## **IMPORTANCE OF IDENTIFYING AND UNDERSTANDING MORTALITY TRENDS**

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## THEORETICAL QUESTIONS

- Education is a fundamental cause of health and longevity (Link and Phelan)
- Cumulative disadvantage (Pampel and Rogers)
- Mexican American epidemiologic paradox (Markides)
- Rectangularization of survival
- Sex gap in life expectancy

## INTERNATIONAL COMPARISONS "Americans are much sicker than the English."

The SES-health gradient is real.

### Disease and Disadvantage in the United States and in England

James Banks, PhD	
Michael Marmot, MI	D
Zoe Oldfield, MSc	
James P. Smith, PhI	)

**Context** The United States spends considerably more money on health care than the United Kingdom, but whether that translates to better health outcomes is unknown.

**Objective** To assess the relative heath status of older individuals in England and the United States, especially how their health status varies by important indicators of socioeconomic position.

# LIFE EXPECTANCIES CIRCA 2010

Japan	83
Italy	82
Switzerland	82
Austrailia 81	
Canada 81	
France 81	
Iceland 81	
Israel 81	
Norway 81	
Singapore 81	
Spain 81	
Sweden 80	
Austria 80	
Belgiulii Finland	
Filialiu 80	
Gennary 80	
Nothorlands 80	
New Zealand 80	
South Korea	
United Kingdom	
Cyprus 79	
Costa Rica	
Denmark 79	
Ireland 79	
Portugal 79	
Puerto Rico	
Slovenia 79	
Taiwan 79	
United States 78	

Source: PRB 2010; countries with population of over one million.

## NATIONAL CENTER FOR HEALTH STATISTICS DATA

• U.S. Vital Statistics Mortality Data

- National Health Interview Survey Linked Mortality Files
- National Health and Nutrition Examination Survey Linked Mortality File
- National Mortality Follow-back Survey
- Links to other administrative data







Absolute difference

Life expectancy at birth

U.S. Life Expectancies by Sex, 1900-2006

## AGE-SPECIFIC MORTALITY RATES BY SEX, U.S., 1989-91, LOGGED SCALE.



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#### Cigarettes Per Capita and Sex Gap in Life Expectancy, U.S. Adults, 1920-2005



Sources: Derived from Arias (2007), Kung et al. (2008), Smith and Bradshaw (2006), CDC 1994, and US Dept. of Agriculture (2007).

## RISKY BEHAVIOR: MEN MORE LIKELY TO

Engage in violence
Take occupational risks
Drive recklessly
Abuse alcohol
Use illicit drugs
Consume tobacco



## DATA CONSIDERATIONS

• Age at death for oldest ages • Other important covariates

- Smoking, drug use, drinking, firearms
- Selected causes of death
  - Detailed causes of death
  - Emerging causes of death
  - Underlying and contributing causes
  - Potential indexes

• Innovative data sets and data linkages

## THANK YOU!

SIGNIFICANCEMortality affects

- Health disparities
- Social relationships
- Social institutions
- Age composition
- Social policy
  - Social Security
  - Medicare

## SEX GAP IN MORTALITY

oHistorical trends
oContributing factors
oCause of death
oFuture trends

