Geographic Variation in Opioid Mortality by Race/Ethnicity, 1999–2016

Identifying epidemic hotspots

Mathew Kiang[1] Monica Alexander[2] Zhe Zhang[3] Jarvis Chen[1]

[1]Deptartment of Social and Behavioral Sciences
Harvard TH Chan School of Public Health

[2]Department of Demography
University of California, Berkeley

[3]Heinz College
Carnegie Mellon University

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    - Variation by type of opioid

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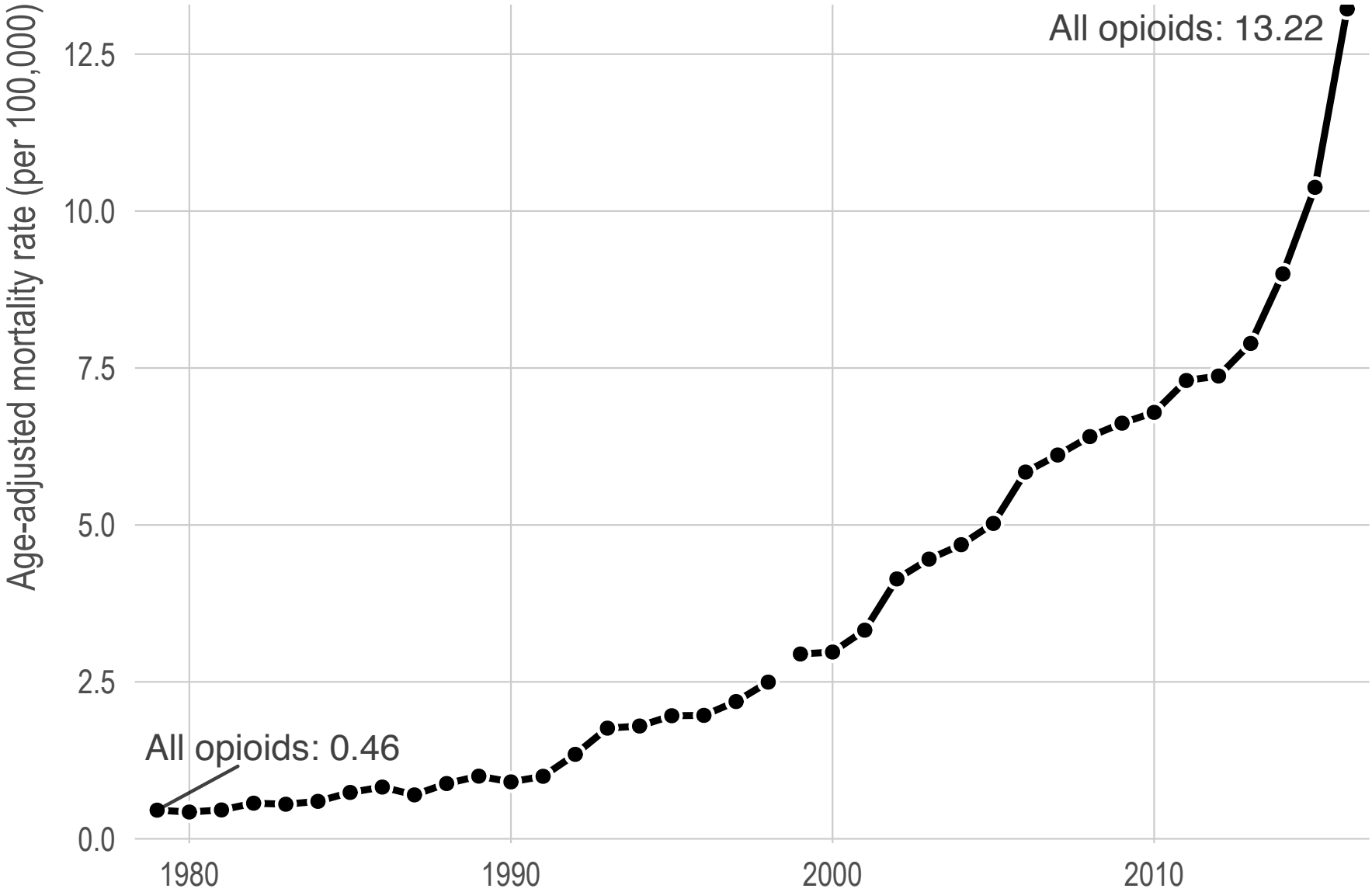
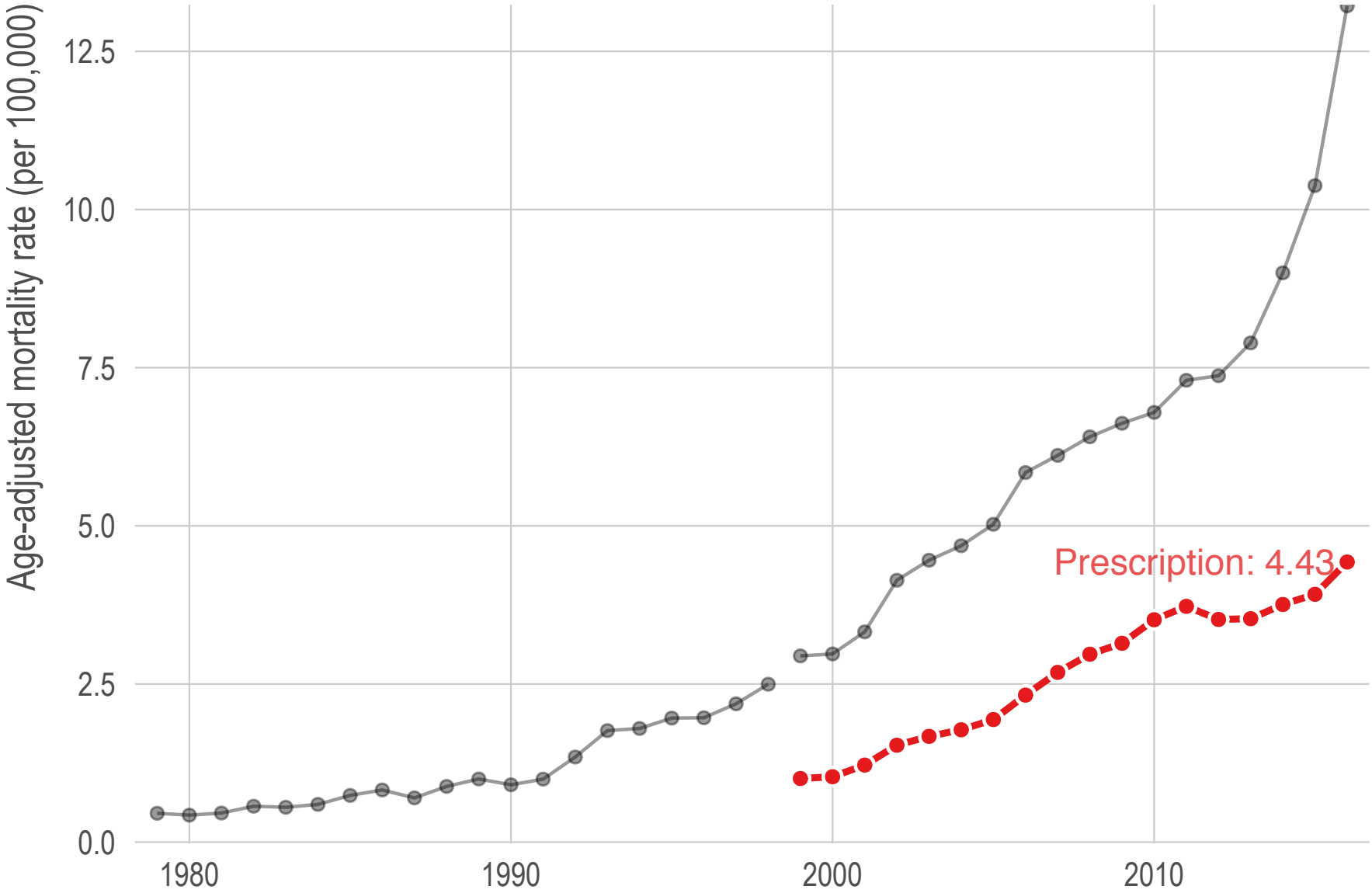
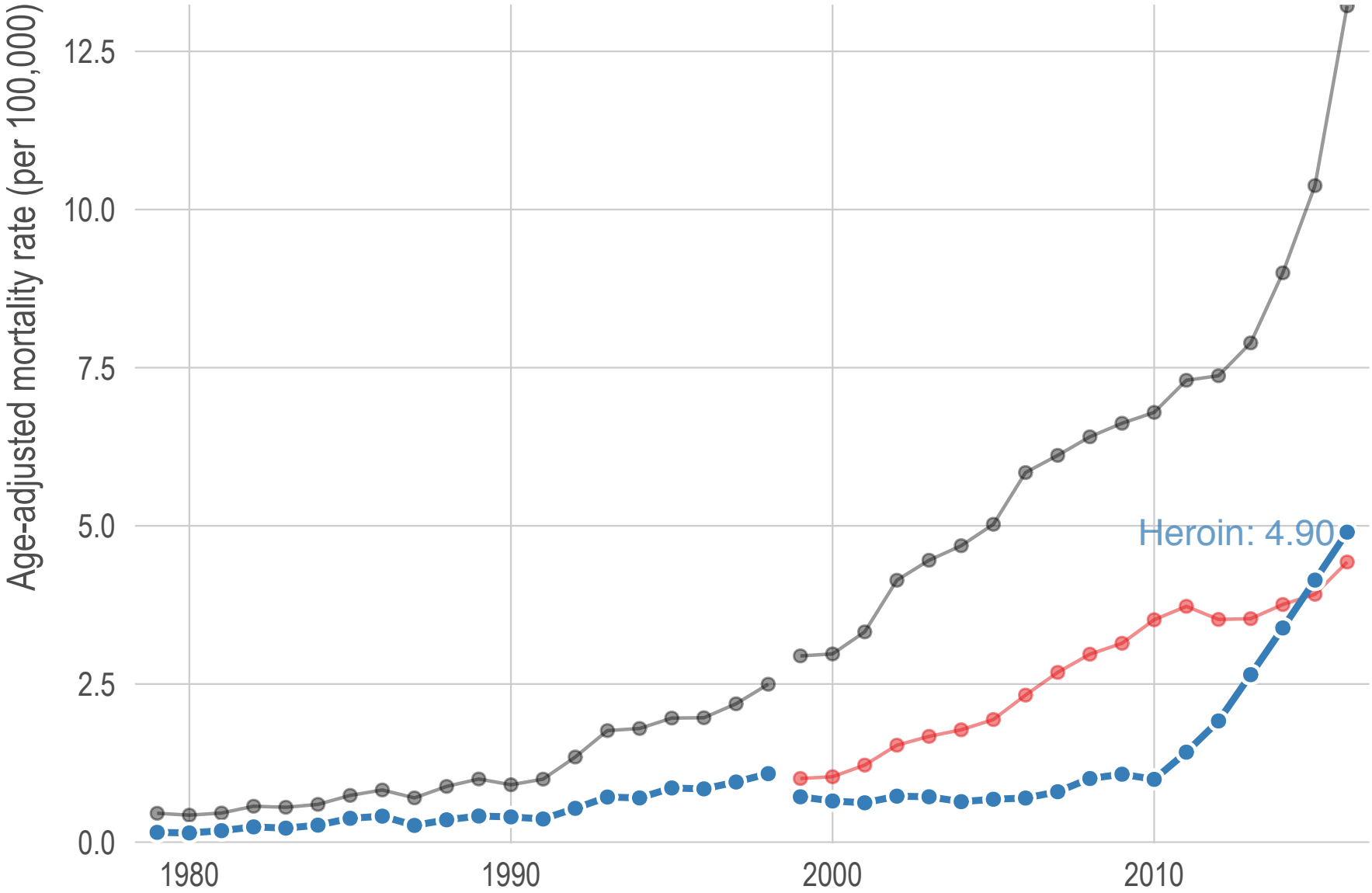
Increased over 2,500% since 1980



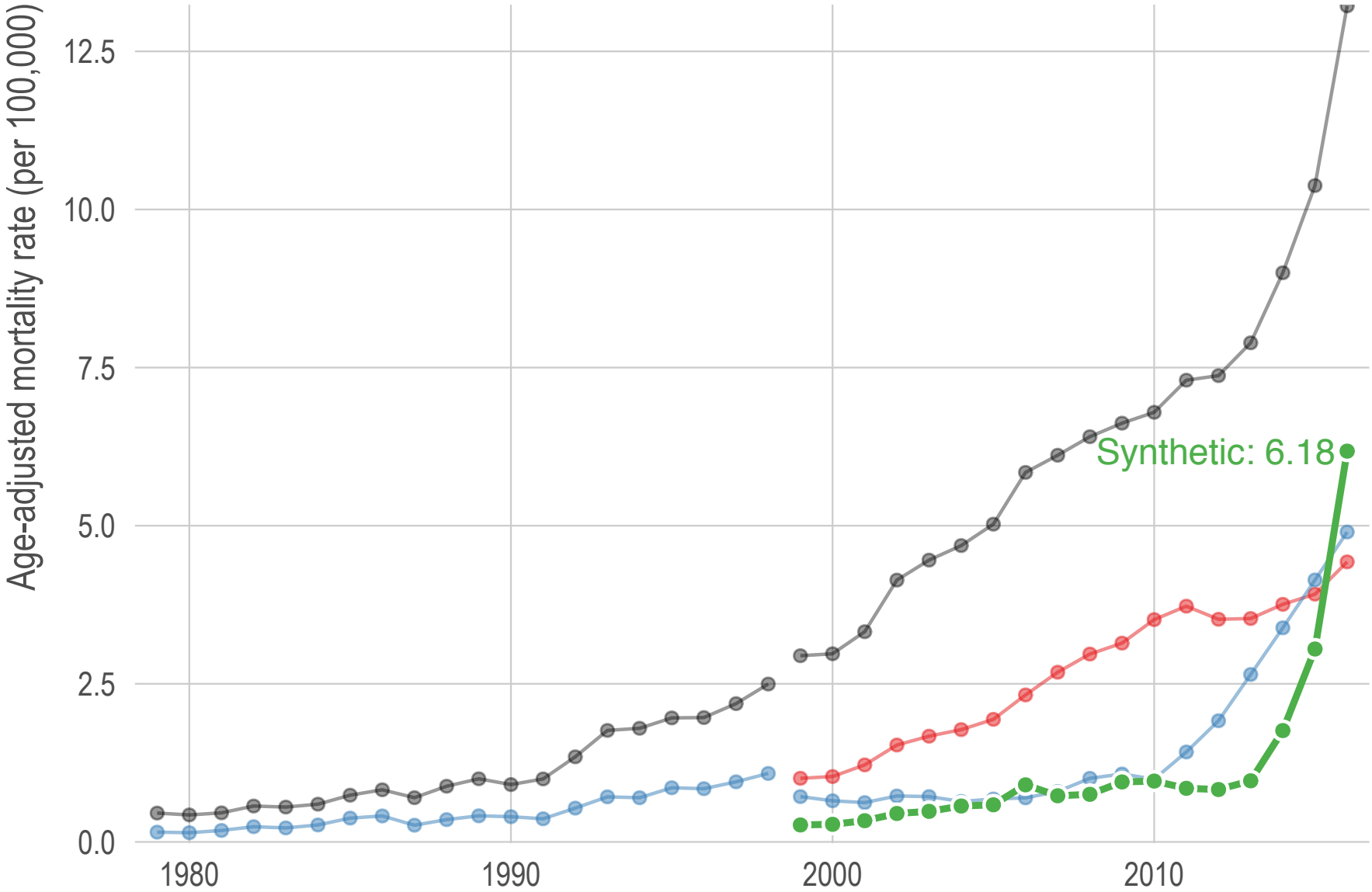
Wave 1: Prescription Opioids, 1990–2010



Wave 2: Heroin, 2010–current



Wave 3: Synthetic Opioids, 2013–current



Substantial variation: By race/ethnicity

Substantial variation: By geography

Aims of the paper

1. Systematically describe the opioid epidemic from 1999 to 2016 by state, race/ethnicity, and opioid type.

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2. Systematically describe the *current* epidemic.
3. Identify "epidemic hotspots" — areas with both high mortality rates and rapid increases in mortality.

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- Defined statistical significance as $P < 0.01$

Example Joinpoint Results: Maryland

Example Joinpoint Results: All opioids

Current Mortality

Current Trajectory

Epidemic Hotspots

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  - Source of heroin/synthetic opioids is important

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  - Types of drugs
  - Cost and availability

Thank you

Code and interactive results explorer:

`https://tiny.cc/paa2018`

mathewkiang.com | : mkiang | : @mathewkiang

Epidemic Hotspots