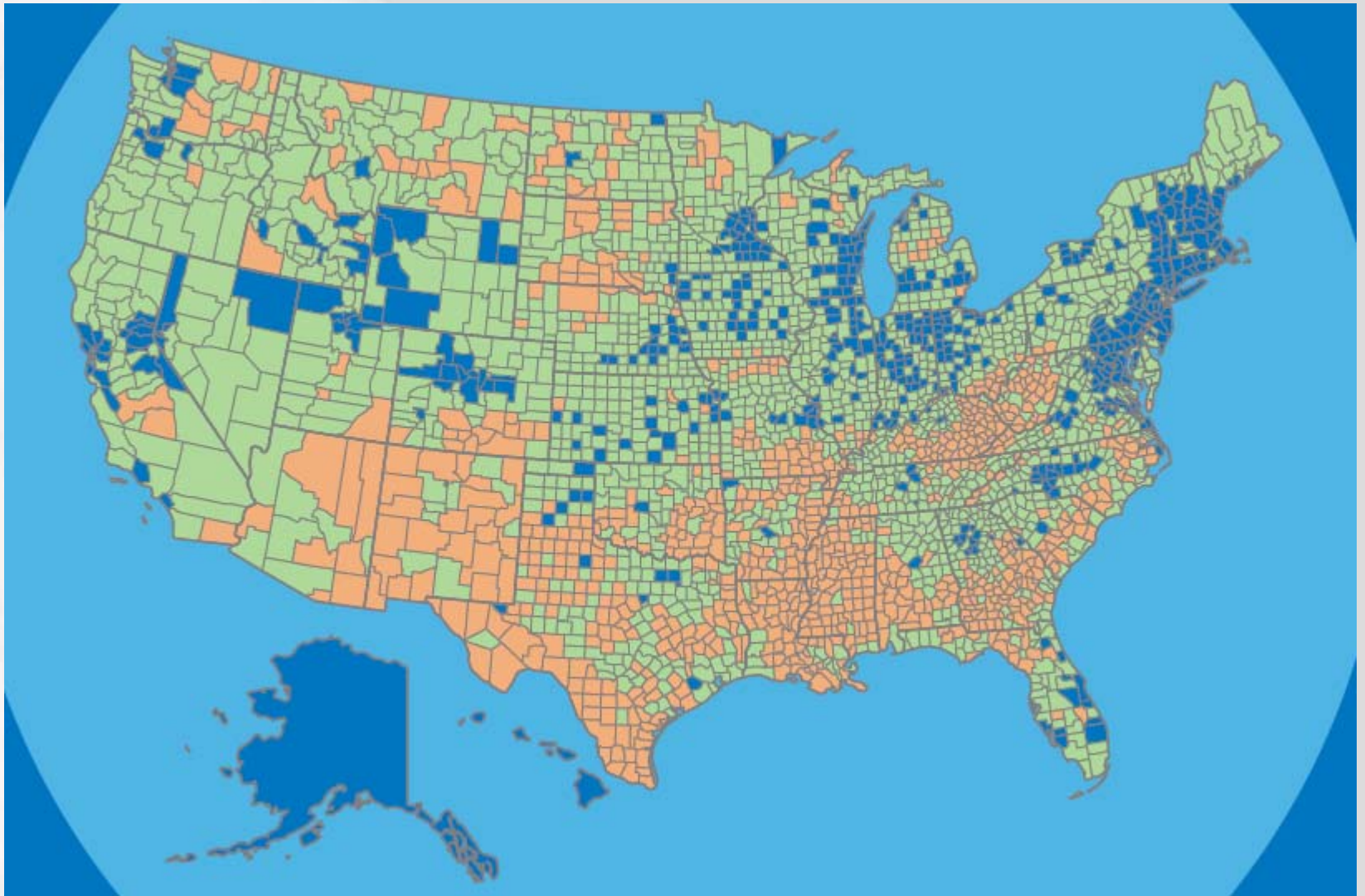


# The NAACCR Poverty and Census Tract Linkage Program

Francis P. Boscoe, Ph.D.  
NAACCR Annual Meeting  
Québec City, June 2010



## U.S. Poverty Rates by County, 2000

Singh GK et al. *Area Socioeconomic Variations in U.S. Cancer Incidence, Mortality, Stage, Treatment, and Survival, 1975-1999*. NCI Cancer Surveillance Monograph Series, Number 4. 2003.

# The NAACCR Poverty and Census Tract Linkage Program

- A simple SAS program available from the NAACCR web site
- Returns the census tract level poverty rate and poverty category (less than 5%, 5%-10%, 10%-20%, and above 20%)
- Incorporating a census tract poverty indicator into CINA Deluxe will make our data much more useful!

# The NAACCR Poverty and Census Tract Linkage Program

Data will not be identifiable:

- CINA Deluxe applicants can request county OR census tract poverty indicator, but not both
  - At the state level, there are no unique tract/poverty level combinations
  - At the county level, there are over a thousand examples of unique tract/poverty level combinations (2% of cases)

# The NAACCR Poverty and Census Tract Linkage Program

Example: St. Lawrence County, New York

- One tract has 0%-5% poverty (SUNY-Potsdam campus)
- One tract has 5%-10% poverty (St. Lawrence University campus)
- All other tracts are in one of the two highest categories

# The NAACCR Poverty and Census Tract Linkage Program

Registries retain control of data:

- Registries will be informed of any NAACCR projects that would use census tract poverty indicator and asked for consent
- Consent or denial may be given on a project-by-project basis
- Researchers wishing to use this variable must get NAACCR IRB approval

Relative Risk of Cancer Incidence, Highest vs. Lowest Poverty Rate  
 Census Tracts, non-Hispanic Whites,  
 New York State, 2003-2007, for Selected Sites

Site	Relative Risk
Oropharynx*	2.81
Anus*	2.10
Cervix*	1.79
Penis <sup>+</sup>	1.77
Larynx*	1.77
Liver*	1.74
Vagina <sup>+</sup>	1.64
Stomach*	1.58
Oral*	1.41
Non-melanoma skin*	1.41
Lung*	1.26
Colorectal*	1.24
All sites combined*	1.04

\*significant at p=0.05

<sup>+</sup>significant at p=0.10

Relative Risk of Cancer Incidence, Highest vs. Lowest Poverty Rate  
Census Tracts, non-Hispanic Whites,  
New York State, 2003-2007, for Selected Sites

Site	Relative Risk
Melanoma*	0.56
Prostate*	0.78
Thyroid*	0.88
Bladder*	0.89
Breast*	0.90

\*significant at p=0.05

+significant at p=0.10



Research article

Open Access

## Recent trends in breast cancer incidence in US white women by county-level urban/rural and poverty status

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**Methods:** We obtained invasive and *in situ* breast cancer incidence data for the years 1997 to 2004 from 29 population-based cancer registries participating in the North American Association of Central Cancer Registries resource. Annual age-adjusted rates were examined overall and by rural/urban and poverty of patients' counties of residence at diagnosis. Joinpoint regression was used to assess trends by annual quarter of diagnosis.

**Results:** Between 2001 and 2004, overall invasive breast cancer incidence fell 13.2%, with greater reductions among women living in urban (-13.8%) versus rural (-7.5%) and low- (-13.0%) or middle- (-13.8%) versus high- (-9.6%) poverty counties. Most incidence rates peaked around 1999 then declined after second quarter 2002, although in rural counties, rates decreased monotonically after 1999. Similar but more attenuated patterns were seen for *in situ* cancers.

**Conclusion:** Breast cancer rates fell more substantially in urban and low-poverty, affluent counties than in rural or high-poverty counties. These patterns likely reflect a major influence of reductions in hormone therapy use after July 2002 but cannot exclude possible effects due to screening patterns, particularly among rural populations where hormone therapy use was probably less prevalent.

# Infrequently Asked Questions

1. What if the quality of our census tract data isn't high enough?

- Geocoding has become dramatically easier and cheaper in the last few years
  - Kevin Henry and myself – May 2010 NAACCR webinar
  - NAACCR Geocoding Best Practices guide - [http://www.naacrr.org/filesystem/pdf/Geocoding\\_Best\\_Practices.pdf](http://www.naacrr.org/filesystem/pdf/Geocoding_Best_Practices.pdf)
  - Simple Singh article in Journal of Registry Management: more than half of registries should have good enough data

# Infrequently Asked Questions

2. Shouldn't we just wait for the 2010 census results?

- SES information is not part of the decennial census anymore
- 2005-2009 tract level poverty, using 2000 census boundaries, will be available in early 2011
- A new 5-year period will be available every year thereafter
- It will be very simple to swap the existing tract-poverty table with an updated one every year

# Infrequently Asked Questions

## 3. What about Canada?

- If a Canadian member can put together a comparable table (dissemination areas?), we would enthusiastically include it

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