# Out of sight, out of mind:

# Unaddressed disparities among rural minority populations

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South Carolina Rural Health Research Center

## **Overview**

- Things are getting better from a data point of view
- More research into rural minority health remains needed





# Most analyses address race, residence separately

Health US 2016, e.g. Table 38 (Self-reported

prevalence of heart disease, cancer & stroke from NHIS):

- Age
- Sex
- Sex and age
- Race
- Hispanic origin & race
- Education
- Percent of poverty level
- Hispanic origin and race and percent of poverty level
- Geographic region
- Location of residence

Residence is the only cross-tab that can't be performed from public use data.

South Carolina Rural Health Research Center Admittedly, major documents focus on major populations. HUS 2013 included race / urbanization analyses.



# 2017: The year of rural

CDC:

- 11 rural-focused MMWR Surveillance Summary reports in 2017
  - 12 if an Iowa study is included
  - + 8/11 included race/ethnicity cross-tabs
- Rural analysis workshop in December, 2017

AHRQ

- Chartbook on rural health care
- NCI
  - Rural Cancer Control research emphasis





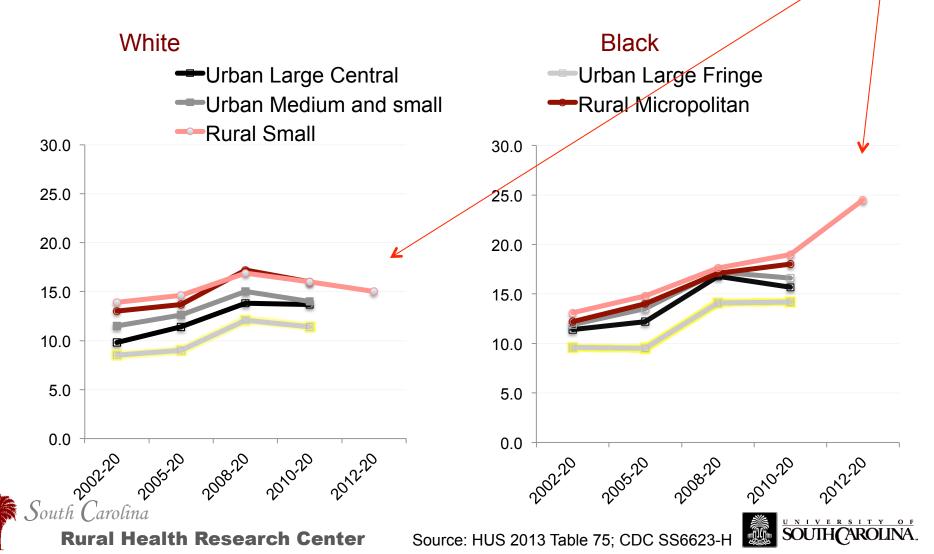
- Rural effects
- Race effects
- Interactive effects ... does anyone look?





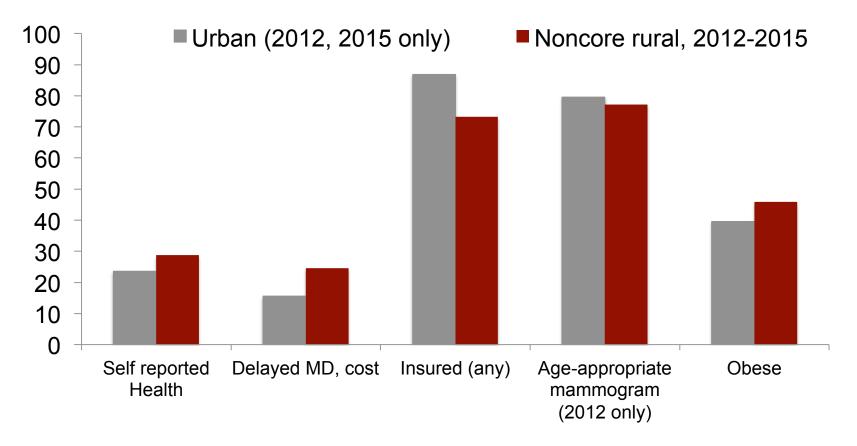
# **Clear residence effects and... ?**

Percent of working age adults delaying care, by race & residence



# Quick comparative estimates: residence matters

Selected self-reported variables, black only, Metro counties compared to Noncore rural counties, BRFSS, selected years



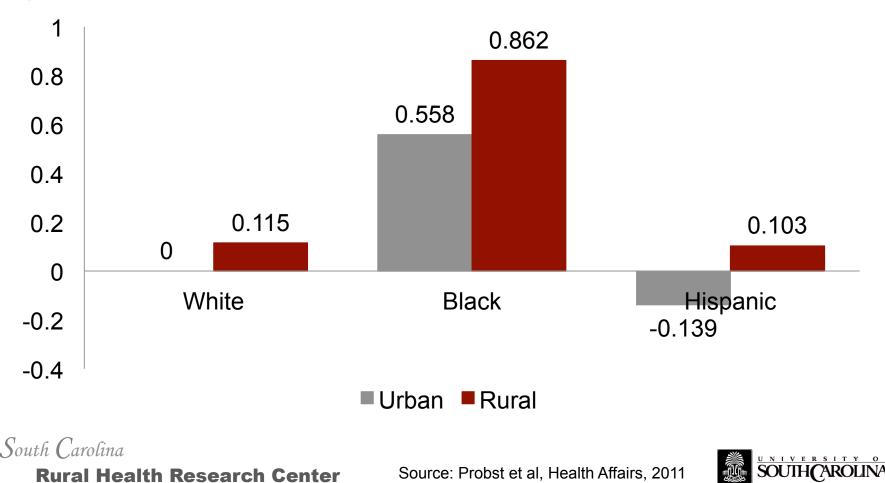
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Source: James et al 2017 & author's analysis

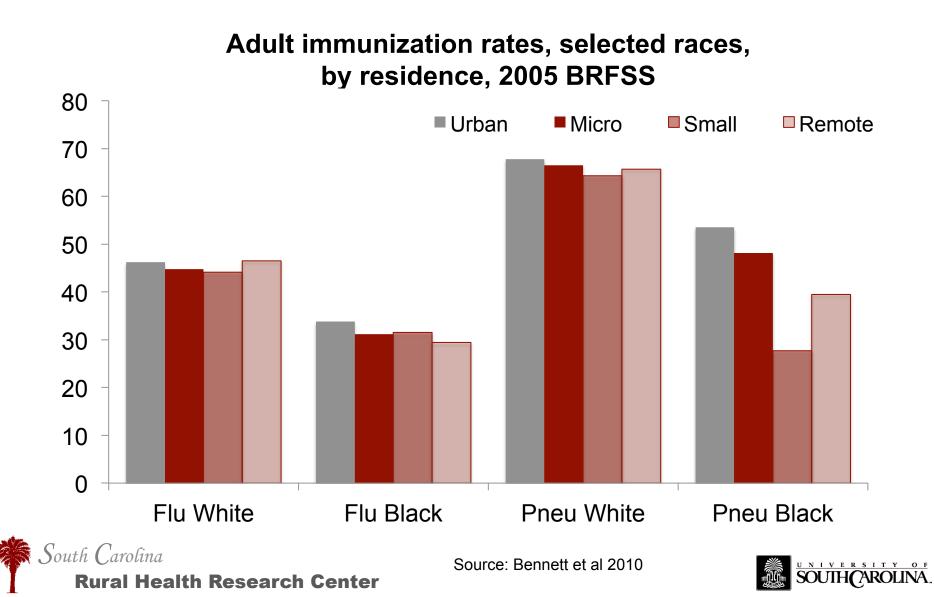


### **Clear interaction effect**

Hazard ratio for death before age 65 among persons age 45-64 when interviewed, 1986-2000 NHIS LMF, adjusted for sex and age. Referent group = urban white.

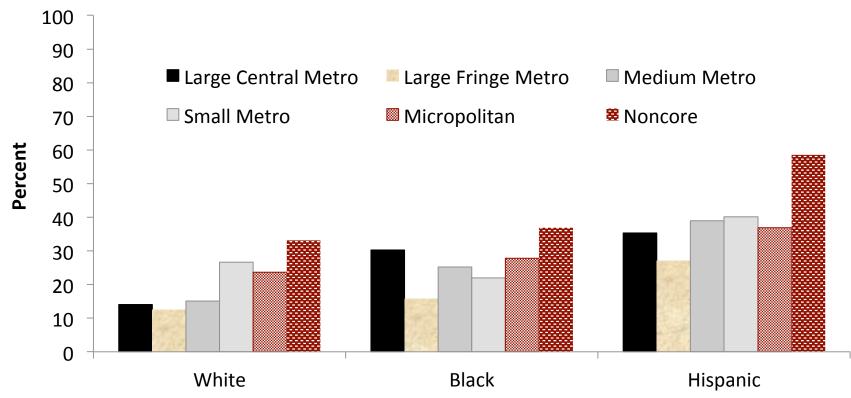


### **Race/ethnicity, some residence effects**



## **Race/ethnicity and residence effects**

People who identified a hospital, emergency room, or clinic as a source of ongoing care, by residence location, stratified by race/ethnicity, 2014 (Source: AHRQ)



#### Drawn from AHRQ Rural Health Disparities Chartbook, 2017

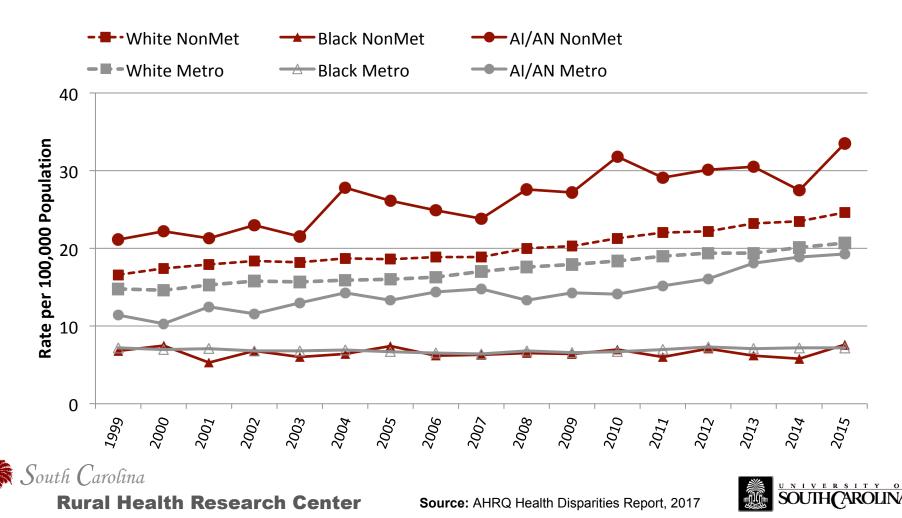
**Source:** Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, 2014. **Note:** For this measure, lower rates are better. White and Black are non-Hispanic. Hispanic includes all races. *South Carolina* 

#### **Rural Health Research Center**



#### **Race, residence and time effects**

Suicide rate per 100,000 population, by race/ethnicity and residence location, age 15 and over, 1999-2015



### Increased attention, but ...

#### **11 reports with 6 distinct classification approaches**

#### **Definitions of rural across 11 CDC Surveillance Reports**

Geographic Unit	Categories	Number of Reports	With race/ residence
County	Metro / Non metro	3	1
County	4 urban, 2 rural	3	3
County	Non-core rural only	2	2
County	2 urban, 2 rural	1	1
County	3 urban, 3 rural	1	1
ZIP Code Tabulation Area	1 urban, 3 rural	1	0





# Geo analysis is complex

#### Multiple levels of measurement

- County
- Census Tract
- Public Use Microdata Sample
- Care referral region
- Confusing terms
  - Metropolitan / non-metropolitan
  - Urban / rural





# "Micropolitan:" the term from heck

- Greenwood, SC: 23,000 residents
- NOT a variant on metropolitan (urban) but a rural county with large town



## Metropolitan

#### **Rockville, MD: population 66,940**



# So, what do rural researchers want?

- Clear, consistent definitions of rural
  - Terms such as "micropolitan" are confusing
- Consistent testing for race/residence interaction effects
  - If no one looks, no one will find
- Access procedures to enhance geo-based research





# **Thanks!**

Our web site:

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