Enumerating ethnicity in the U.S. Census: It's consequence for Hispanic/non-Hispanic cancer rates

Laurie M. DeChello, MPH¹, David I. Gregorio, PhD¹, Rafael Perez-Escamilla, PhD²

¹University of Connecticut, School of Medicine ²University of Connecticut, Department of Nutritional Sciences

Dependent Children and Child Care Worker Disappearance

- Between 1986 and 1987, dependent children disappeared on IRS forms
- Between 1987 and 1988, child care workers disappeared on IRS forms
- The count of Hispanic persons increased in 2000

What is Ethnicity?

- Ethnicity in the 1970 and 1980 U.S.
 Decennial Censuses
- International conference on the Measurement of Ethnicity

Definitions of Ethnicity

- Merriam-Webster's Dictionary: of or relating to large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background
- U.S. Census Bureau: the heritage, nationality group, lineage, or a country of birth of the person or the person's parents or ancestors before their arrival in the U.S.

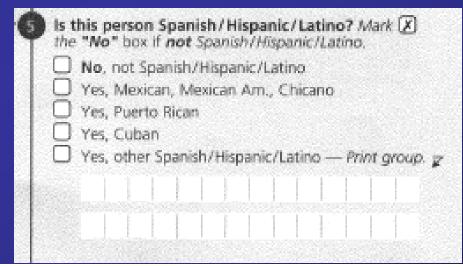
What is Hispanic Origin?

• Merriam-Webster's Dictionary: of, relating to, or being a person of Latin American descent living in the U.S.; especially: one of Cuban, Mexican, or Puerto Rican origin

U.S. Census Questions 1990 Census

○ Yes, Puerto Rican ○ Yes, Cuben ○ Yes, other Spanish/Hispanic (Print one group, for example: Argentis Colombian, Dominican, Nicaraguan, Salvadizan, Spanishd, and so on 1	7. Is this person of Spanish/Hispanic origin?	O No (not Spanish/Hispanic)
○ Yes, Cuben ○ Yes, other Spanish/Hispanic (Print one group, for example: Argentis Colombian, Dominican, Nearaguan, Salvadizan, Spanish and so on \	Pitt ONE circle for each person.	O Yes, Mexican, Mexican-Am., Chicano
○ Yes, other Spanish/Hispanic (Print one group, for example: Argentis Colombian, Dominican, Nicaraguan, Salvadizan, Spanisad, and so on 1	°	O Yes, Puerto Rican
(Print one group, for example: Argentis Colombian, Dominican, Nearaguan, Saloadizan, Soanizad, and so on)		O Yes, Cutan
Colombian, Dominican, Nicaraguan, Salvadiran, Sonniani, and so on 1 —		
Salvadizen Spanised and so on 1		
print one group.	If Yes, other Spanish/Hispanic, print one group.	Salvadozan, Spaniard, and so on.)

2000 Census



Why is Hispanic Origin Collected?

- Voting Rights Act
- Civil Rights Act
- Differences in disease risk

Variability of Hispanic Population Counts

- Change in how Hispanics classified themselves
- Impact on cancer incidence rates

Population Counts

- Connecticut Decennial Census counts from 1990 and 2000
- Connecticut population estimates, 1995
- Linear projections by gender and ethnicity
 - using 1990 and 1995
 - using 1995 and 2000

Cancer Incidence Counts

- SEER cancer incidence counts, 1994 to 2000
 - Breast Cancer
 - Prostate Cancer
 - Colorectal Cancer
 - Lung Cancer

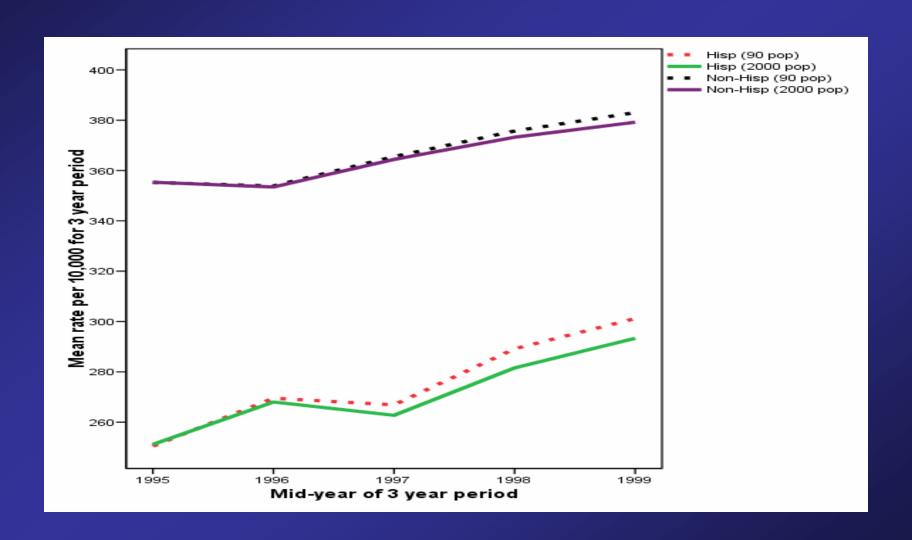
SEER Definition of Hispanic

- Identify themselves as being of Hispanic origin
- Hispanic ethnicity is independent of race

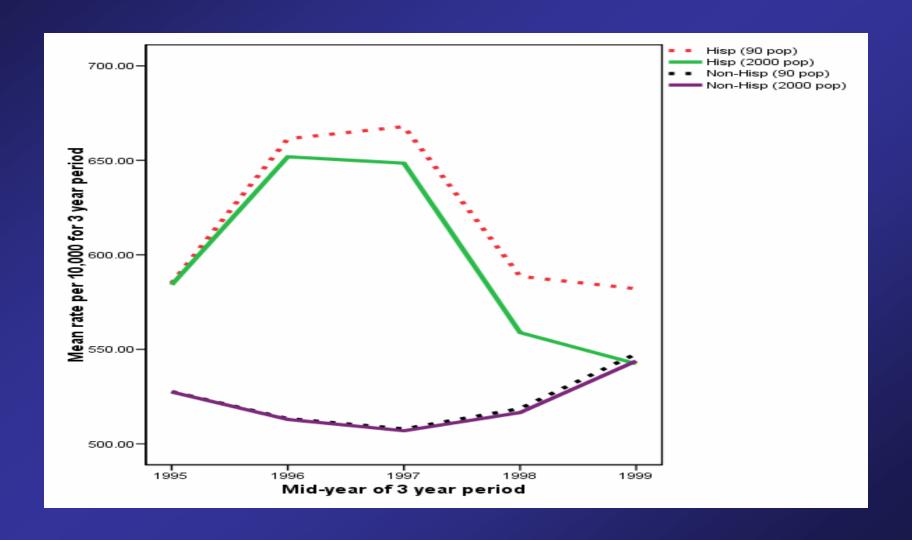
Statistics

- Incidence data grouped into 3-year periods
- Incidence rates
- Risk ratios
- T-tests

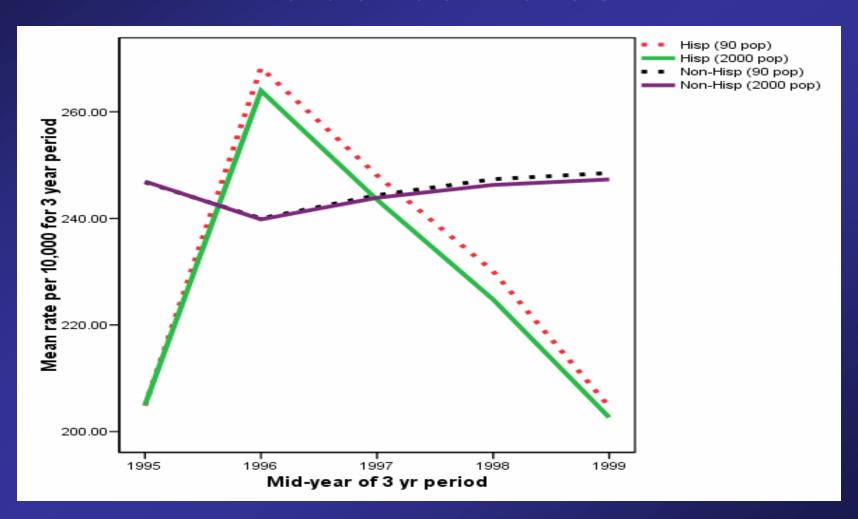
Breast Cancer Incidence Rates



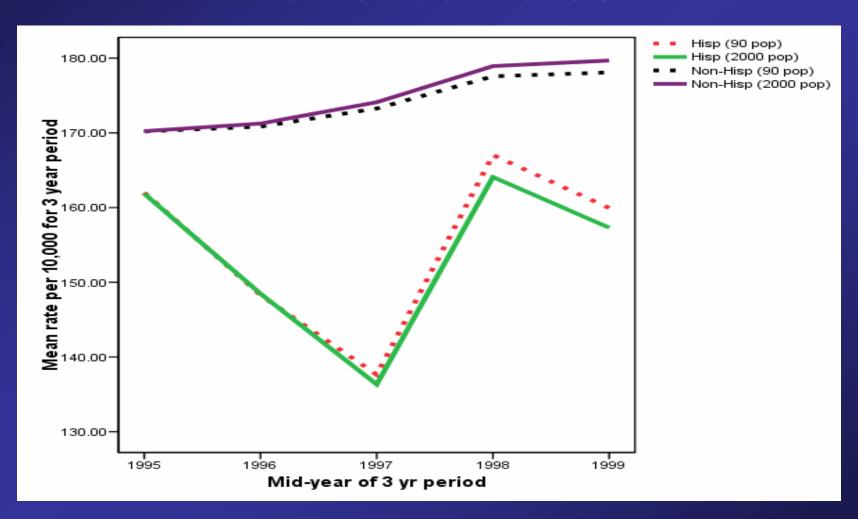
Prostate Cancer Incidence Rates



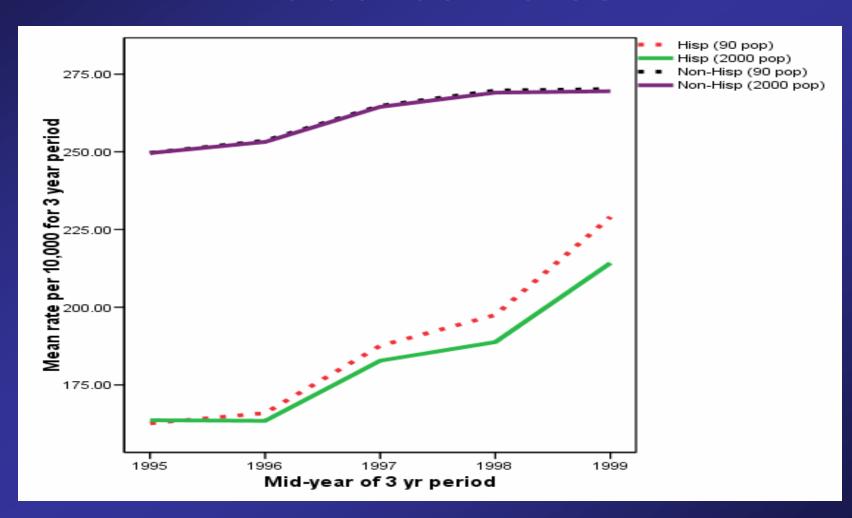
Male Colorectal Cancer Incidence Rates



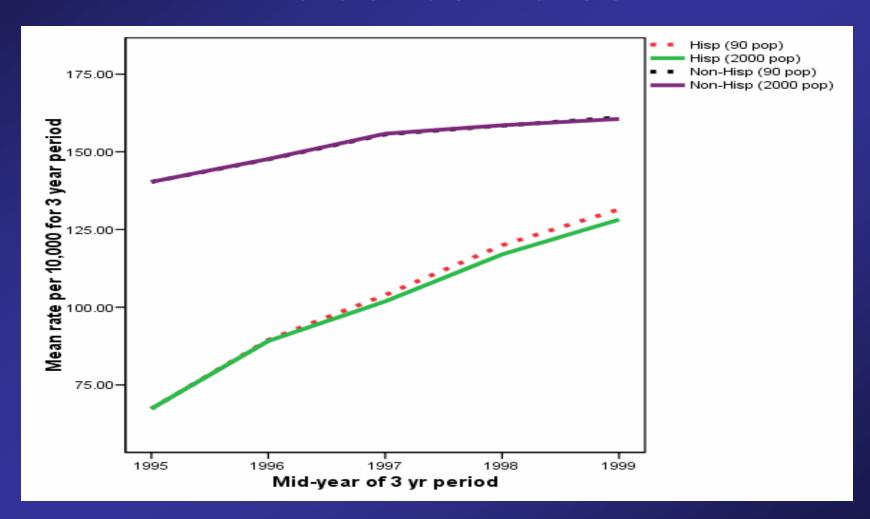
Female Colorectal Cancer Incidence Rates



Male Lung Cancer Incidence Rates



Female Lung Cancer Incidence Rates



Conclusions

- 2000 rates lower than 1990 rates
 - Shift in Hispanic categorization
- Significant difference in census year ratios for prostate cancer incidence and male colorectal cancer incidence
- Changes in 1990 and 2000 Census forms
- Affect on epidemiological statistics