

More than Opioids: The Social Determinants of Drug Overdose and other 'Deaths of Despair' in the U.S.

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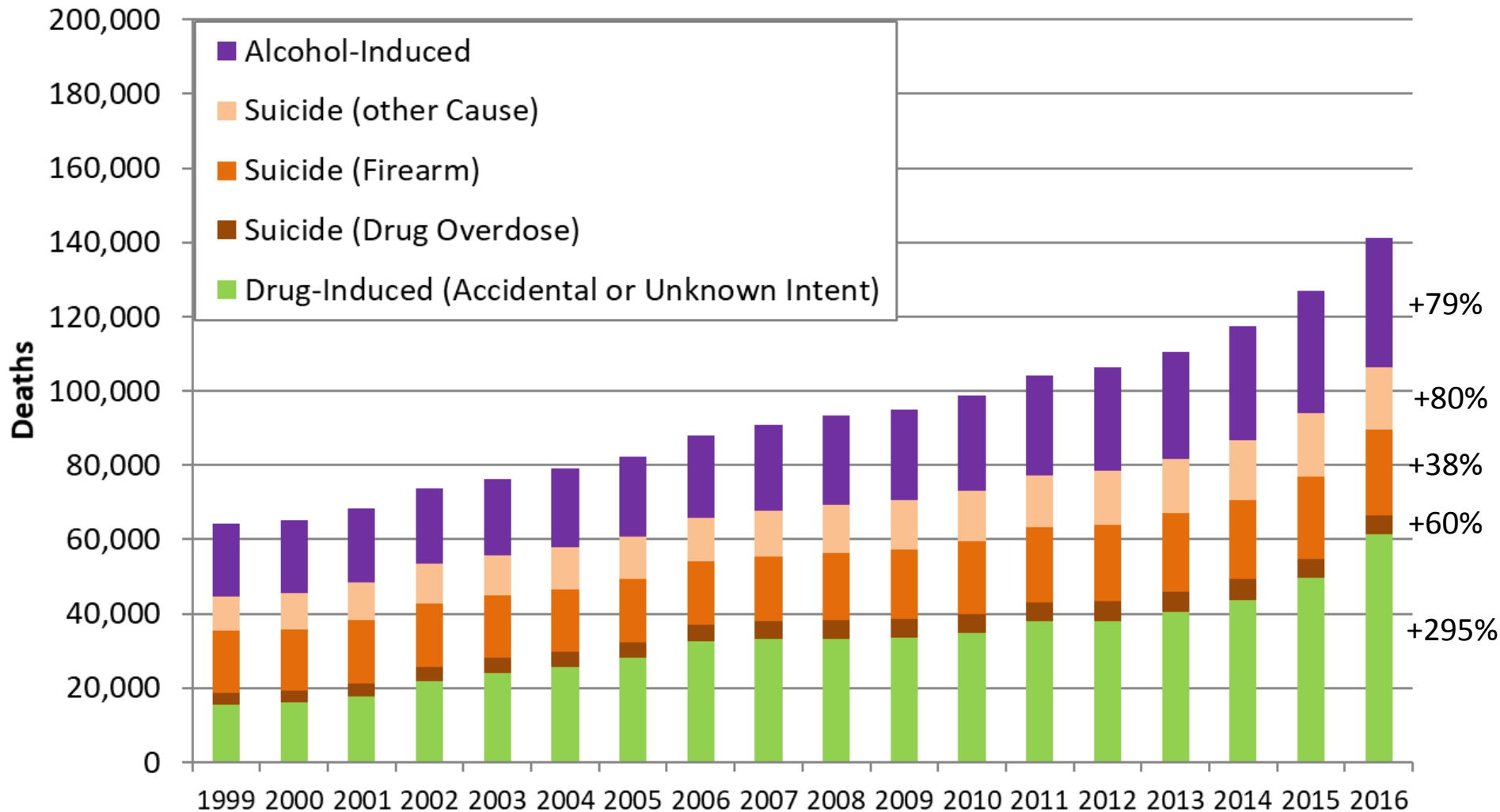
PAA Congressional Briefing

Grave Consequences: Why Some Americans are No Longer Living Longer



Drug, Alcohol, and Suicide Deaths have Increased

U.S. Total Drug, Suicide, and Alcohol Deaths, 1999-2016

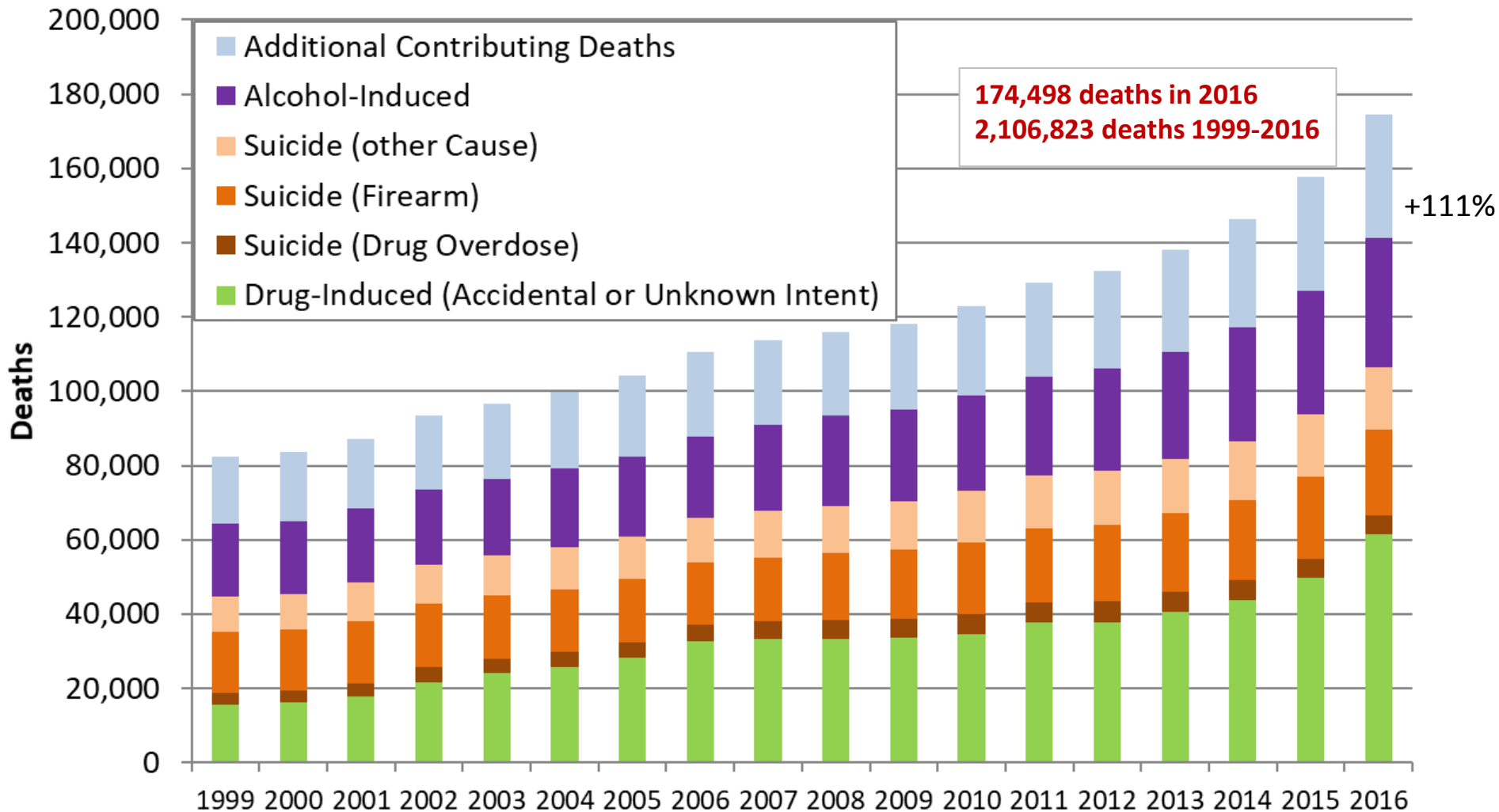


Data: CDC Wonder Multiple Cause of Death Files; <https://wonder.cdc.gov/>

Chart: Shannon Monnat, smmonnat@maxwell.syr.edu

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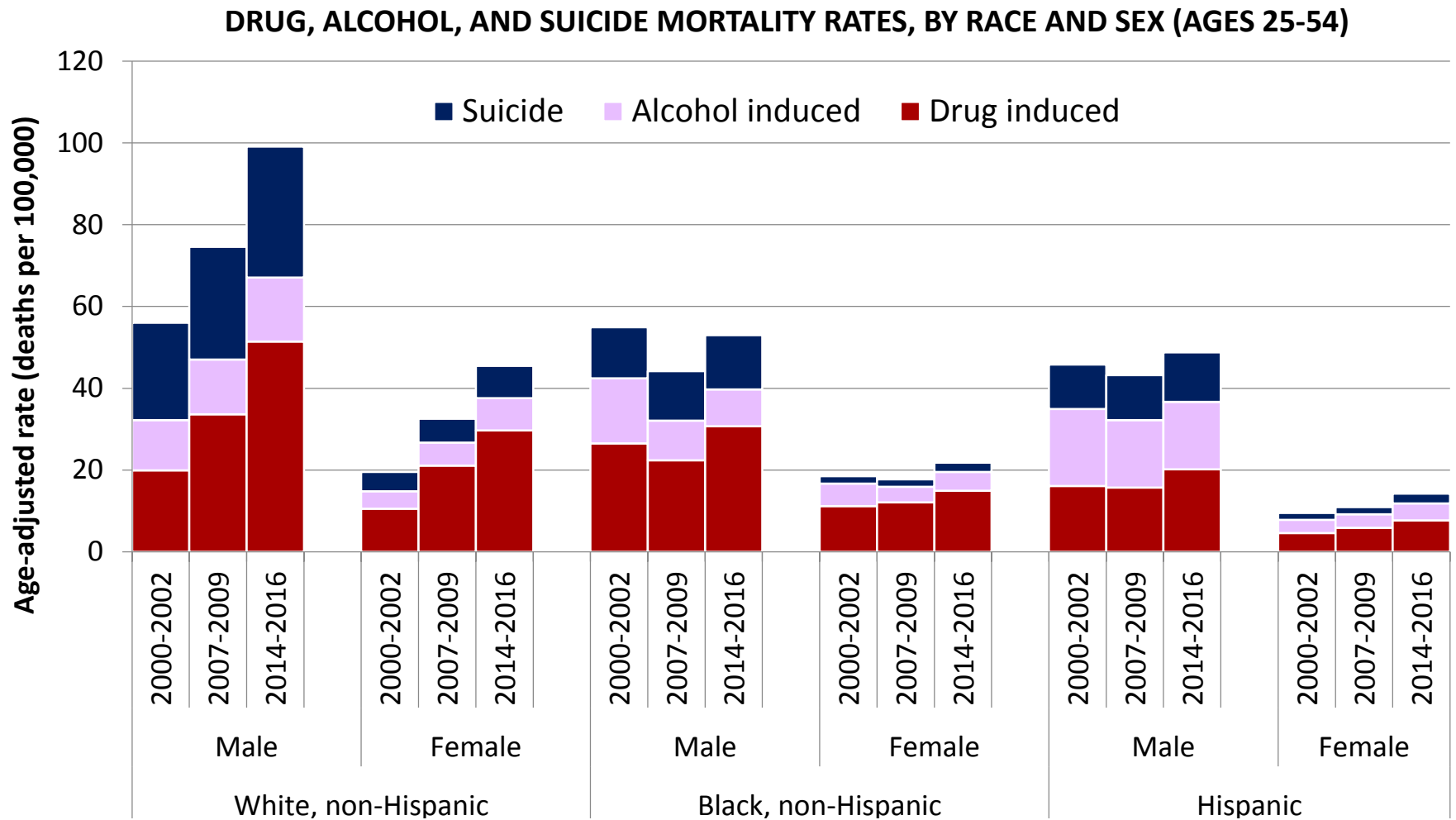
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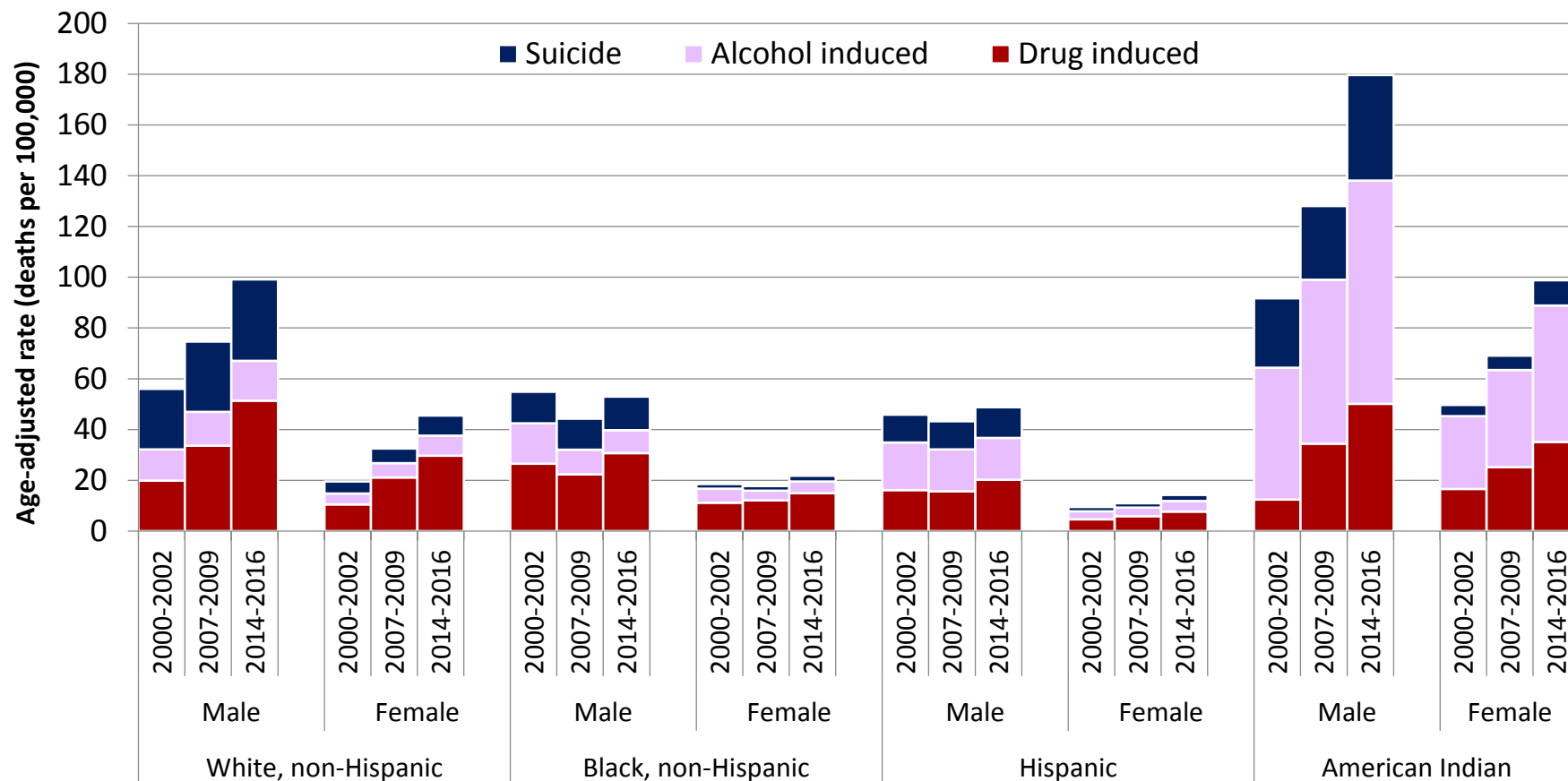
Mortality Rates from Drugs, Alcohol, and Suicide Vary by Race/Ethnicity and Sex



Data: CDC WONDER. Multiple Cause of Death Files, 2000-2016; including NCHS data <https://wonder.cdc.gov/>.
Intentional drug overdoses are included in the drug induced category

Rates for American Indians Far Exceed other Racial/Ethnic Groups

DRUG, ALCOHOL, AND SUICIDE MORTALITY RATES, BY RACE AND SEX (AGES 25-54)



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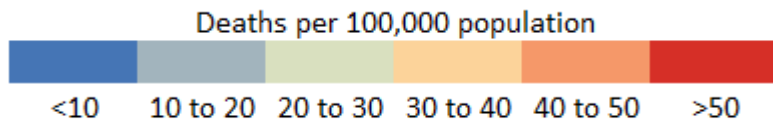
There is Wide Geographic Variation in Drug Mortality Rates

Rates are for NH whites (age 25-64) and are age-adjusted

2000-02

2007-09

2014-16

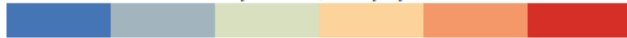


Excluded county (<2,000 NHW pop)

Data: CDC WONDER. Multiple Cause of Death Files; <https://wonder.cdc.gov/> and NCHS

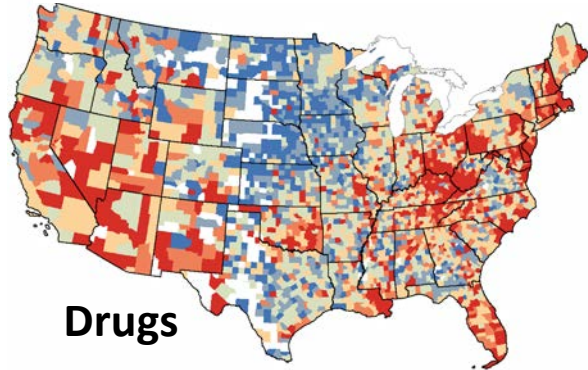
The Geographic Distribution for All-Cause Mortality is Different than for Drug, Alcohol, and Suicide Mortality

Deaths per 100,000 population

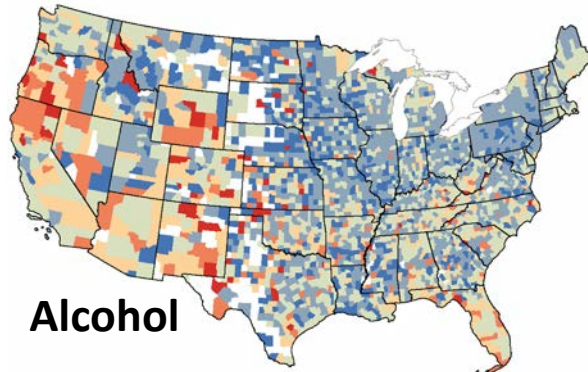


<10 10 to 20 20 to 30 30 to 40 40 to 50 >50

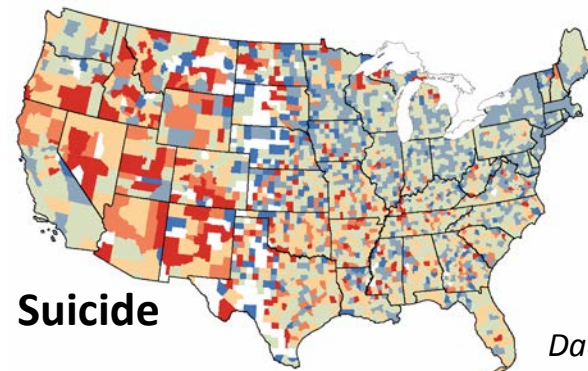
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Drugs

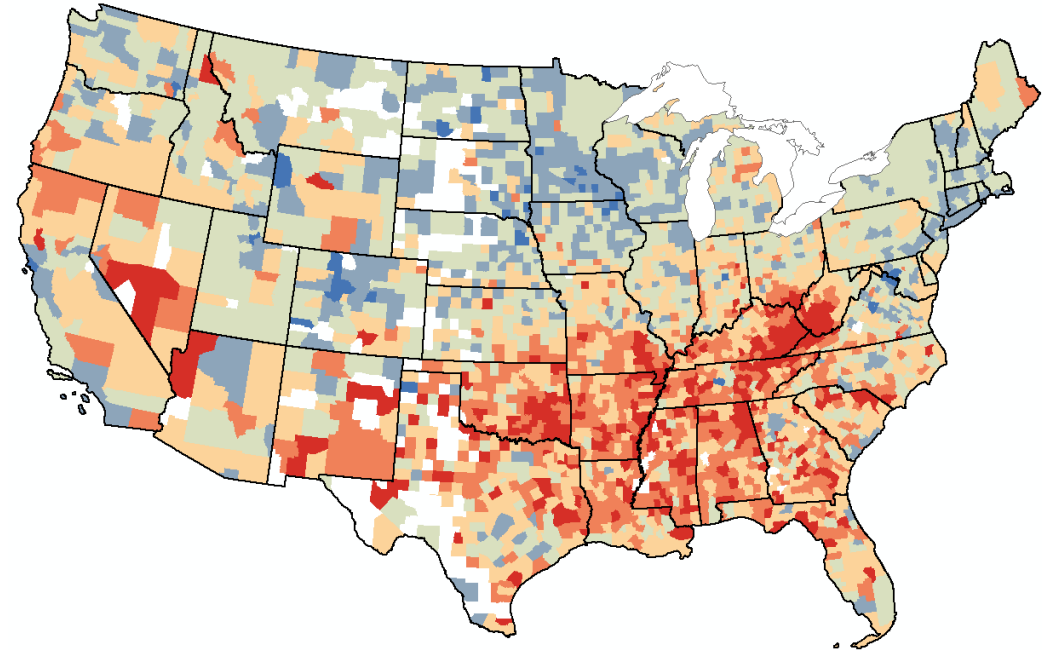


Alcohol

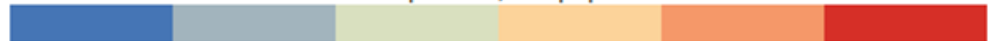


Suicide

All-Cause Mortality, 2014-16



Deaths per 100,000 population

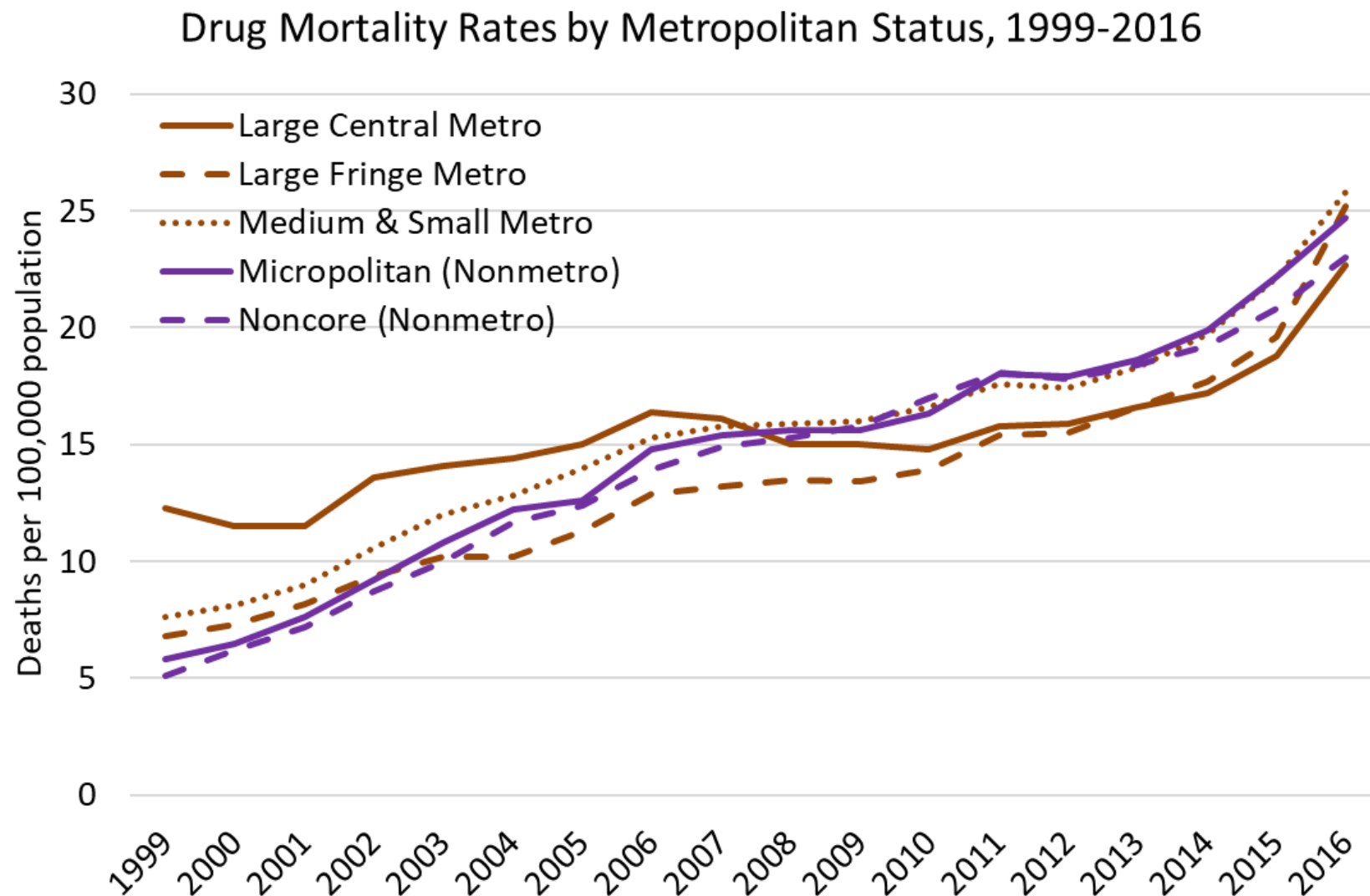


<200 200 to 300 300 to 400 400 to 500 500 to 600 >600

Rates are for NH whites (age 25-64) for 2014-2016 and are age-adjusted

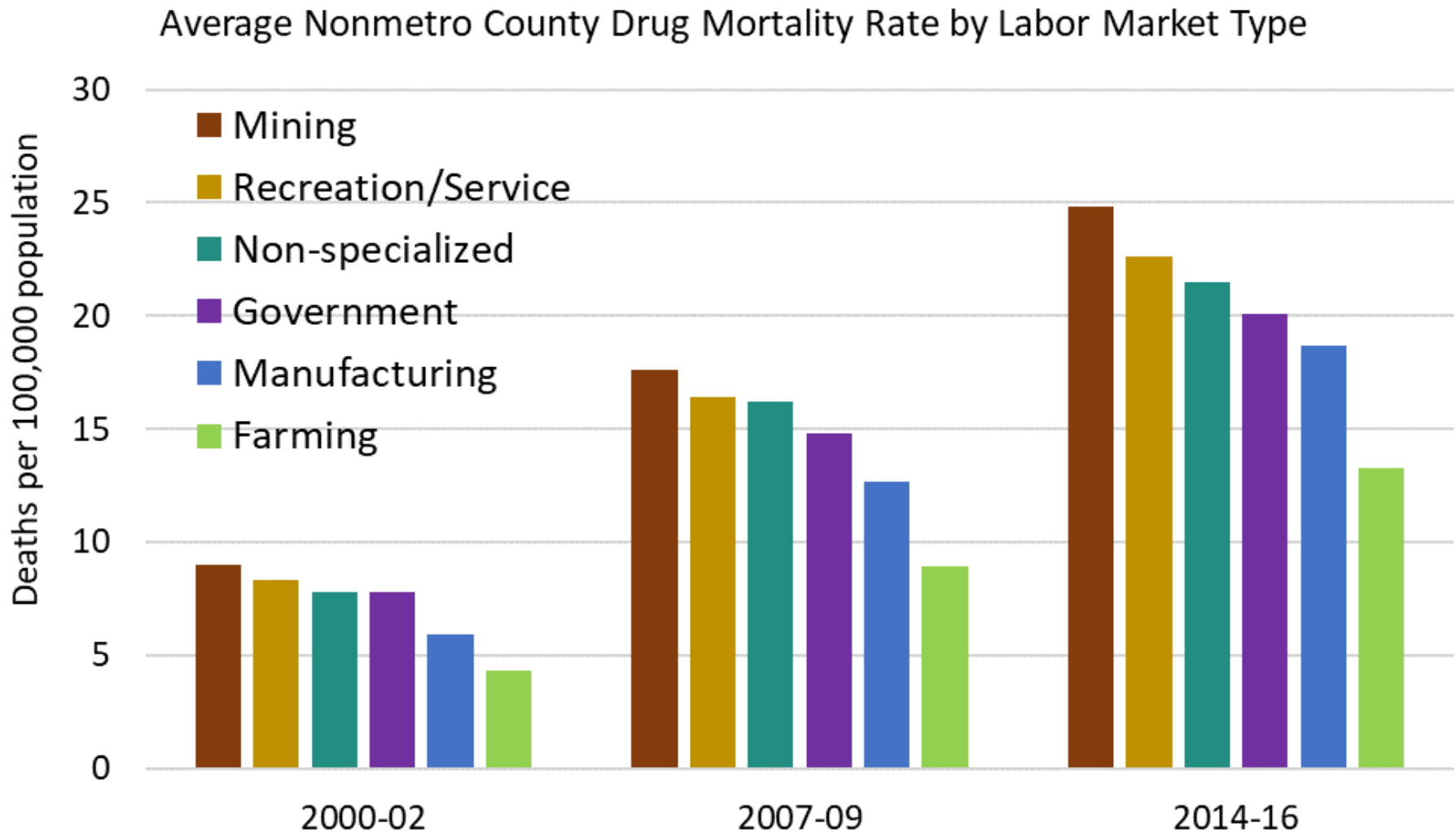
Data: CDC WONDER. Multiple Cause of Death Files 2014-2016; <https://wonder.cdc.gov/>.

On Average, Drug Mortality Rates are Not Higher in Rural Areas



Data: CDC WONDER. Multiple Cause of Death Files; <https://wonder.cdc.gov/> including NCHS data

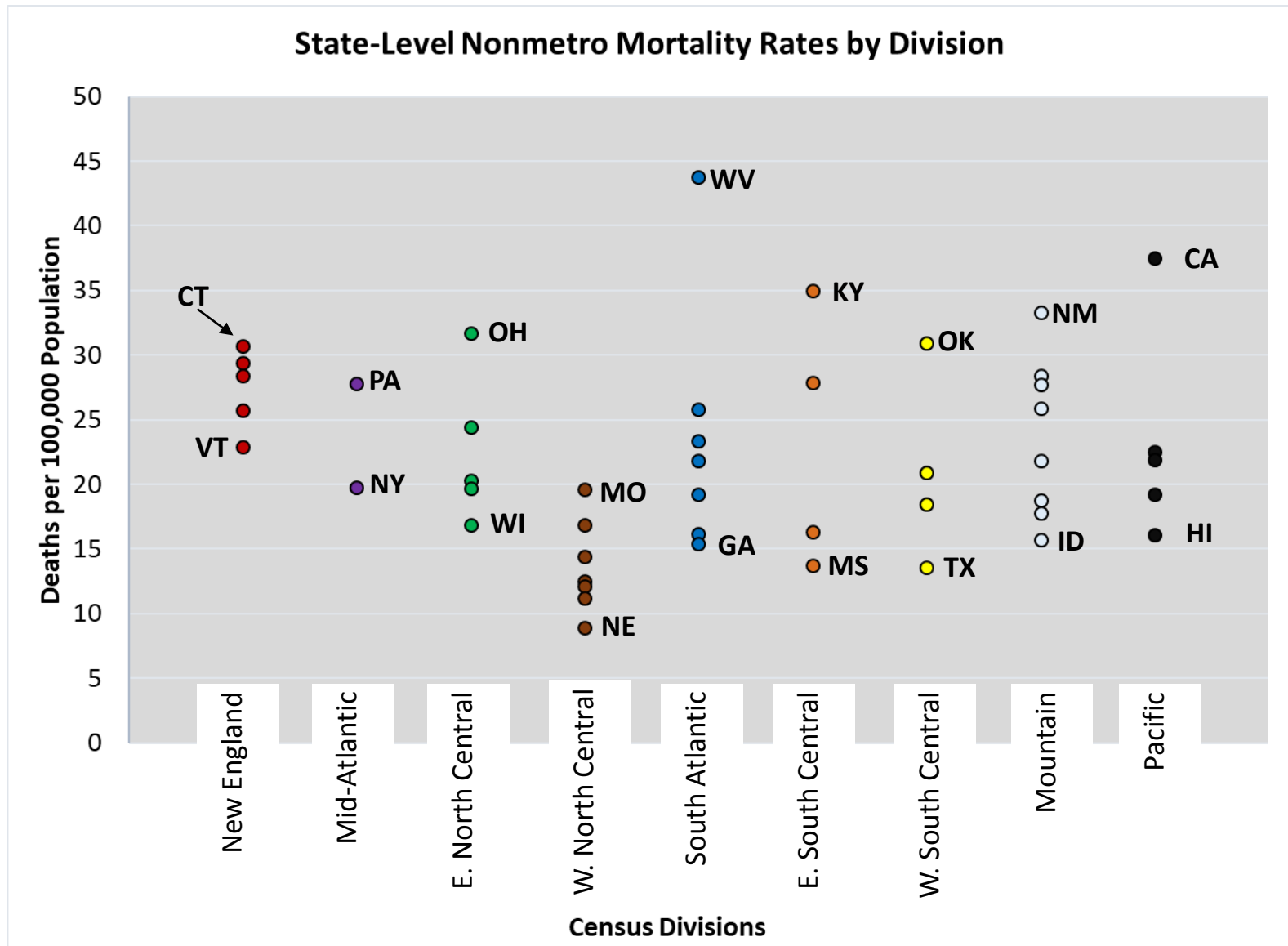
Rural is not Monolithic: Substantial Variation in Drug Mortality across Rural Areas



Data: CDC WONDER. Multiple Cause of Death Files (<https://wonder.cdc.gov/>); USDA Economic Research Service County Typology Codes, 2015 Edition (<https://www.ers.usda.gov/data-products/county-typology-codes.aspx>)

Variation in Drug Mortality Rates Between & Within Regions

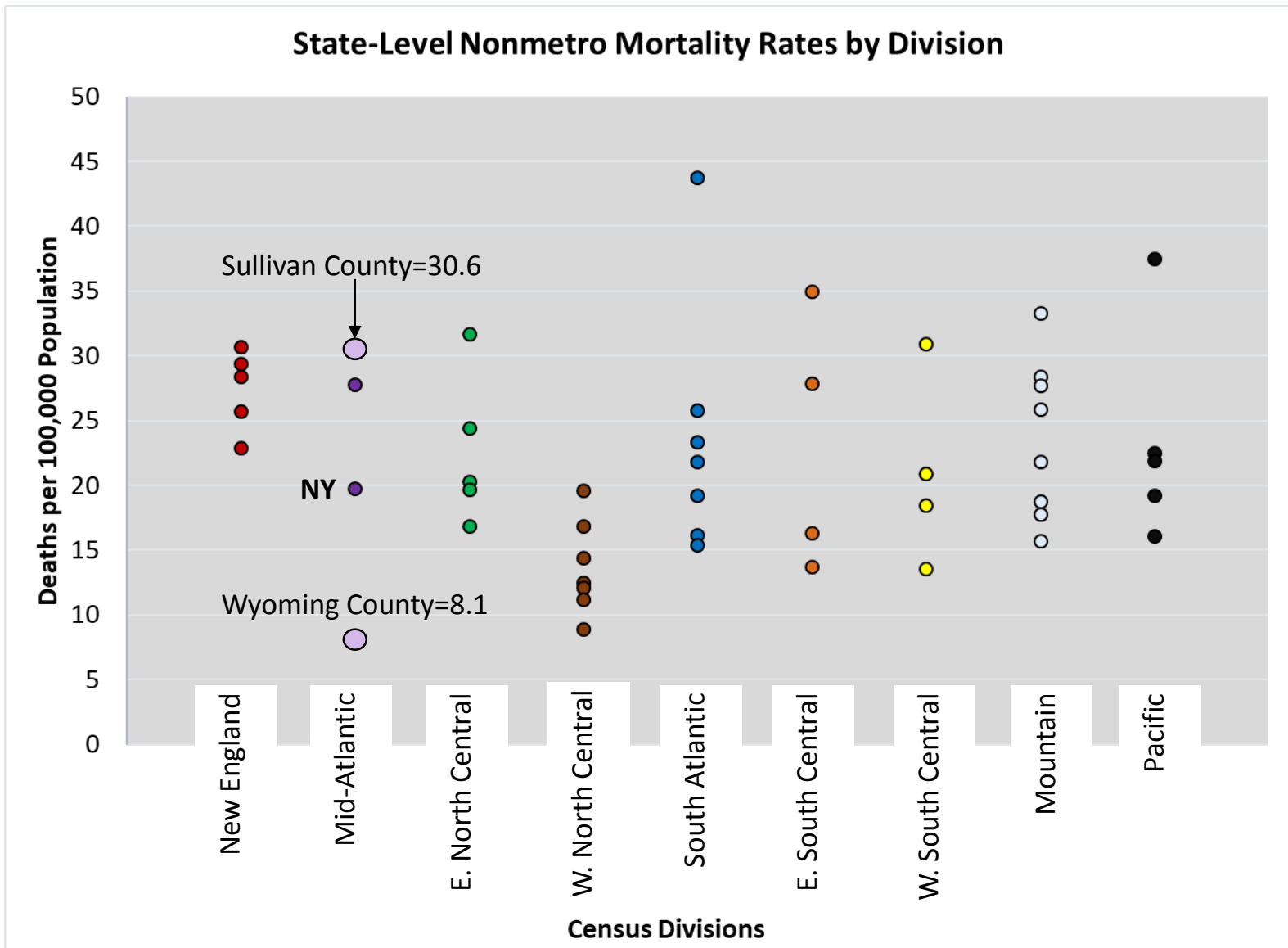
○ Represents the pooled age-adjusted drug mortality rate of all nonmetro counties within the state, 2014-2016



Data: CDC WONDER. Multiple Cause of Death Files, 2014-2016 (<https://wonder.cdc.gov/>)

Significant Within-State Variation

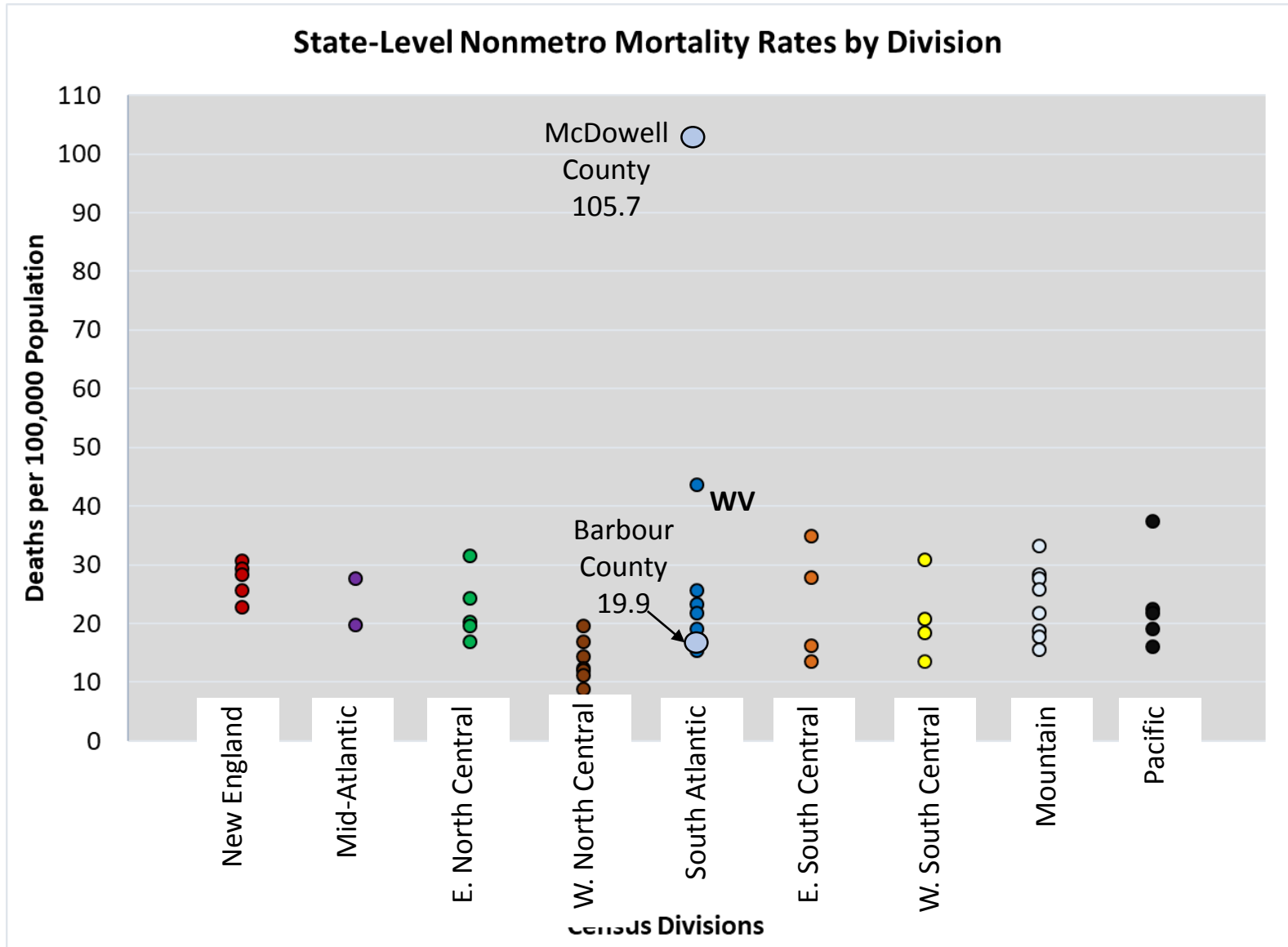
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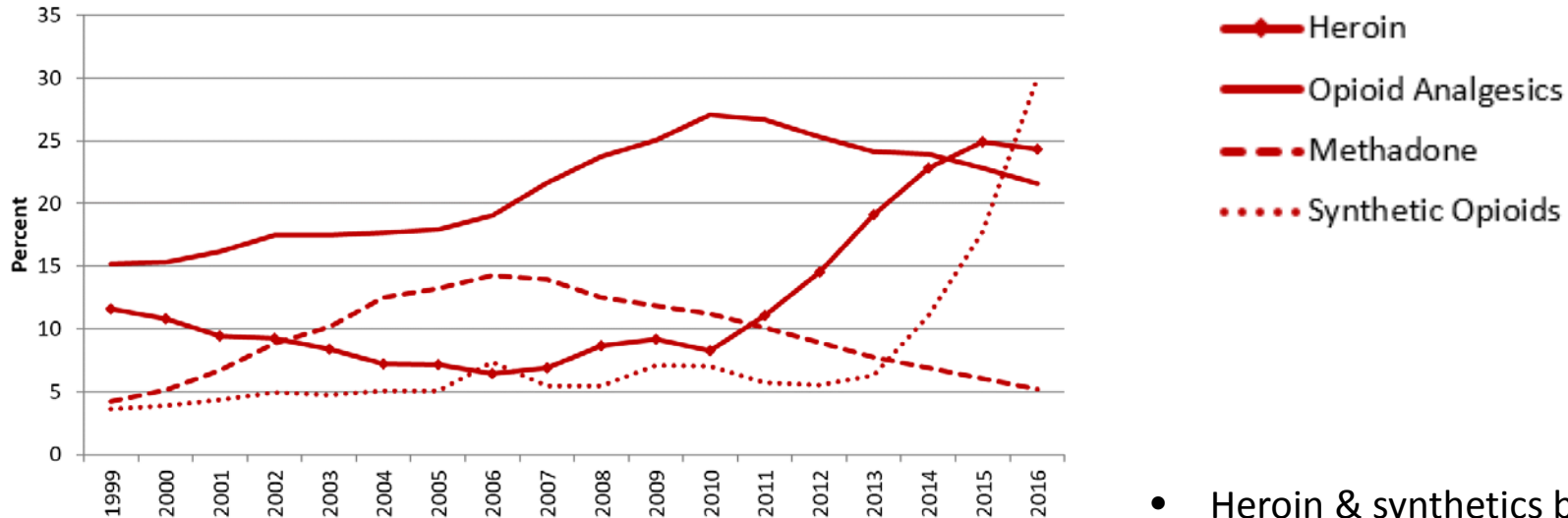
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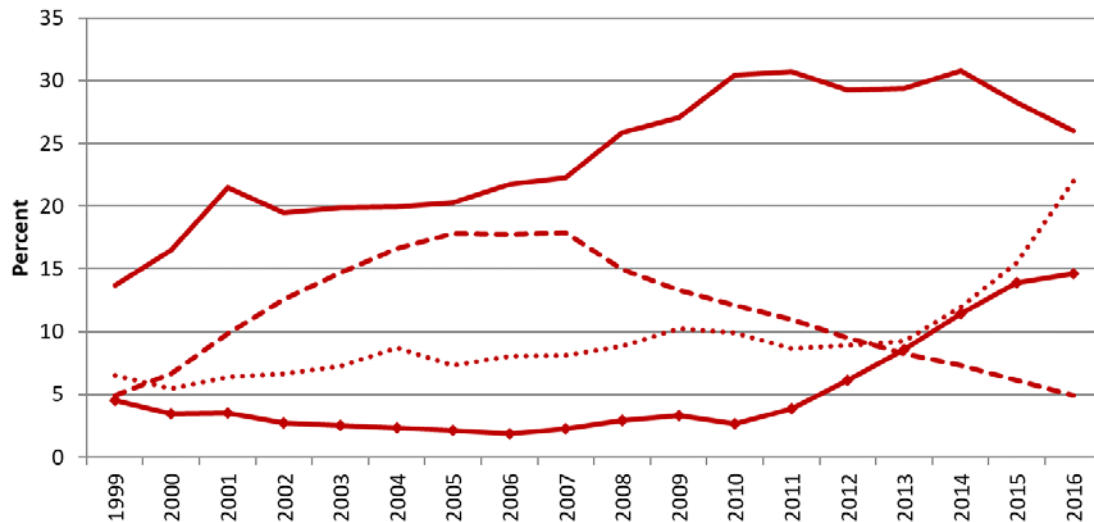
Prescription Opioids Bigger Nonmetro Problem, Heroin/Fentanyl Bigger Metro Problem

Percentage of Metro Drug-Related Deaths Involving Specific Drugs



- Heroin & synthetics bigger problem in metro
- Prescription opioids bigger problem in nonmetro; declining in both metro and nonmetro

Percentage of Nonmetro Drug-Related Deaths Involving Specific Drugs



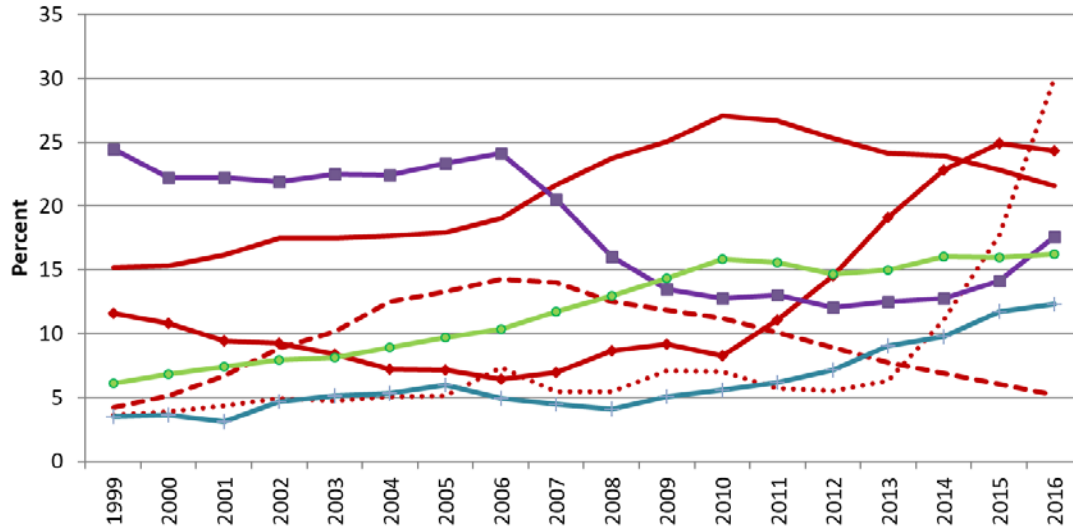
Note: Sum of all drug-specific deaths adds to more than 100% because multiple drugs can be involved in a death

*Opioid analgesics are natural or semi-synthetic opioids (e.g., prescription oxycodone, hydrocodone); Synthetic opioids include fentanyl

Data Source: CDC Wonder Multiple Cause of Death Files, 1999-2015

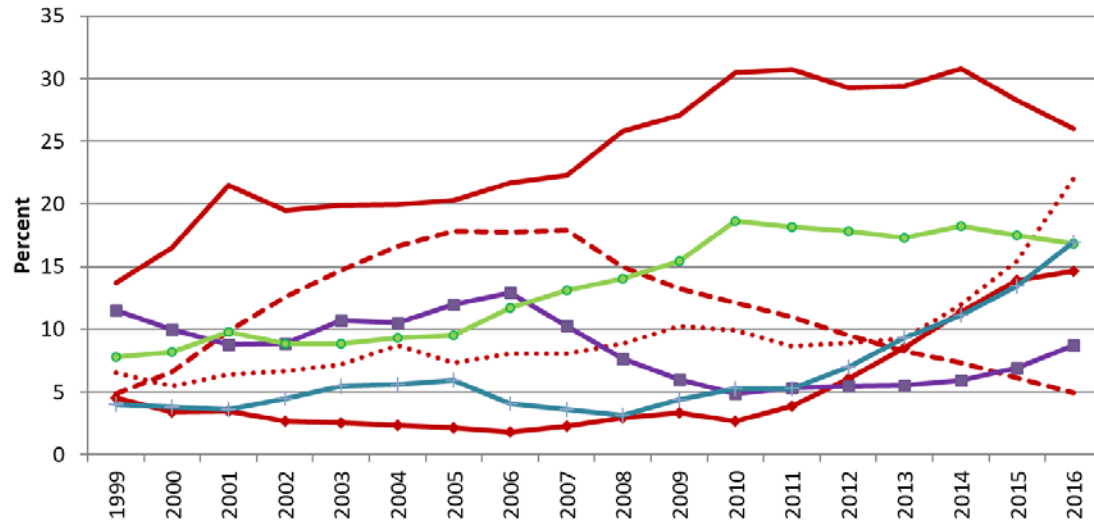
Don't Lose Sight of other Drugs

Percentage of Metro Drug-Related Deaths Involving Specific Drugs



opiates

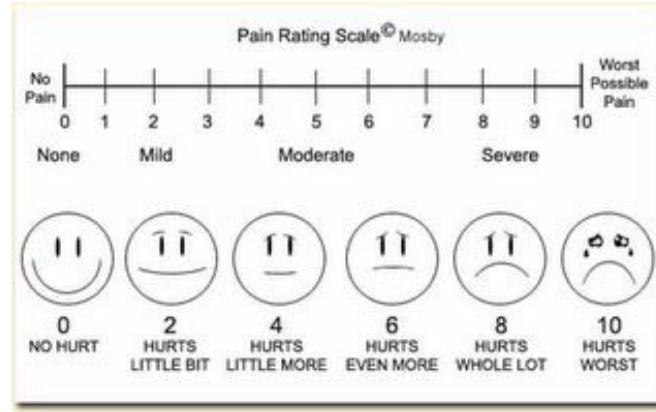
Percentage of Nonmetro Drug-Related Deaths Involving Specific Drugs



- Heroin & synthetics bigger problem in metro
- Prescription opioids bigger problem in nonmetro; declining in both metro and nonmetro
- Benzodiazepines and psychostimulants increased in recent years; bigger nonmetro problem
- Cocaine declined but showing signs of reversal; bigger metro problem
- Substantial drug mixing

Note: Sum of all drug-specific deaths adds to more than 100% because multiple drugs can be involved in a death
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How Did We Get Here? The Spark vs. The Kindling



Opioids were the spark, but you can't start a fire without kindling.

The Factors that Help Explain Geographic Variation in Drug Mortality Rates

ECONOMIC



FAMILY

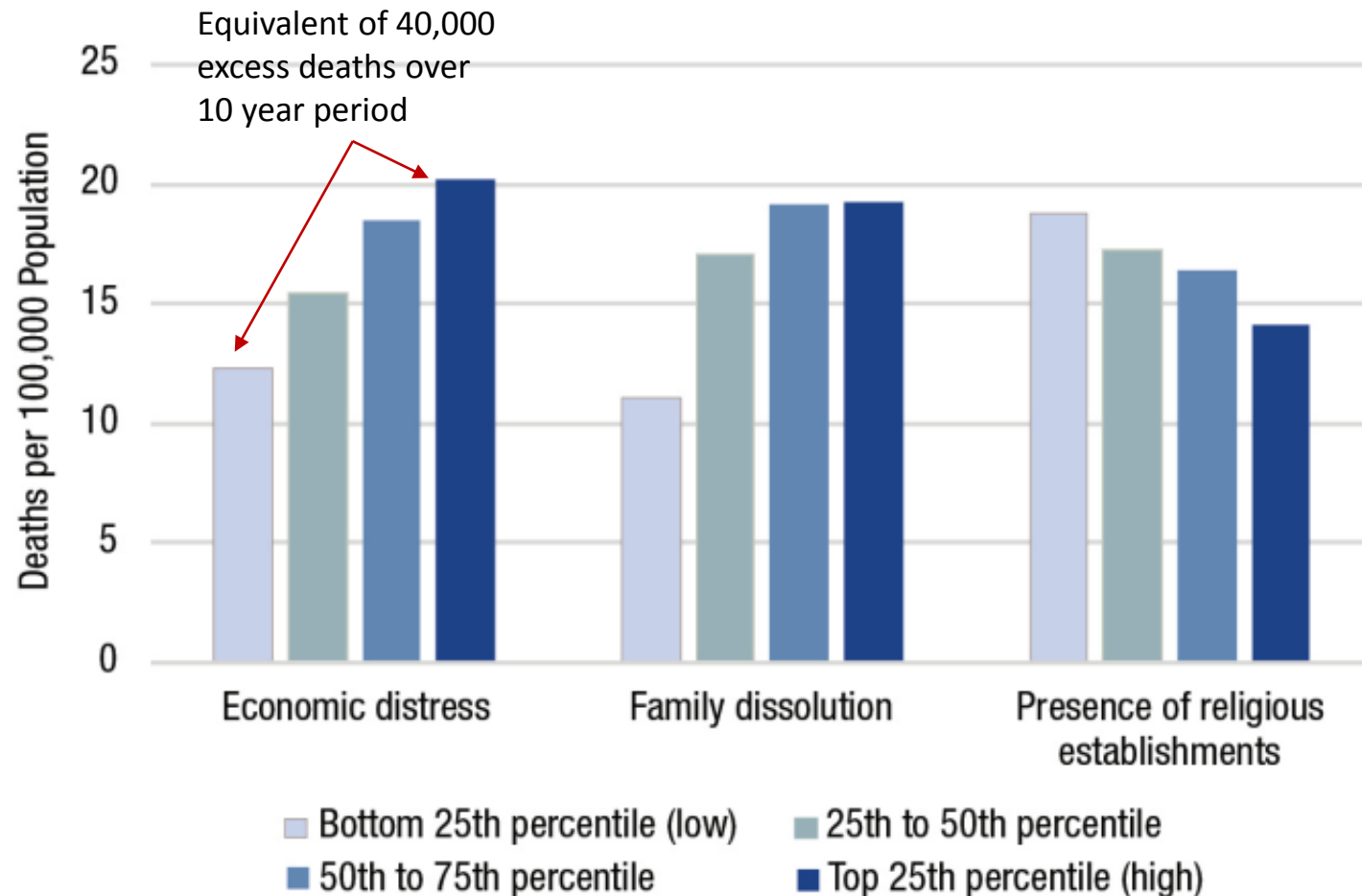


COMMUNITY



The key connecting force is **isolation**.

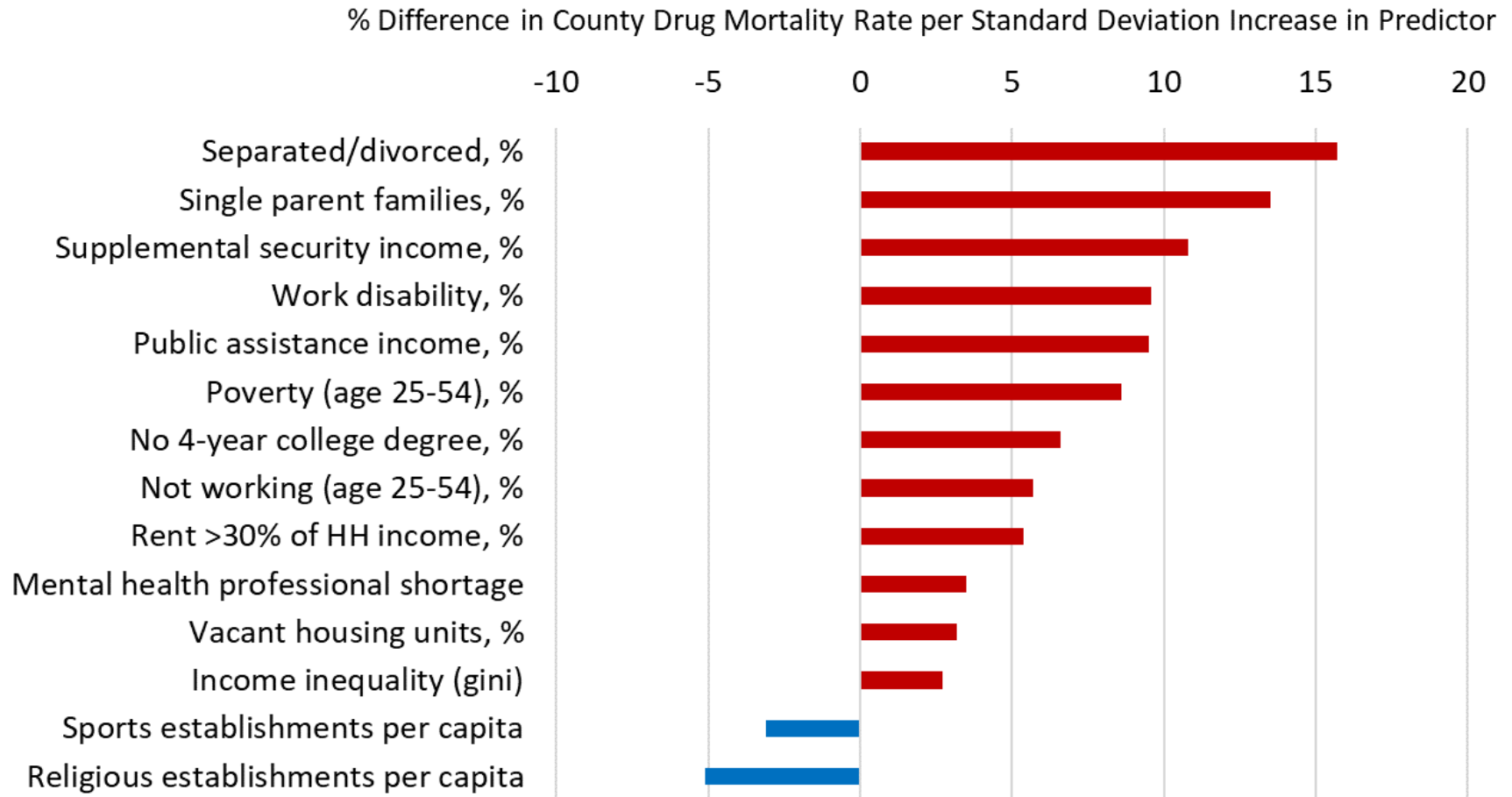
Drug Mortality Rates are Higher in Places with More Economic and Family Distress and Lower in Places with More Opportunities for Community Interaction



Data Sources: CDC WONDER, Multiple Cause of Death Files, 2006-2015; U.S. Census 2000; Northeast Regional Center for Rural Development, 2005

Citation: Monnat, Shannon M. 2018. Drug Overdose Rates are Highest in Places with the Most Economic and Family Distress. National Issue Brief #134. Carsey School of Public Policy. University of New Hampshire.

Drug Mortality Rates are Higher in Places with More Economic and Family Distress and Lower in Places with More Opportunities for Community Interaction



Data Sources: CDC WONDER, Multiple Cause of Death Files, 2006-2015 with NCHS; U.S. Census 2000; Northeast Regional Center for Rural Development, 2005

Citation: Monnat, Shannon M. 2018. "Factors Associated with County-Level Differences in U.S. Drug-Related Mortality Rates. *American Journal of Preventive Medicine*. <https://doi.org/10.1016/j.amepre.2018.01.040>

Summary

- Drug epidemic not disproportionately rural:
 - Heterogeneity: very high rates in some rural counties (i.e., Appalachia, southwest), very low in others
 - Rural areas may have more challenges dealing with it.
- Don't forget about the other “deaths of despair” and chronic diseases:
 - Alcohol & suicide mortality rates have also increased.
 - Heart disease remains the biggest contributor to premature mortality.
- Economic, family, and community factors are key upstream drivers.

Must Address What's Going on Upstream

“There I am standing by the shore of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back in the river again, reaching, pulling, applying, breathing, and then another yell. Again and again, without end, goes the sequence. **You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who is upstream pushing them all in.**”

John B. McKinlay. “A Case of Refocusing Upstream: The Political Economy of Illness,” in *The Sociology of Health & Illness Critical Perspectives*, 8th edition, ed. Peter Conrad (New York: Worth Publishers, 2009).

Thank you.

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DATA

U.S. Centers for Disease Control and Prevention

National Center for Health Statistics

United States Department Agriculture Economic Research Service

U.S. Census Bureau