

# DOES THE HISPANIC PARADOX IN MORTALITY EXTEND TO DISABILITY? A COMPARISON OF OLDER MEXICANS IN THE U.S. AND MEXICO

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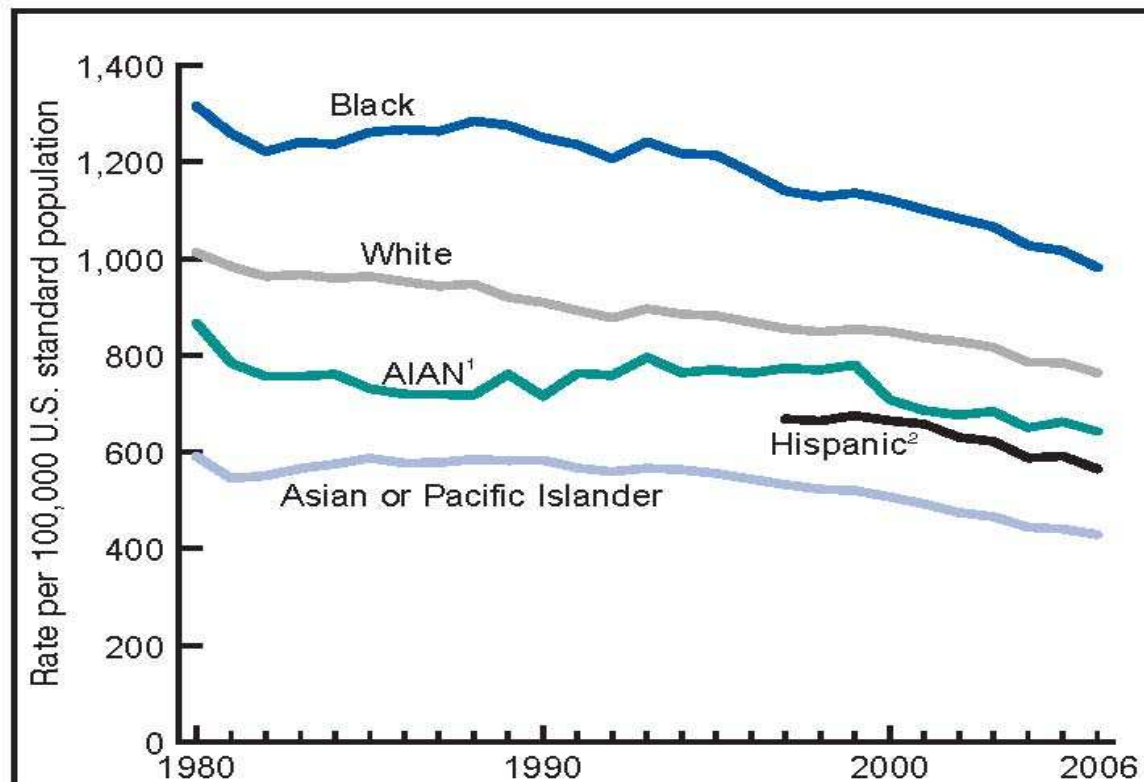
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# Age-Adjusted Death Rates by Race/Ethnicity: United States, 1980-2006



<sup>1</sup>American Indian or Alaska Native.

<sup>2</sup>Mortality data for the Hispanic population of the entire United States became available in 1997.

NOTES: Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Data for Hispanic origin and races other than white and black should be interpreted with caution; see "Technical Notes."

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality Statistics Branch.

Source: Heron et al. (2009, Figure 2)

# The debate surrounding the Hispanic paradox in adult mortality

- ✎ Health selection processes
  - ✎ Positive selection – “healthy migrant”
  - ✎ Negative selection – “salmon bias”
- ✎ Negative acculturation processes
  - ✎ Adoption of social and behavioral characteristics indicative of minority status populations in the U.S.

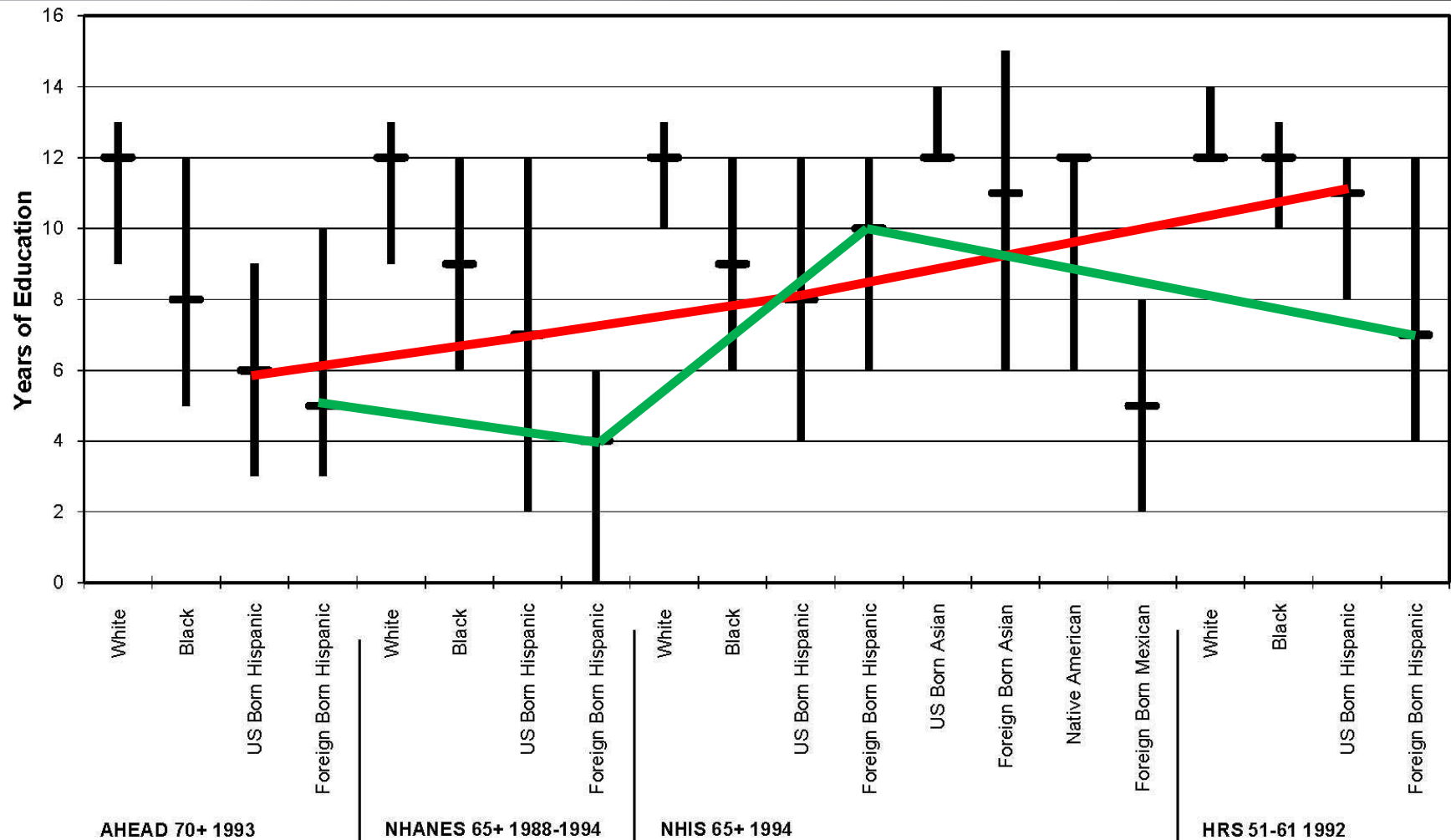
# Our contributions to the debate (1)

- ❖ Does the paradox extend to disability?
  - ❖ Positive health selection processes should extend to disability
- ❖ Do negative acculturation processes extend to disability?
  - ❖ Negative Acculturation expected to produce higher rates of disability which then elevate mortality rates

## Our contributions to the debate (2)

- ✧ How does the health of Mexicans differ from foreign-born and native-born MAs?
  - ✧ + health selection explanations suggest that FB MexAms should be relatively advantaged
- ✧ Among Mexicans, is there evidence of positive health selection for international and domestic migration?
- ✧ Mexican disability reports as a means of “gauging” over reporting of poor health

# Median Years of Education by Race/Ethnicity with Interquartile Range from Selected Health Surveys



Source Crimmins, Hayward, & Seeman (2004)

## A review of race/ethnic differences in health (Crimmins, Hayward, Seeman 2004)

- Compared to NH whites, NB and FB Hisps generally have lower rates of
  - Cancer, CVD, and COPD
- NB and FB Hisps have higher rates of diabetes
- FB Hisps have higher rates of disability
- Unclear whether NB Hisps and NH whites differ in their rates of disability

## MSLT life table approach

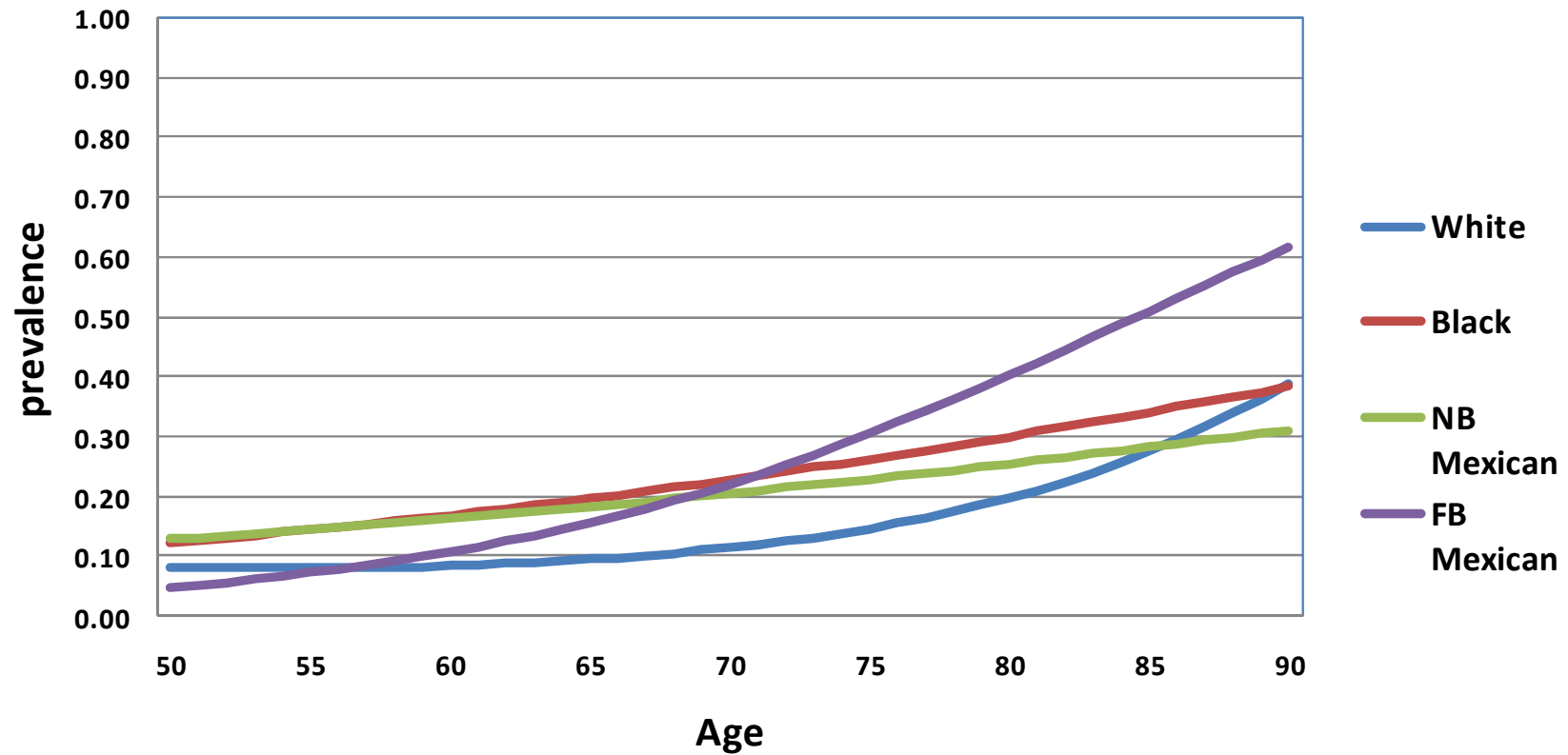
- ❖ MSLTs allow us to integrate mortality and disability information
- ❖ Explicit way of assessing whether paradox in mortality is accompanied by a paradox in disability
- ❖ MSLTs calculated using the prevalence-based approach because of sparse data concerns



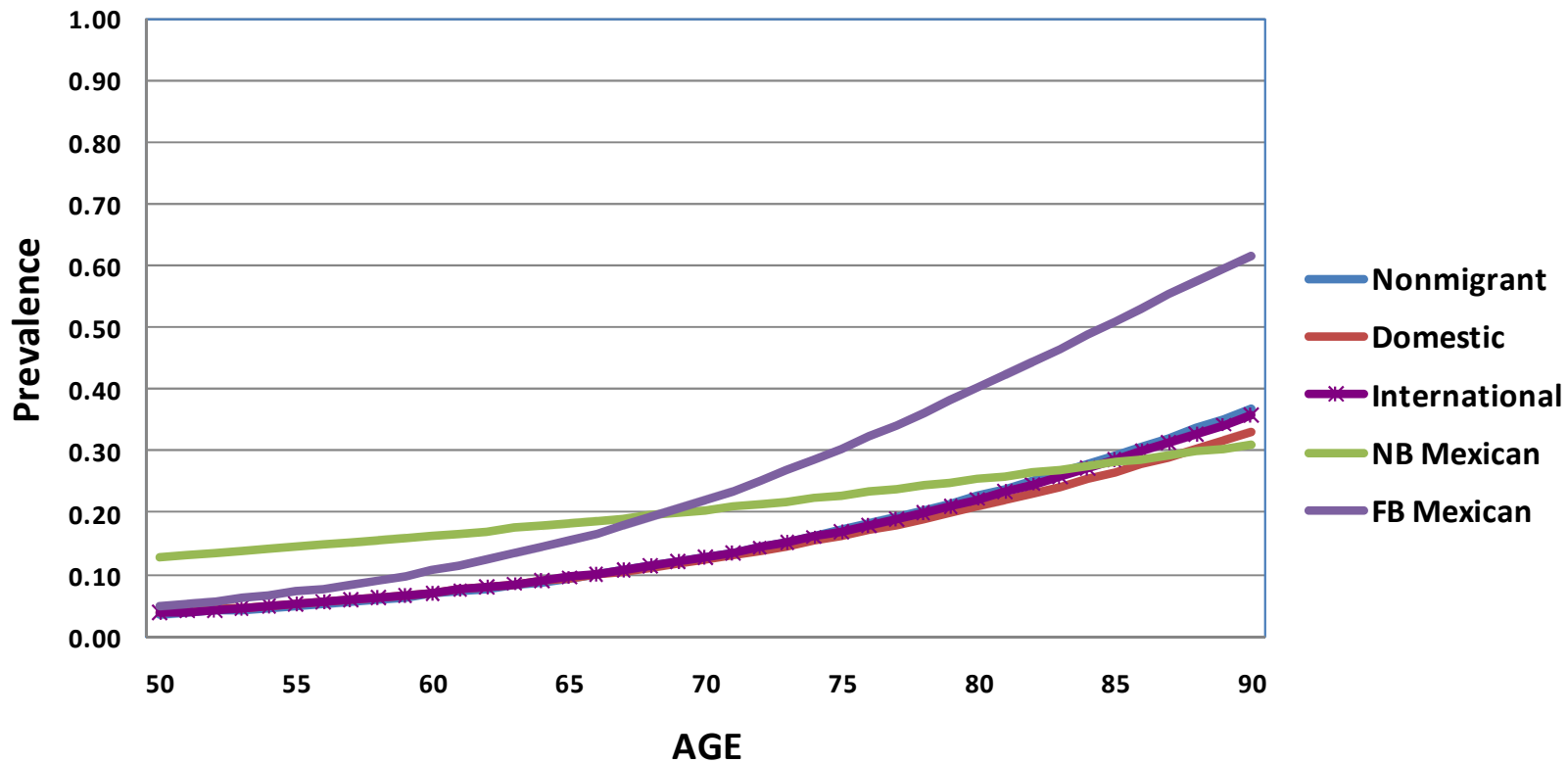
## Data sources and measures

- ❧ Health and Retirement Study (1998-2006)
  - ❧ Disability prevalence and mortality incidence for NH whites, blacks, FB MexAms, and NB MexAms
- ❧ Mexican Health and Aging Study (2001-2003)
  - ❧ Disability prevalence for non-migrants, international migrants, and domestic migrants.
  - ❧ Preliminary mortality analysis based on MHAS
  - ❧ MSLT mortality drawn from CONAPO
- ❧ Disability defined using 5 comparable ADLs (dressing, walking, bathing, eating, and getting in/out of bed)
  - ❧ Disabled having difficulty with 1+ ADLs

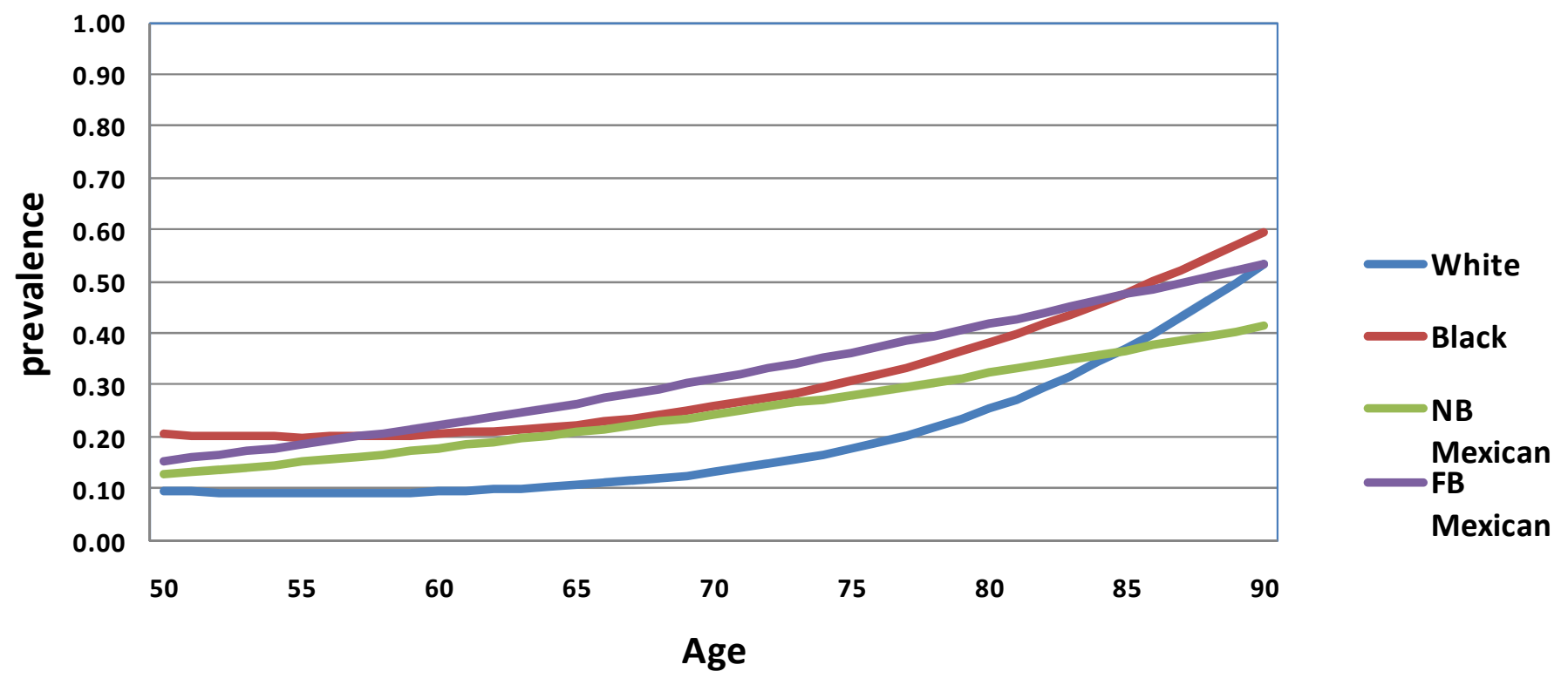
## Disability prevalence for U.S. males by race/ethnicity



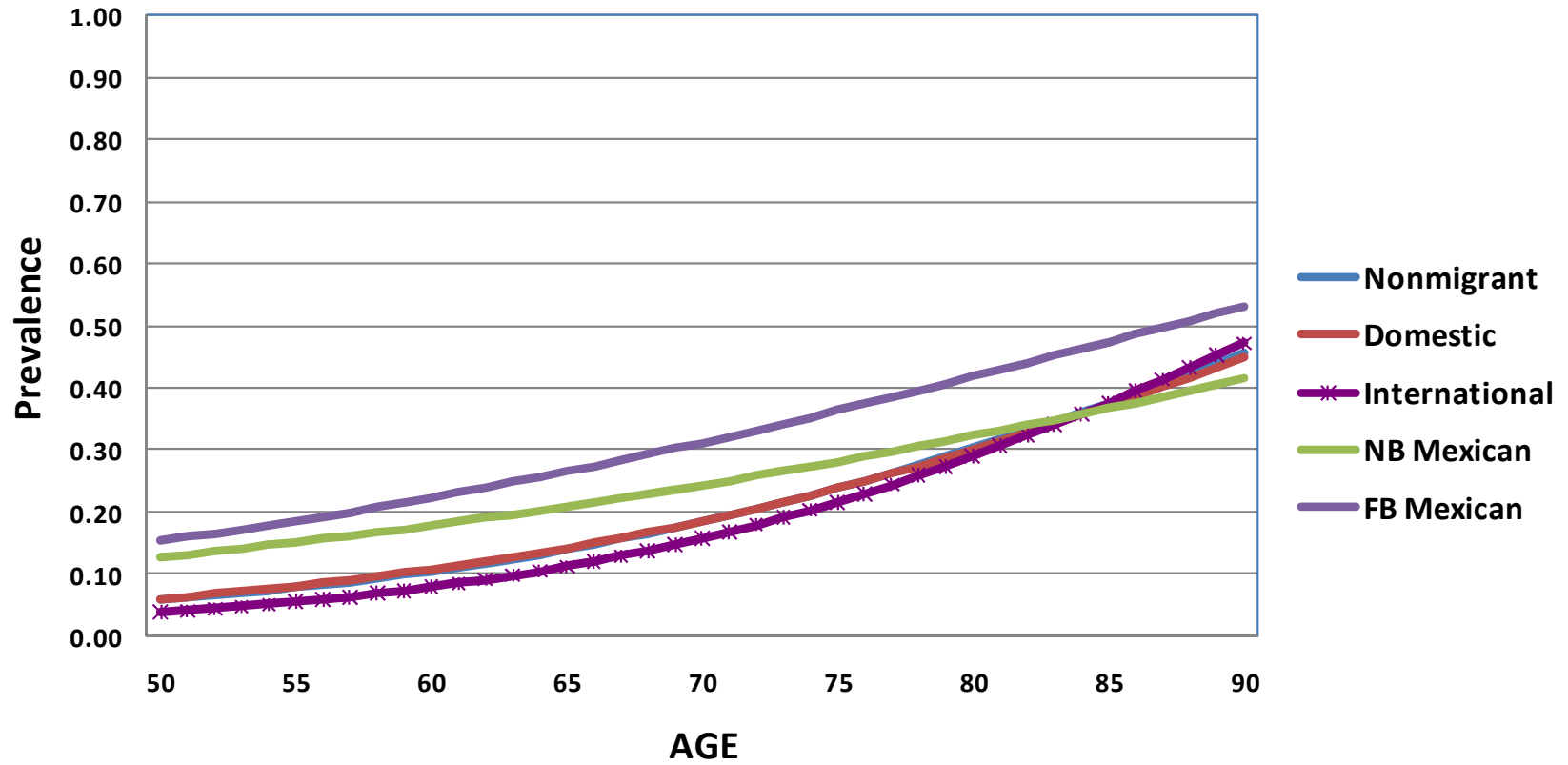
### Disability prevalence for Mexican males by migration status



### Disability prevalence for U.S. females by race/ethnicity



Disability prevalence for Mexican females by migration status



**Table 2. Healthy Life Expectancies at Age 50 Comparing U.S. Race/Ethnic Groups with Mexican Migrant Groups by Sex**

	Male				Female			
	TLE	DFLE	DLE	%dfl/tle	TLE	DFLE	DLE	%dfl/tle
<b>White</b>	29.5	25.7	3.8	87.0	33.8	27.7	6.1	82.1
<b>Black</b>	25.4	20.3	5.1	79.8	29.9	21.5	8.4	72.0
<b>NB MxAm</b>	25.5	20.8	4.7	81.5	32.3	24.5	7.8	75.9
<b>FB MxAm</b>	30.6	23.8	6.8	77.7	34.2	23.8	10.4	69.5
<b>Mex (IM)</b>	27.6	23.8	3.8	86.3	30.3	25.8	4.5	85.2
<b>Mex (NM)</b>	27.6	24.0	3.5	87.2	30.3	25.3	4.9	83.7
<b>Mex (DM)</b>	27.6	24.2	3.4	87.8	30.3	24.9	5.4	82.3

## Conclusions (1)

- ❖ Paradox restricted to mortality
  - ❖ No evidence of health selection for disability
  - ❖ FBs pay a health penalty in terms of disability burden
- ❖ Longer/shorter life accompanied by compressed/lengthy period of disability *except* for FB Mexican Americans
- ❖ Disability for FB Mexican Americans appears to have weaker ties to pathological conditions

## Conclusions (2)

- ✧ What accounts for the low mortality and high disability of FB Mexican Americans?
  - ✧ Combination of migrating *and* staying in the U.S.
  - ✧ Heavy concentration in agricultural and construction jobs for the HRS cohorts
  - ✧ Lifestyle risk factors substantially less prevalent among FB Mexican Americans
- ✧ Will paradox persist in the future?
  - ✧ Changes in the Mexican population are altering the characteristics of immigrants to the U.S.
  - ✧ Health selection processes a moving target