



National Institute  
on Drug Abuse

# The Impact of Cultural Differences Across American Communities on the Opioid Epidemic

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## Introduction

- The opioid epidemic in the United States is a growing public health concern due to increasing opioid poisoning mortality (OPM) rates
- OPM thought to be higher in primarily rural, White areas

### Study Aims

- Identify how cultural differences between American communities may influence differences in OPM
- Analyze community-level factors that might contribute to these differences

## Methods

### Data

- OPM rates from the CDC-WONDER database
- Community categorization from the American Communities Project (ACP) determined by sociodemographic and cultural characteristics (Figure 1)

### Methods

- Compare mean OPM rates over the decade 2011-2021
- Perform a bivariate correlation between the change in OPM throughout the decade and the percent of the population living in rural areas
- Contrast the relationship between OPM change and rurality in each of the 15 communities

## Results

Figure 1: American Communities Projects County-Level Classifications

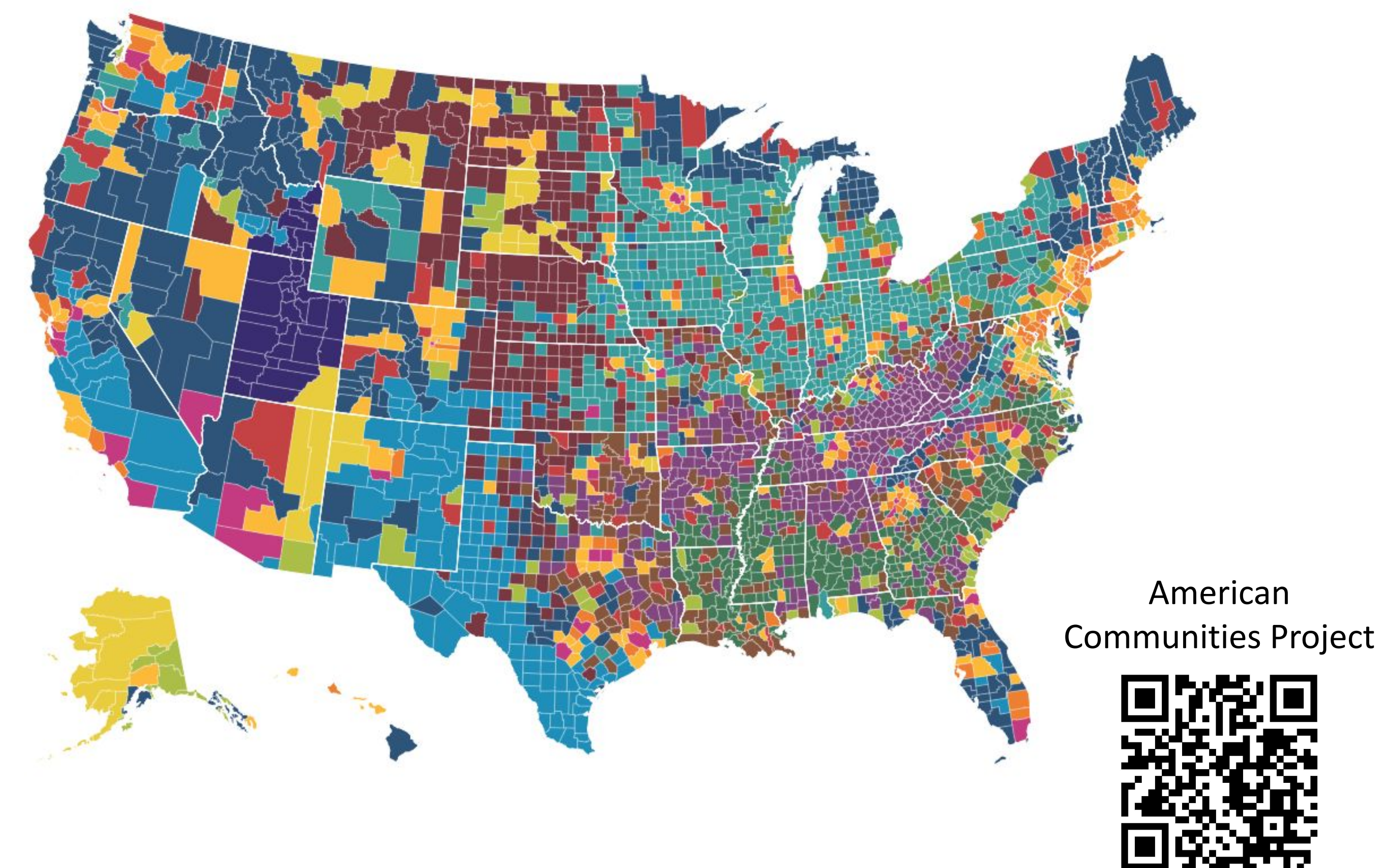


Figure 2: Changes in OPM 2011-2021 in 15 ACP Communities

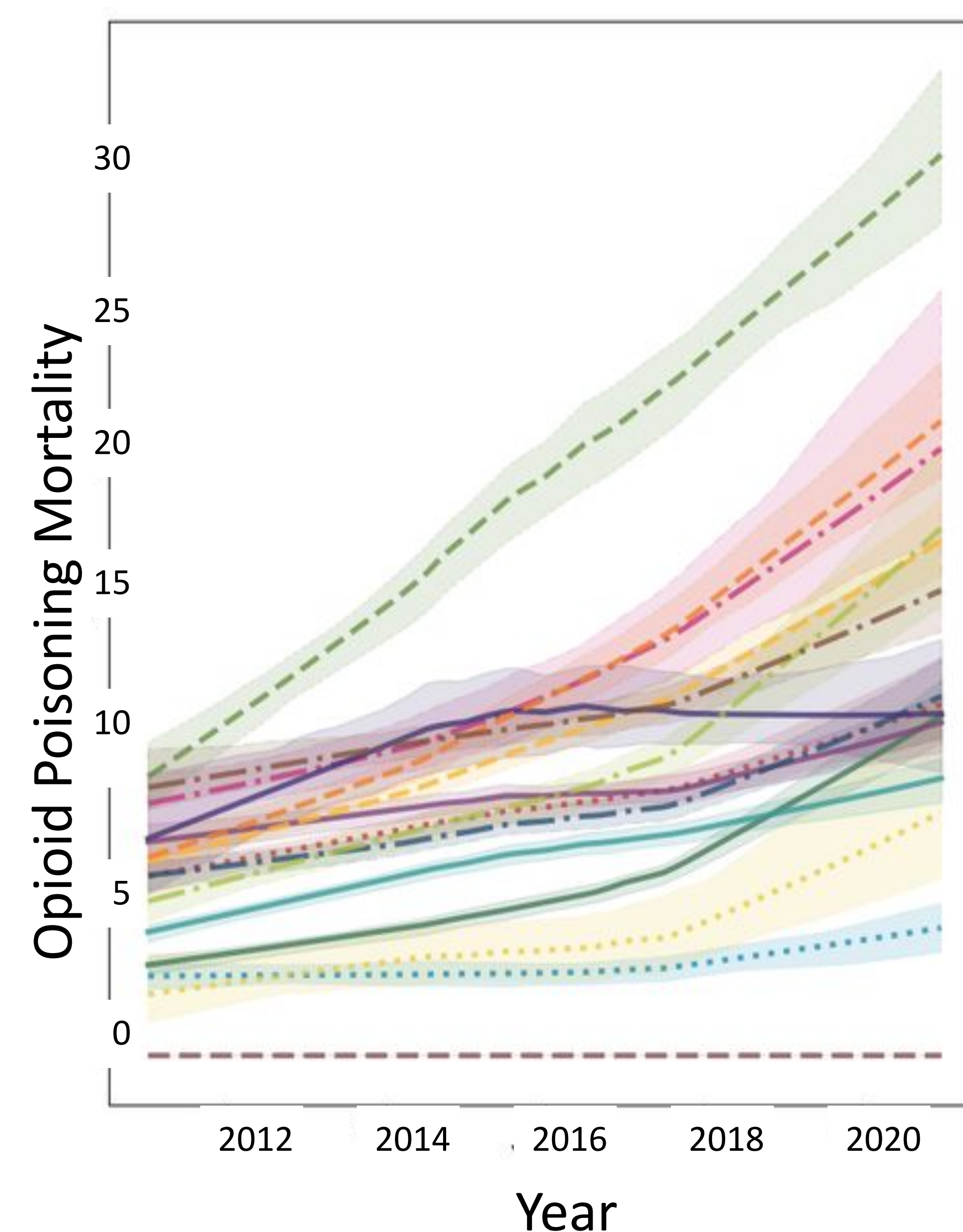
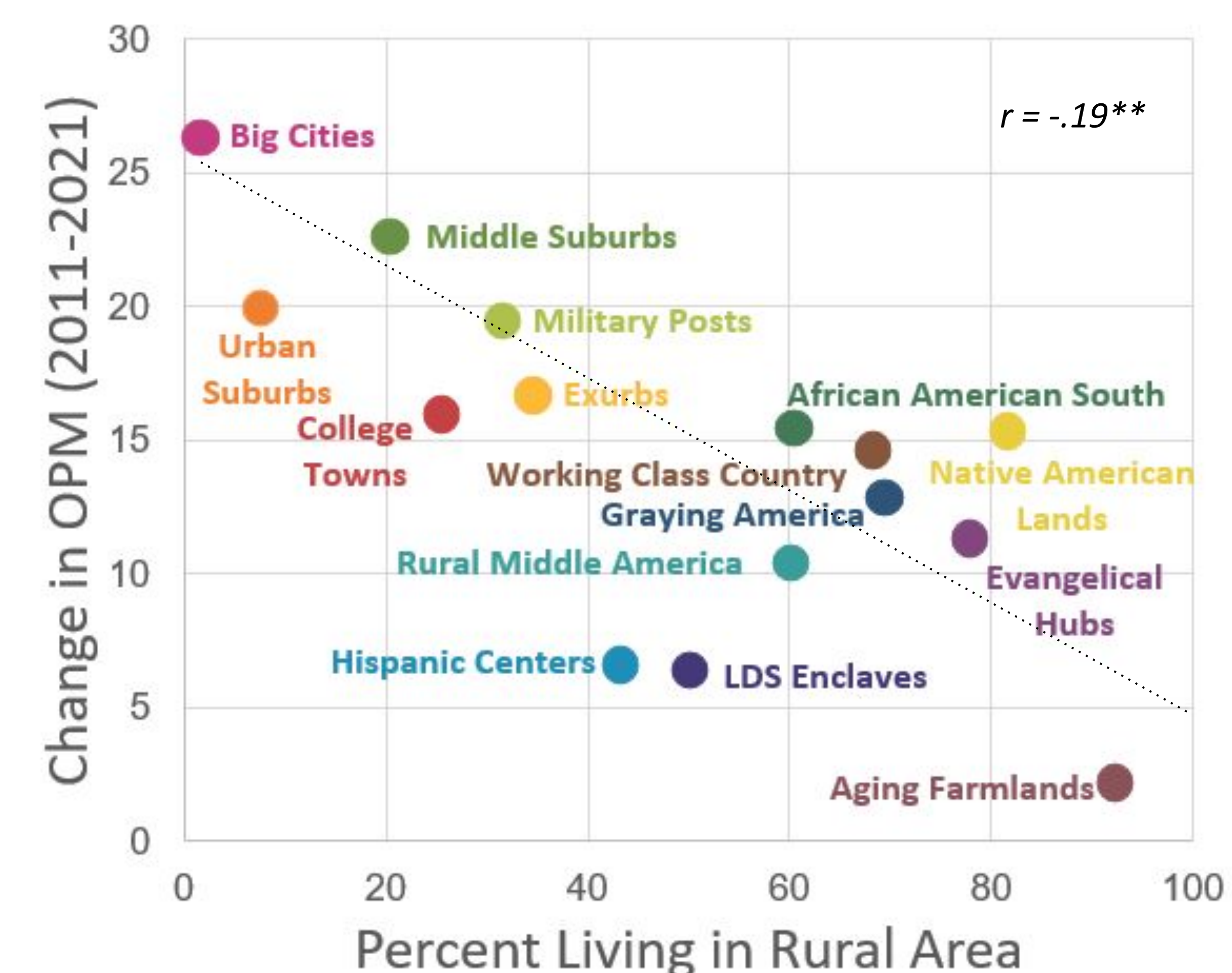


Figure 3: Change in OPM (2011-2021) by % Rural Population in ACP Communities



## Results

- OPM rates increased between 2011 and 2021
- OPM was highest in Middle Suburbs, Big Cities, and Urban Suburbs and lowest in Aging Farmlands, Hispanic Centers, Native American Lands, and African American South (Figure 2)
- Communities with a higher percentage of its population living in a rural area tended to be less affected by the opioid epidemic, with smaller increases in OPM between 2011 and 2021 (Figure 3)

## Conclusions

- The opioid epidemic affects different communities in distinct ways
- While primarily rural and White communities experienced higher rates of OPM in the past, communities that are more urban and diverse are experiencing large increases in OPM in the past decade
- Community-level differences in OPM suggest the need for tailored prevention and intervention strategies that address the cultural differences and individual needs of urban, diverse communities