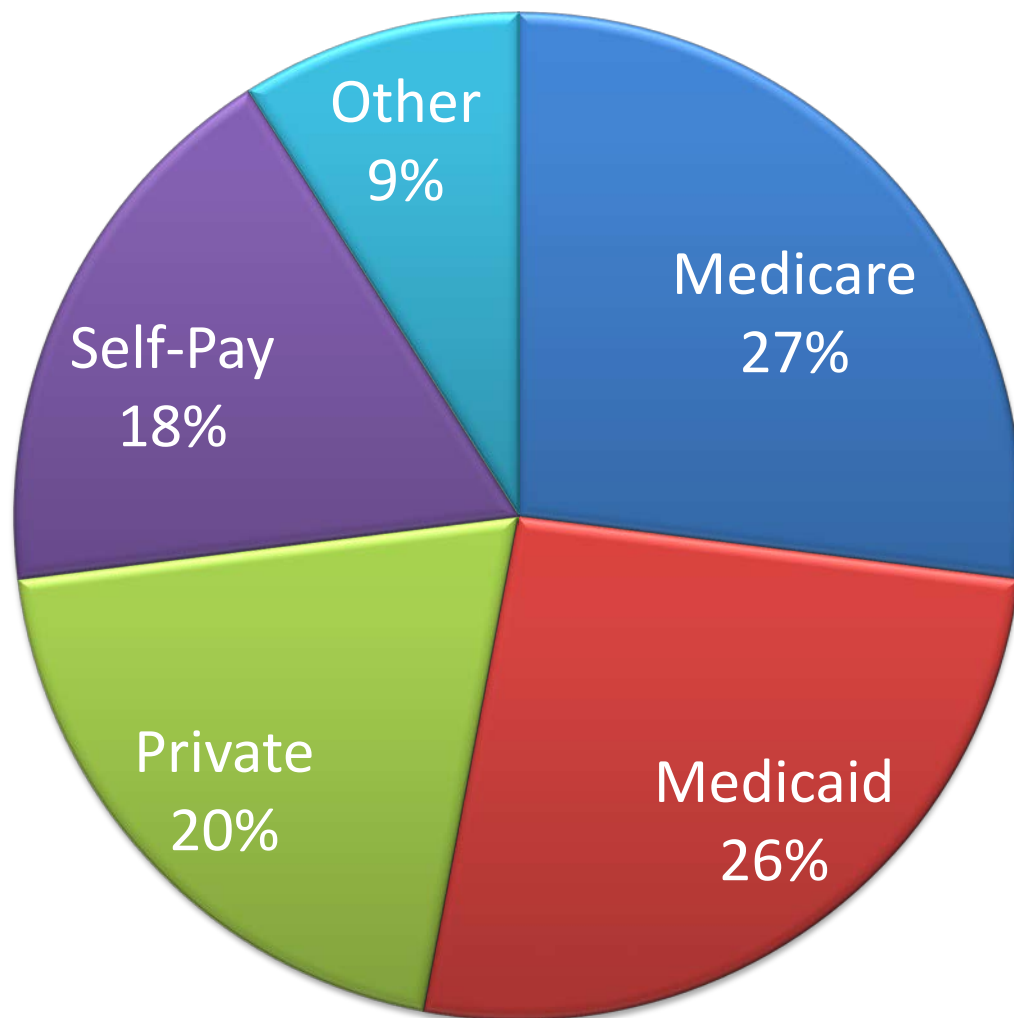
Patient Characteristics

- 7,727 opioid related discharges (6,077 unique patients)
 - Dependence-76%
 - Abuse-18%
 - Poisoning-6%
- Age range: 0-96 yrs
 - Mean age (SD): 41.5 yrs (14.5)
 - 45% aged 25-44 yrs
- Sex:
 - Females 4,058= 53 %
 - Males 3,669 = 47%

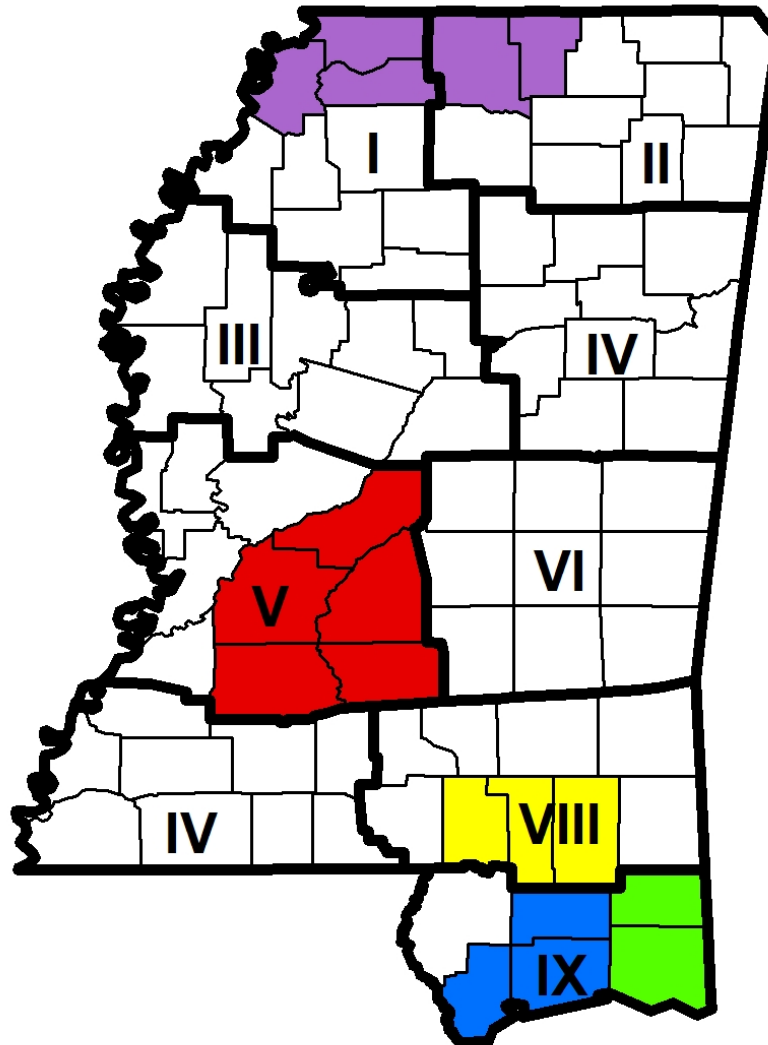
Race & Ethnicity



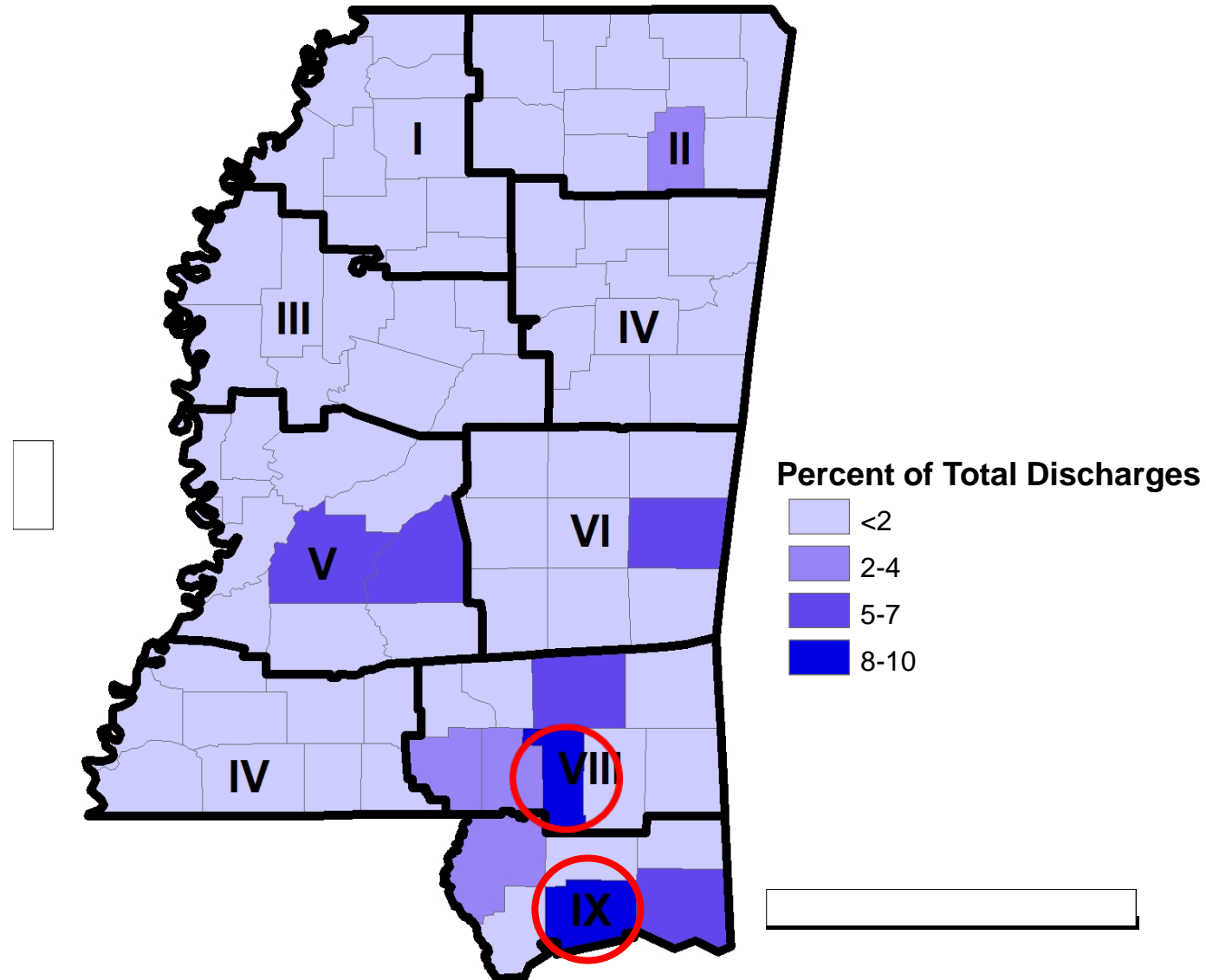
Primary Payer



MS Metropolitan Statistical Areas/Public Health Districts

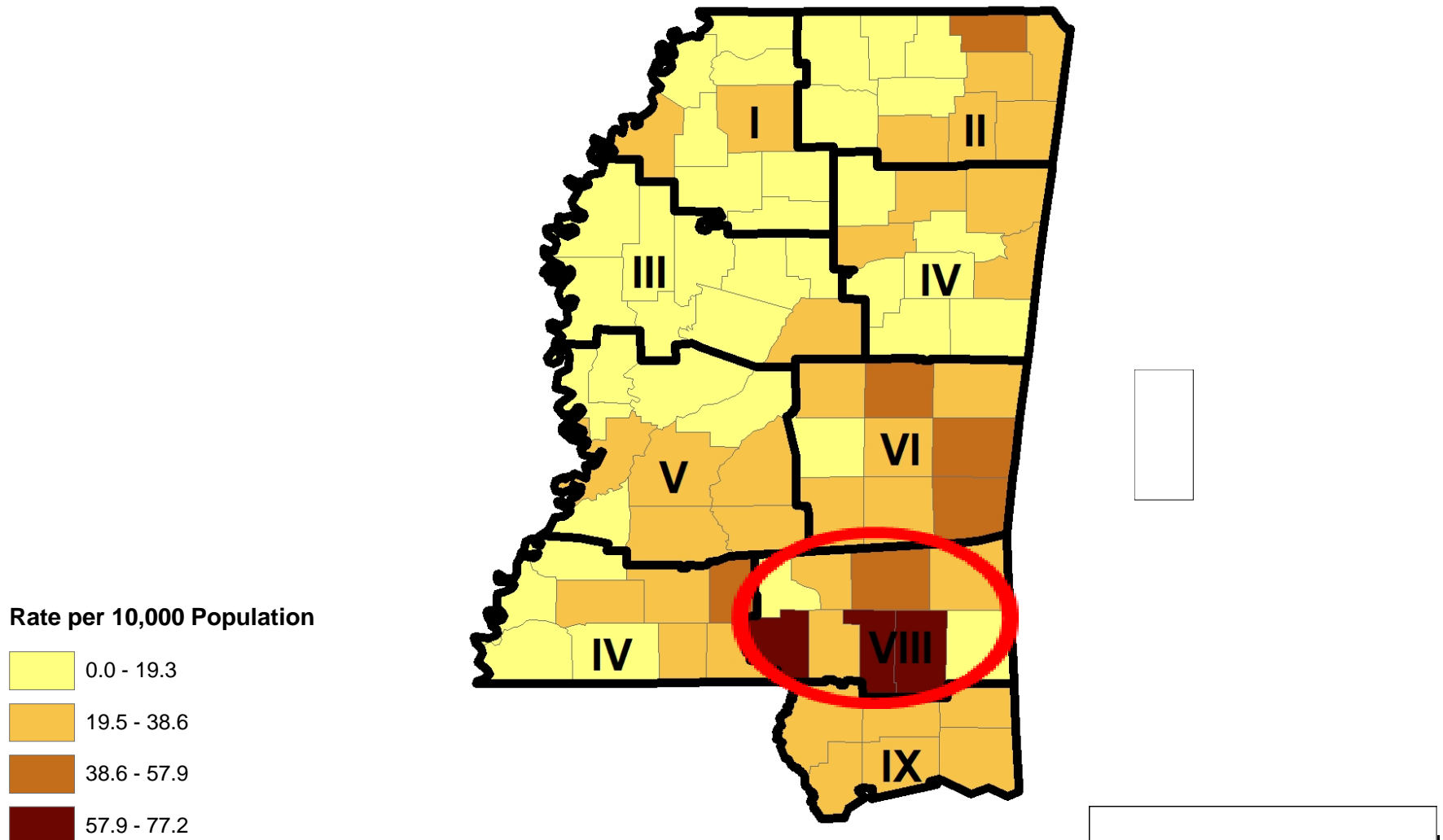


Proportion of Patients with Opioid Related Discharges by County of MS Residence



% (number of discharges by county/total opioid related discharges in MS)

MS Resident Opioid-Related Hospital Discharge Rates by Public Health District



	Forrest County	Mississippi
Opioid-Related Hospital Discharge Rate	77.2	30.0
Age in Years	Hospitalizations (%)	Hospitalizations (%)
Mean	39 years	41 years
Median	37 years	40 years
Range	14 – 90 years	0- 96 years
Race and ethnicity		
Non-Hispanic Caucasian	499 (85.6%)	6,501 (84.1%)
Non-Hispanic African-American	62 (10.6%)	933 (12.1%)
Asian	-	33 (0.4%)
Latino	-	7 (0.1%)
Other	22 (3.8%)	253 (3.3%)
Primary Expected Payer		
Medicare	122 (20.9%)	2,118 (27.4%)
Medicaid	168 (28.8%)	2,022 (26.2%)
Private	92 (15.8%)	1,498 (19.4%)
Self-pay	157 (26.9%)	1,401 (18.1%)
Other	44 (7.6%)	688 (8.9%)
Sex		
Female	300 (51.5%)	4,058 (52.5%)
Male	283 (48.5%)	3,669 (47.5%)

Discussion

- Opioid related hospital discharge rate = 215.7 per 10,000 discharges, 30.0 per 10,000 pop.
- Highest rates
 - Non-Hispanic Whites
 - Adults 30-39 years
 - Metropolitan areas
 - South MS (PHD 8)
- Opioid dependence common primary diagnoses
 - prevalent prescribing practices

Data Limitations

- Inpatient Hospital Data
 - Severe cases
 - Lacked income
 - Inpatient SES vs ER outpatients

MSDH Planned Interventions

- Enhance surveillance
 - utilization of MS PDMP
 - recommendations for substance abuse treatment services
- Inform policy
 - Governors Taskforce
- Prescriber education
 - data, guidance
 - best practices

Future Opioid Data Analysis

- Emergency department visits
- Law enforcement data
- Substance abuse treatment data
- Opioid related mortality data

MSDH Acknowledgements

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