Examining disparities in Asian health: the National Health Interview Survey Experience

Jacqueline Wilson Lucas, B.A., MPH

Renee Gindi, Ph.D.

Division of Health Interview Statistics

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Objectives

- **Provide basic information about the National Health Interview Survey (NHIS)**

- **Briefly describe the Asian sample in the NHIS**

- **Illustrate use NHIS data to examine disparities in the health of the Asian population**

What is the purpose of the NHIS?

❑ Collect data on the health status of the US population

❑ Address specific issues of current public health concern (e.g., health care disparities), meet priority data needs

❑ Provide estimates for monitoring, tracking health goals (Health U.S., Healthy People)

NHIS structure: Core Modules

Household Core

Demographic information on all household members

Family Core

General health info on all family members

Source of race/ethnicity, gender, health insurance data

Sample Adult Core

Health condition, risk behavior and health behavior data on randomly selected adult

Sample Child Core

Health condition, access, utilization data on randomly selected child

Source of Hep B vaccine data

Oversampling in the NHIS

❑ Method of sampling households at a higher rate based on selected criteria (population density, screening)

❑ Designed to increase reliability of estimates for population groups (e.g. by race, age)

❑ Implemented in **1985** – oversample of **black** households

  ❑ **1995** – oversample of **Hispanic** households

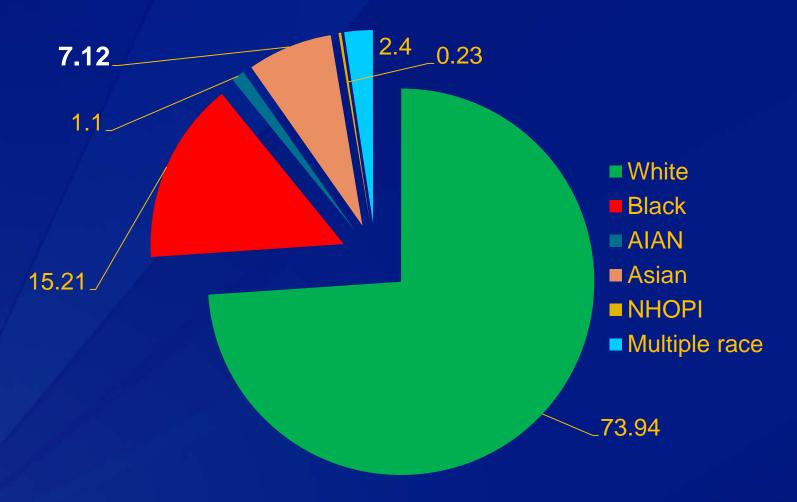 ❑ **2006** – oversample of **Asian** households, households w/minority adults 65+ years of age

Sample sizes for total Asian population groups in the NHIS*

	2005	2006	2007	2008	2009	2010	2011
Asian Indian	704	812	804	946	1063	1202	1297
Chinese	704	982	983	970	1123	1189	1509
Filipino	872	1148	1153	1160	1461	1719	1689
Korean	287	521	401	474	541	657	679
Vietnamese	394	507	475	447	563	557	670
Japanese	261	301	296	341	373	407	453
Other Asian	486	459	554	491	704	806	1098

* Includes adults and children

SOURCE: CDC/NCHS National Health Interview Survey, 2005-2011

Percent distribution of NHIS sample by race: 2011

7.12

2.4

0.23

1.1

15.21

73.94

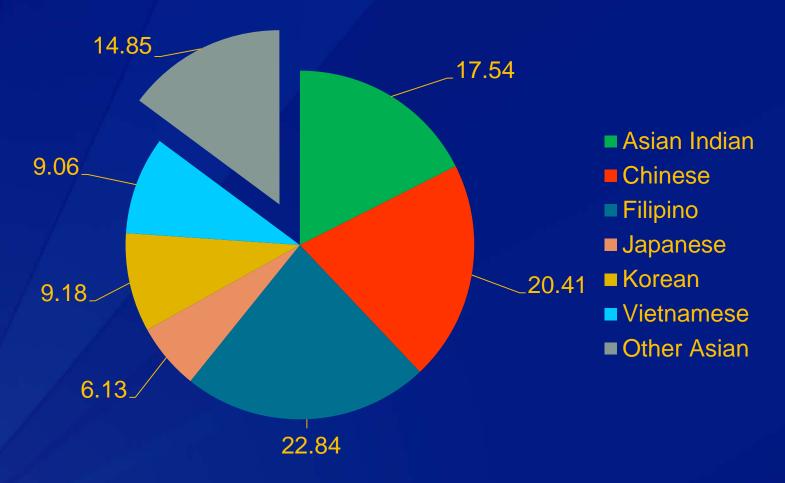- White
- Black
- AIAN
- Asian
- NHOPI
- Multiple race

SOURCE: CDC/NCHS, National Health Interview Survey, 2011

Percent distribution of NHIS Asian sample by population group: 2011

SOURCE: CDC/NCHS, National Health Interview Survey, 2011

Analyses of Asian health data

- **Health Characteristics of the Asian Adult Population: United States 2004-2006**
  - Health access and utilization
  - Conditions (activity limitations), diseases (diabetes, heart disease)
  - Immunizations

- **New reports underway with 2007-2011 data**

- **Hepatitis B vaccinations in Asian adults**

Global prevalence of Hepatitis B
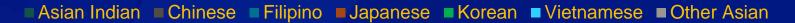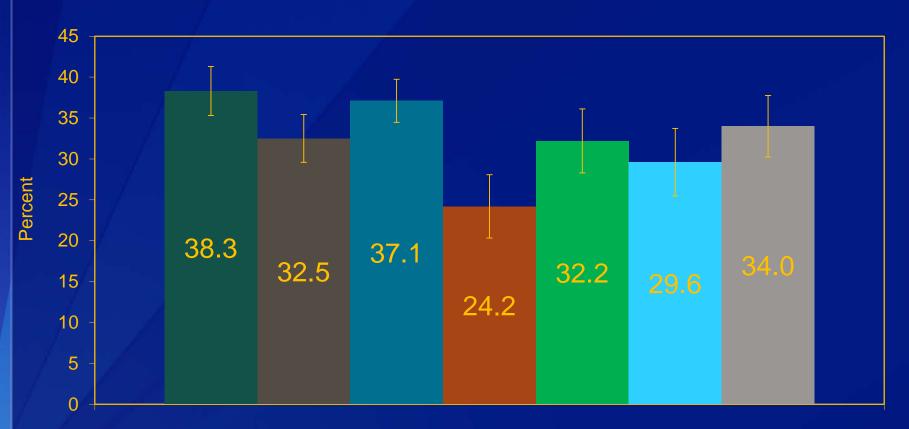

Worldwide Rates of Chronic Hepatitis B

Rates of Chronic Hepatitis B Infection
- High
- Moderate
- Low

Analysis of Hepatitis B vaccination in Asian adults

- ❑ Significant public health issue in this population

- ❑ Combine 2006-2011 NHIS data - ~157,000 adults; 7,395 Asian adults

- ❑ Estimates based on NHIS self-reported data
  - ❑ Ever had vaccine, number of doses (3+, <3)

- ❑ Variables of interest
  - ❑ e.g., age, sex, education, nativity, access to care, health insurance coverage, language of interview, use of interpreter for interview, liver disease, occupation

Percentage of Asian adults who ever had a Hepatitis B vaccine, by population group (unadjusted) : United States, 2006-2011

Percentage of Asian adults who ever had a Hepatitis B vaccine, by population group and nativity status (unadjusted): United States, 2006-2011
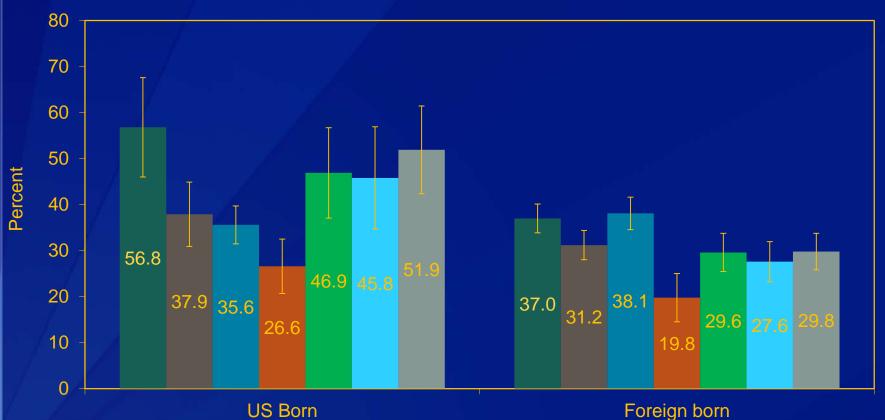
NOTES: Estimates are based on household interviews of a sample of the civilian noninstitutionalized population.
SOURCE: CDC/NCHS: National Health Interview Survey, 2006-2011.

Next steps

- ❑ Compute age-adjusted estimates for demographic and health characteristics

- ❑ Determine covariates to select for modeling to test:
  - ❑ Are Asian groups significantly different from one another in the likelihood of having received a Hep B vaccine?
  - ❑ What factors are associated with receiving a Hep B vaccine?
  - ❑ Do those factors differ for Asian groups?

- ❑ Write up descriptive and multivariate results for publication
  - ❑ NCHS report
  - ❑ Journal article

For more information:

Jacqueline Wilson Lucas

jbw4@cdc.gov

NHIS Website:

http://www.cdc.gov/nchs/nhis.htm

THANK YOU!!

CDC