

Immigrant Health

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Outline of Presentation

- Overview of what we know about the health status of immigrants
- Overview of what we know about the health status of the second generation (or U.S born of the same ethnic group)
- Selected questions of interest that are not fully understood and warrant further investigation

Hazard Ratios for Mortality for Immigrants Relative to U.S. Born

	Men	Women
All adults	0.79*	0.86*
25-44 years	0.75*	0.69*
45-64 years	0.63*	0.63*
65-84 years	0.81*	0.91*
85 years or older	0.83*	0.87*

*p<.01

Source: Singh and Siahpush, *Am J Public Health* 2001; 91:392-399.

Prevalence of Chronic Conditions Among Immigrants and U.S. Born

	<u>Age Category</u>			
	21-30	31-40	41-60	61-80
Arthritis				
Immigrants	2.1	2.2	11.4	41.9
U.S. Born	2.7	6.7	18.5	42.0
Diabetes				
Immigrants	0.0	1.3	3.5	10.7
U.S. Born	0.4	1.5	4.1	11.0
Hypertension				
Immigrants	1.4	4.6	12.9	34.7
U.S. Born	3.7	5.9	17.0	36.2
Heart Disease				
Immigrants	0.9	2.9	6.2	20.7
U.S. Born	3.5	5.1	8.7	19.5

Source: Jasso et al., *Immigrant Health: Selectivity and Acculturation*, IFS WP0423, January 2004.

Infant Mortality Among Immigrant and U.S.-Born Women, 2003

Infant Mortality
(per 1,000 Live Births)

Immigrants	5.21
U.S. Born	7.15

Source: *National Vital Statistics Report*, Volume 54, No. 16, May 3, 2006.

Prevalence of Selected Chronic Conditions and Infant Mortality for Immigrants, By Place of Origin

	Hypertension	Arthritis	Diabetes	Infant Mortality
Europe/ Non-Hispanic white	17.4	12.0	3.7	4.36
Africa/ Non-Hispanic black	9.5	2.4	2.4	9.59
Asia	5.5	6.6	1.4	4.45
Mexico	11.0	7.1	4.8	5.03
Central or South America	8.5	4.6	3.0	4.92

Source: Jasso et al, 2004; *National Vital Statistics Report*, 2006.

Summary of What We Know

- By many health indicators, immigrants are in better health than the U.S. born
- In analyses of cross-sectional data, the immigrant health advantage declines with increasing age
- The health status of new immigrants varies by region and country of origin

Hazard Ratios For Mortality For Selected Latin American Immigrants, U.S.-Born Hispanics, and Non-Hispanic Whites

	Immigrants vs. U.S. Born Hispanics	U.S. Born Hispanics vs. Whites
Men		
25-44	1.12	0.59*
45-64	0.46*	0.60*
65 years or older	0.93	0.62*
Women		
25-44	0.55	0.49*
45-64	0.52*	0.65*
65 years or older	0.91	0.59*

*p<.05

Source: Abraido-Lanza et al., *Am J Public Health* 1999; 89:1543-1548.

Infant Mortality for Latin American Immigrants and U.S. Born of Latin American Origin

	Infant Mortality (per 1,000 Births)	
	Immigrants	U.S. Born
Non-Hispanic white	-	5.69
Mexican	5.03	6.20
Puerto Rican	7.94	8.20
Cuban	3.96	5.28
<u>Central/South American</u>	<u>4.92</u>	<u>5.84</u>

Source: *National Vital Statistics Report*, 2006.

Cardiovascular Risk Factors Among Mexican Immigrants and Second Generation Mexican-Americans

	<u>Men</u>		<u>Women</u>	
	Imm.	2nd Gen.	Imm.	2nd Gen.
Hypertension (%)	11.5	20.1*	14.2	17.6
Diabetes (%)	4.3	8.1*	9.0	8.1
HDL Cholesterol (mg/dl)	45.2	43.8	50.7	53.5*
Current Smoker (%)	32.6	17.3*	10.6	10.1
Obesity (%)	18.1	40.2*	33.7	32.6
Abdominal Obesity (%)	21.0	38.1*	55.3	54.4

* p<.05

Source: 1999-2002 NHANES.

Summary of What We Know

- By many health indicators, second generation (or U.S. born) individuals are in worse health than immigrants of the same national-origin group.
- Relationship of second generation's health indicators to those of U.S.-born whites varies across indicators.

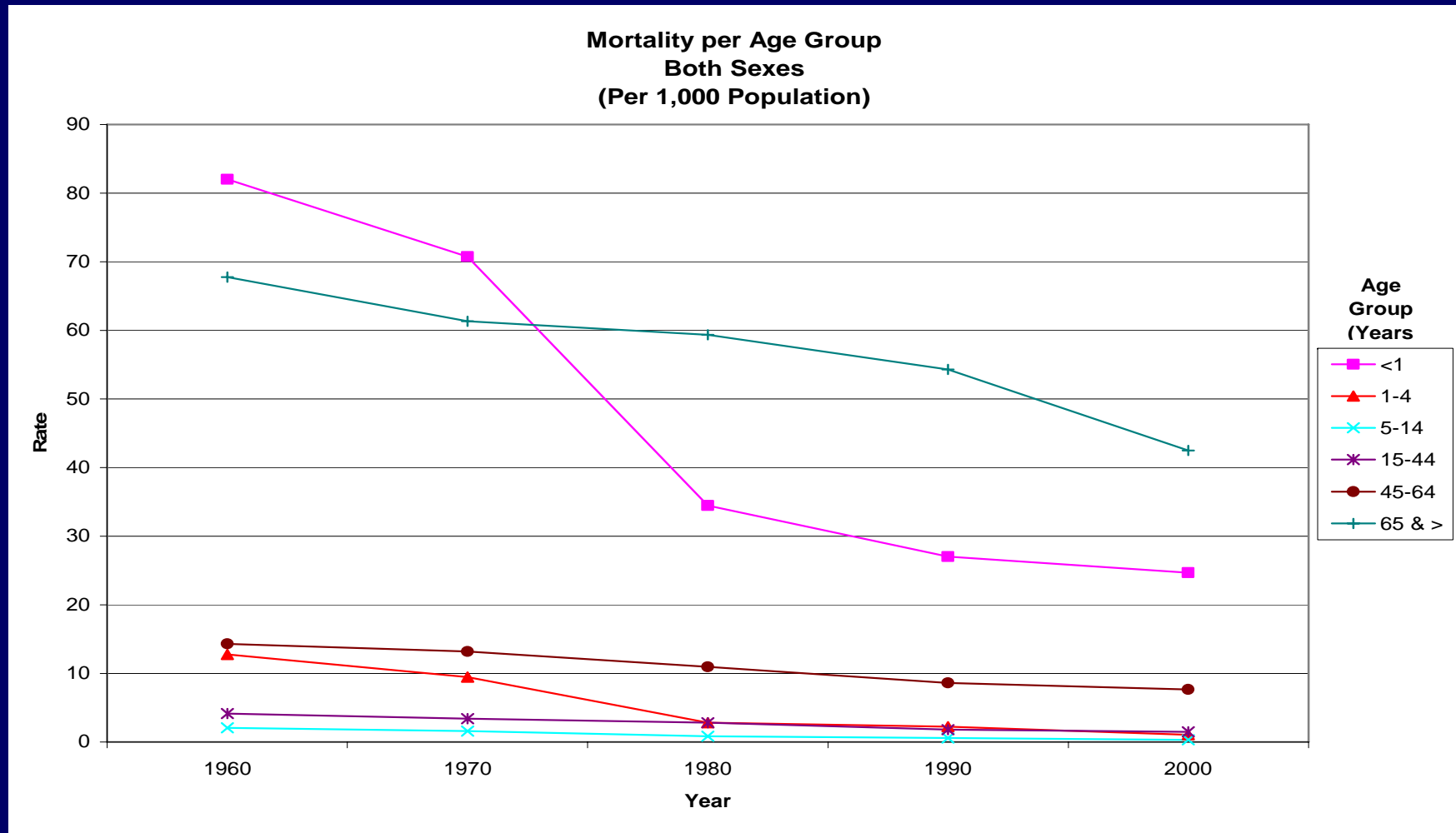
Questions for Research

- Why are immigrants in better health than US. born?
 - health selectivity of migration
 - return migration
 - protective health behaviors and cultural factors
- How does the health selectivity of migration vary by age?
- How does the health selectivity of migration vary across sending countries?
 - health status
 - educational attainment and skills
 - geographic and cultural distance
 - established networks of coethnics
 - immigration policy

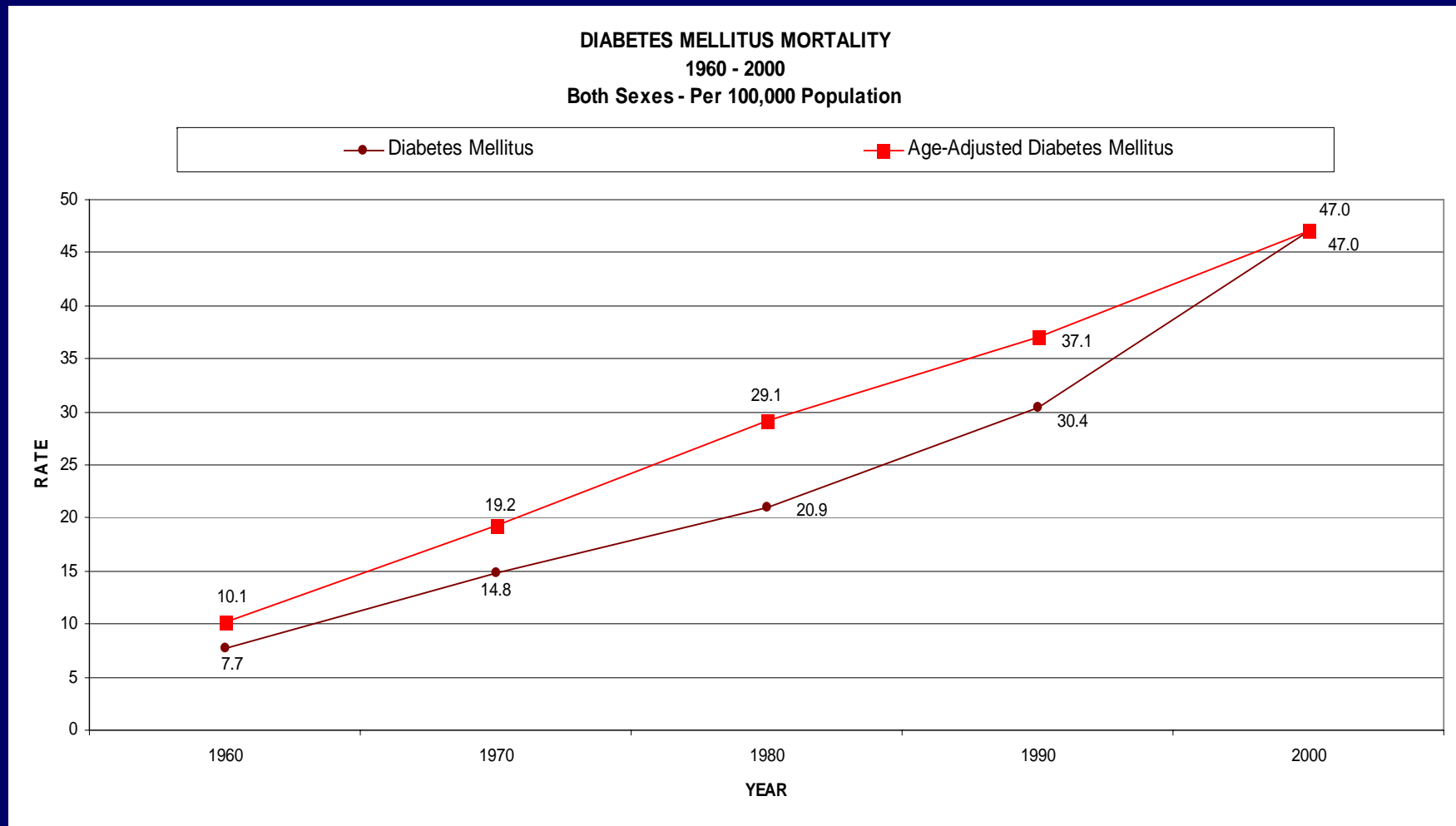
Questions for Research (cont.)

- Do immigrants experience more rapid decline in health over time than the U.S. born?
 - cross-sectional data and cohort effects
 - return migration
- What factors influence the health trajectories of immigrants?
 - regression to mean
 - cultural assimilation (acculturation)

Mortality Rate in Mexico, by Age, 1960-2000



Mortality from Diabetes in Mexico, 1960-2000



Selected Cardiovascular Risk Factors Among Mexican Immigrants in Three National Datasets, 1982-2002

	HHANES	NHANES 3	NHANES 4
Men			
Hypertension (%)	13.9	10.7	11.5
HDL Cholesterol (mg/dl)	47.2	45.4	45.2*
Current Smoker (%)	45.2	31.2	32.6*
Obesity (%)	8.6	15.0	18.1*
Abdominal Obesity (%)	-	16.2	21.0*
Women			
Hypertension (%)	13.8	12.5	14.2
HDL Cholesterol (mg/dl)	50.7	49.4	50.7
Current Smoker (%)	21.5	11.2	10.6*
Obesity (%)	19.8	28.7	33.7*
Abdominal Obesity (%)	-	51.6	55.3

* p<.01

Questions for Research (cont.)

- Do immigrants experience more rapid decline in health over time than the U.S. born?
 - cross-sectional data and cohort effects
 - return migration
- What factors influence the health trajectories of immigrants?
 - regression to mean
 - cultural assimilation (acculturation)

Questions for Research (cont.)

- What factors influence the health status of the second generation?
 - regression to mean
 - cultural assimilation
- Does the effect of assimilation differ depending on the mode of assimilation?
- How does the health of the second generation vary across sending countries?