

# **Assessing the Health Status of Multiracial Persons: Data from the National Health Interview Survey**

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**National Center for Health Statistics**

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# Overview of the National Health Interview Survey (NHIS)

- Annual survey conducted by the Census Bureau for the National Center for Health Statistics (NCHS)
- Nationally representative sample of the non-institutionalized civilian population
- Complex sample design
- Approximately 40,000 households with 100,000 persons each year

# NHIS race and ethnicity questions

- NHIS allowed respondents to report more than one race beginning in 1976 for adults; since 1982 for all household members
- NHIS has asked 2-part race question consistently since 1982
- Hispanic origin has preceded race since 1992
- New OMB standards fully implemented in the 1999 NHIS

# Race questions in the NHIS

## 1982-1996 NHIS

- What is the number of the group or groups that best represents \_\_\_\_\_'s race?

*(if more than one given):*

- Which of those groups, that is (entries above) BEST represents \_\_\_\_\_'s race?

## 1998-Present

- What race or races {do/does} {you/name} consider {yourself/himself/herself} to be? Please select 1 or more of these categories.

*(if more than one given):*

- Which one of these groups, that is (READ GROUPS) would you say BEST represents {your/name's} race?

# Primary race selection in NHIS

- Second race question asks multiple race respondents to indicate the race that best describes them (REF, DK allowed)
- Used to bridge back to old OMB standards to maintain trends in data
- Provides substantive information about identity of multiple race survey respondents

# How data will be tabulated in DHIS reports

**White only**

**Black or African American only**

**American Indian and Alaska Native only\***

**Asian only\***

**Native Hawaiian and Other Pacific Islander only\***

***2 or more races***

**Black or African American; White\***

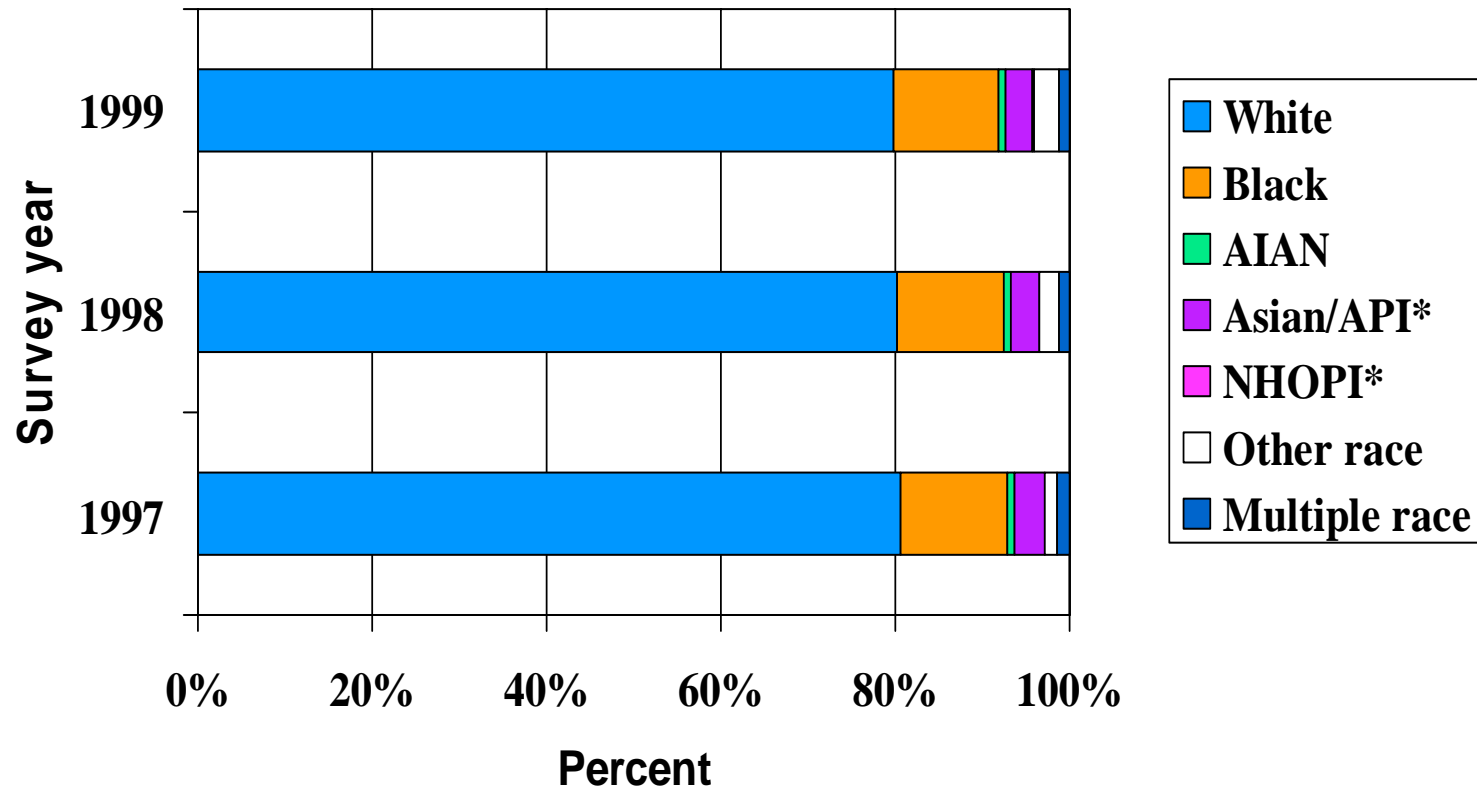
**American Indian and Alaska Native; White\***

\* If data confidentiality and reliability permit

# Data sources and methods

- 1997, 1998 and 1999 NHIS data
- Weighted estimates (SAS, SUDAAN)
- Bivariate analyses:
  - Health variables examined: private health insurance coverage, respondent-assessed health status
  - Sociodemographic characteristics examined: age, region of residence

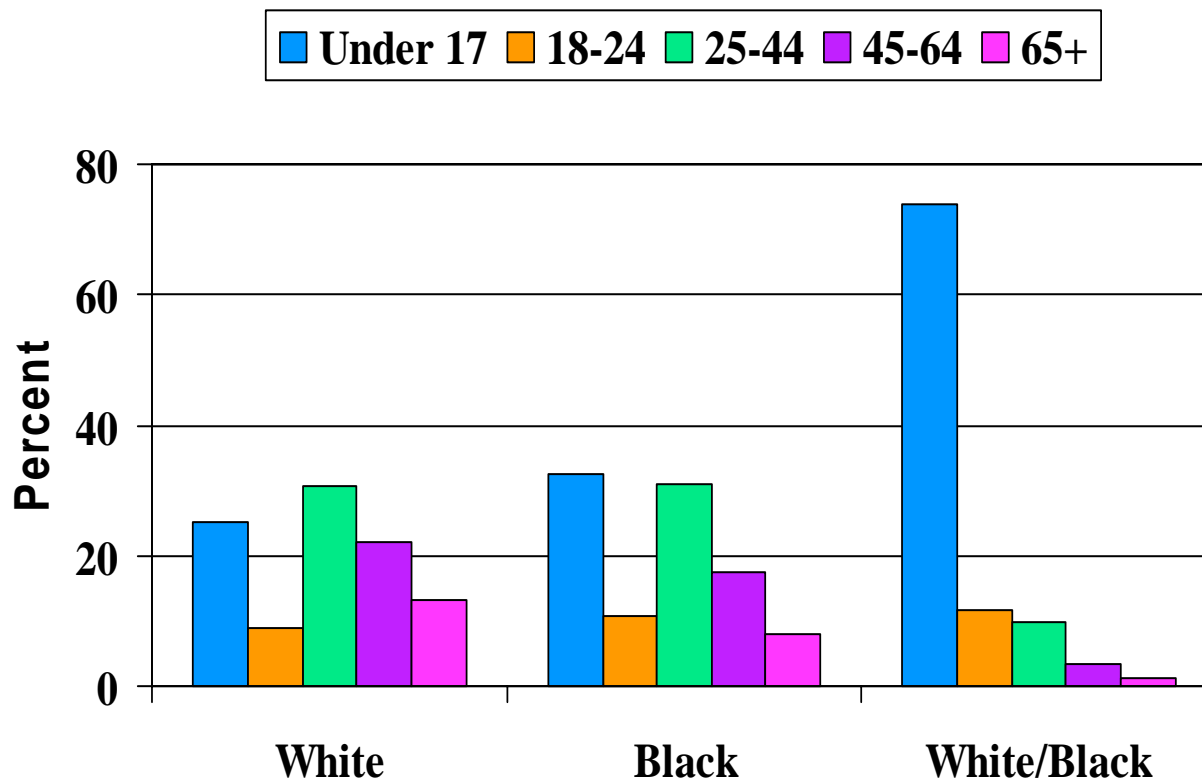
# Distribution of racial groups in the NHIS, 1997-1999



SOURCE: CDC/NCHS: National Health Interview Survey; weighted estimates.

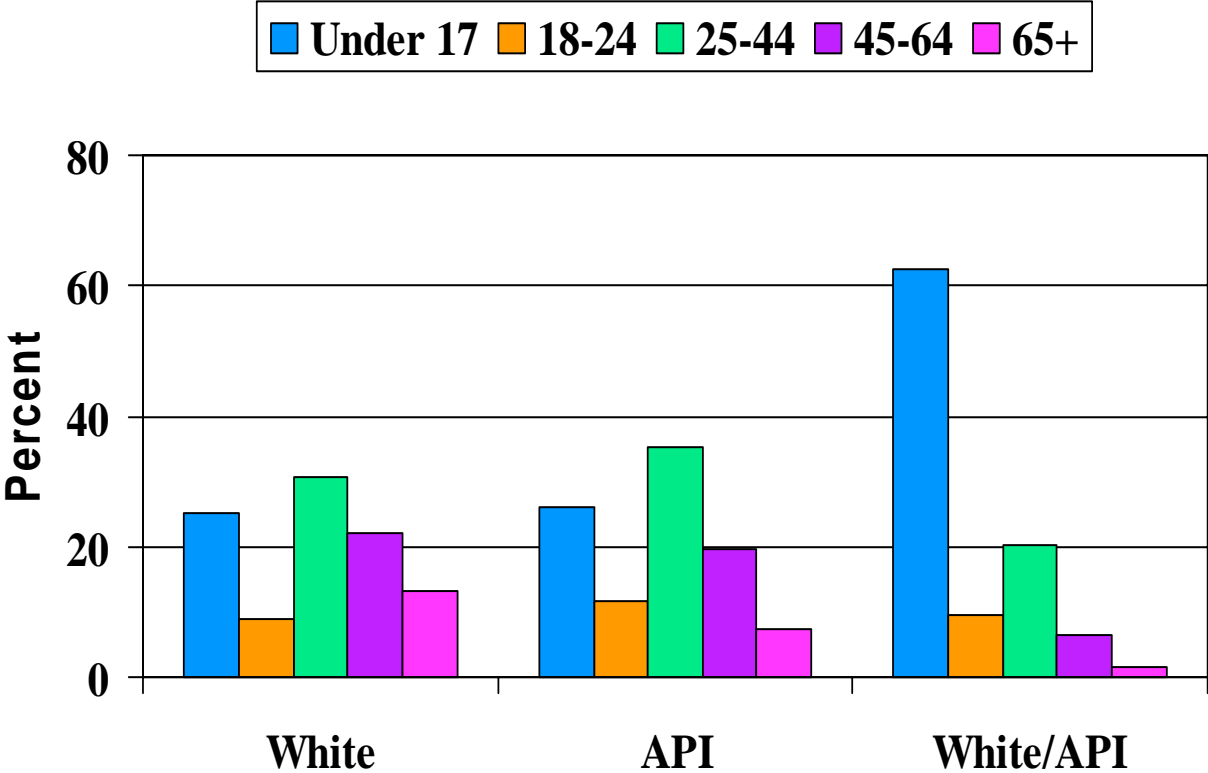


# Comparison of age distributions for single and multiple race groups



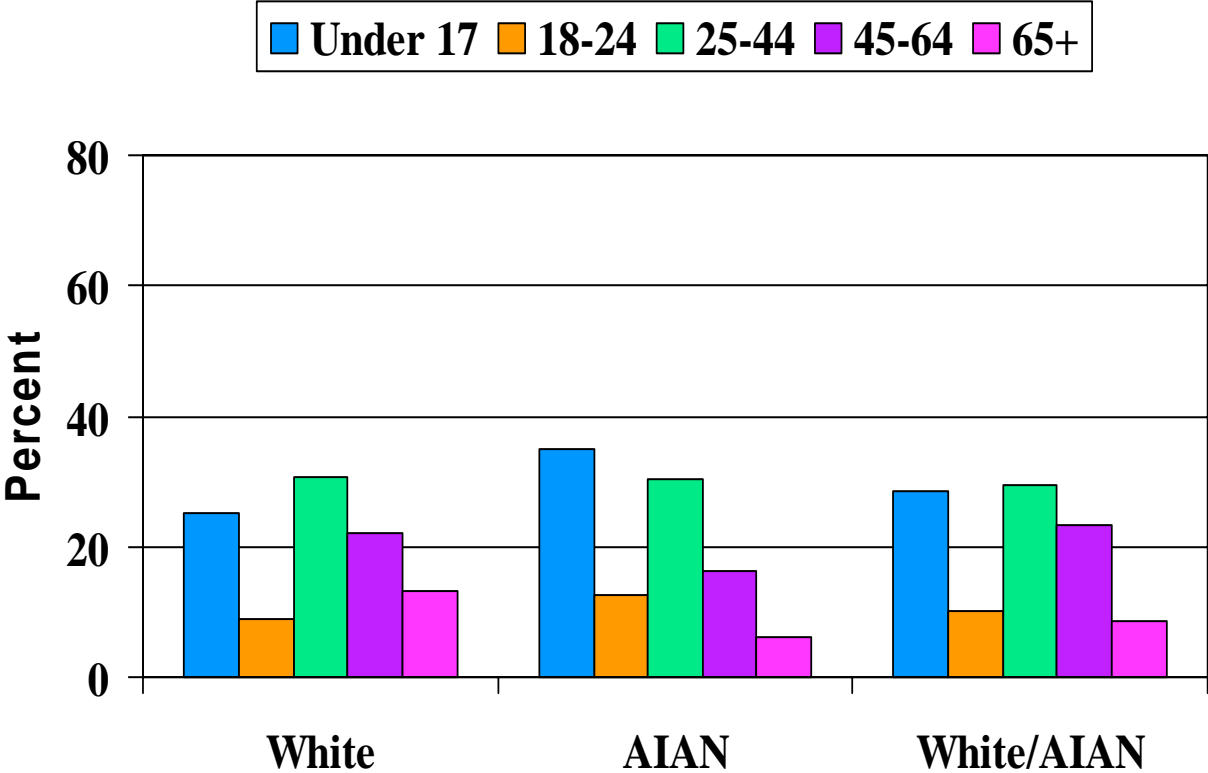
SOURCE: CDC/NCHS, 1997-1999 NHIS (weighted data)

# Comparison of age distributions for single and multiple race groups



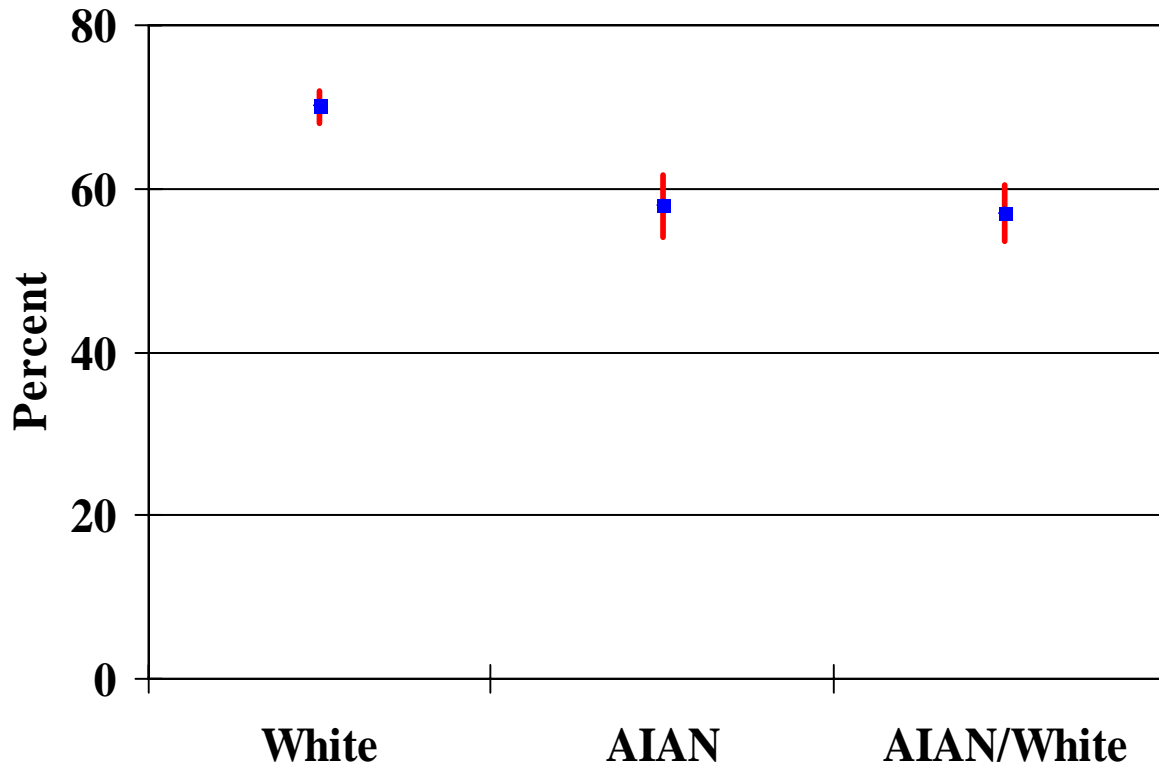
SOURCE: CDC/NCHS, 1997-1999 NHIS (weighted data)

# Comparison of age distributions for single and multiple race groups



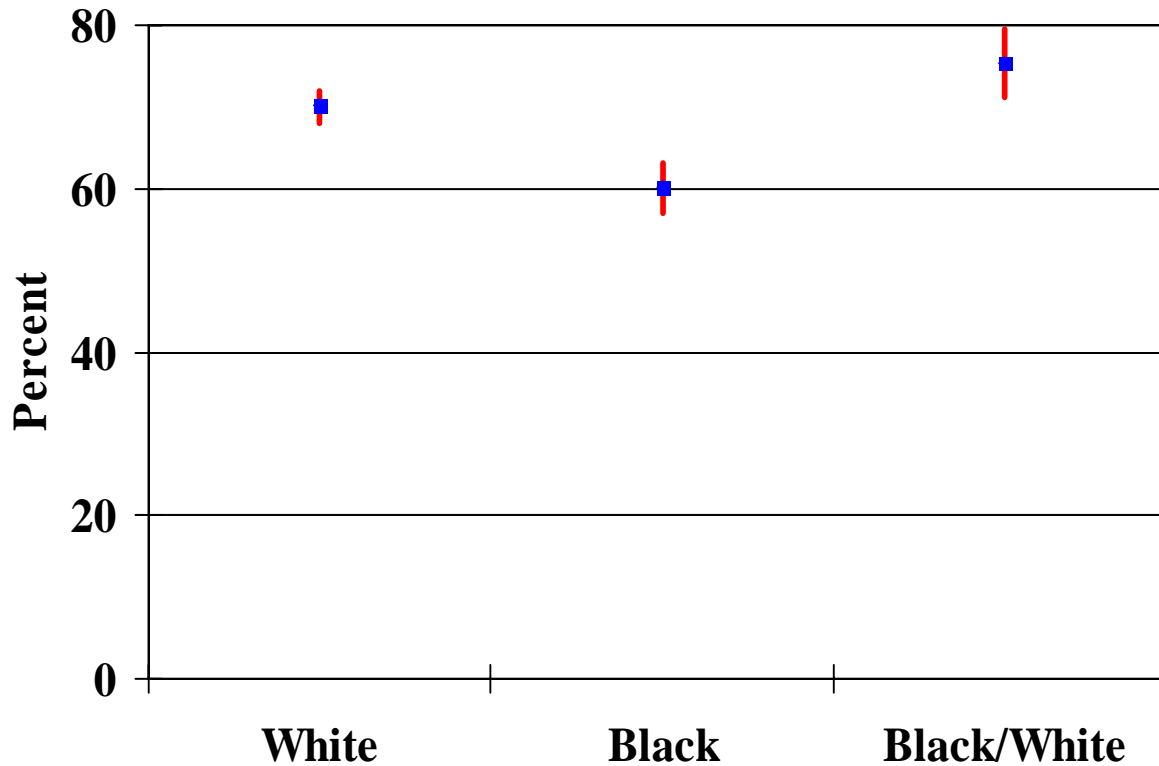
SOURCE: CDC/NCHS, 1997-1999 NHIS (weighted data)

# 95% confidence intervals for respondent-assessed health status rated as excellent/very good



SOURCE: CDC/NCHS, 1997-1999 NHIS (weighted data)

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# Summary of findings

- Single and multiple race groups differ significantly from one another on both demographic and health measures:
  - *multiple race groups are different from one another and from their single race counterparts*
- Patterns of association among single and multiple race groups are not necessarily intuitively obvious
- Further analysis needed to better understand relationships between multiple race and health outcomes.

# Issues related to analyzing data on multiracial populations

- Samples sizes for multiple race groups are small; at least 3 years of data must be combined to do major analyses
- Proxy reporting of race information, such as parents reporting race for their children, should be kept in mind when interpreting data on multiracial populations
- Racial identity is fluid, and may change over time – will complicate the ability to understand relationships between race and health

# Availability of multiple race data for analysis

- NHIS Public Use Files (on CD-ROM, data tape, web) **do not** contain detailed information on multiple race groups
  - *confidentiality and data reliability issues*
  - *patterns in the data that might pose confidentiality risks*
- Accessing non-public use data
  - *in-house data files containing suppressed information are available through **Research Data Center***
  - *a proposal outlining the use of the data in analysis should be submitted*



# Published articles on multiple race issues from the NHIS

- Parker JD, Lucas JB. Multiple Race Reporting for Children in a National Health Survey. *Ethnicity and Disease* 2000; 10:262-274.
- Sondik EJ, Lucas JB, Madans JH, Smith SS. Race/Ethnicity and the 2000 Census: Implications for Public Health. *American Journal of Public Health* 2000; 90:1709-1713.
- Parker JD, Makuc D. Methodologic Implications of Allocating Multiple Race Data to Single Race Categories. *Health Services Research*, 2002 Feb:

# Ongoing research on single/multiple race groups using NHIS data

- Consistency of race and ethnicity reporting in the linked NHIS-NSFG (Lucas, Madans)
- Predictors of health status in single and multiple race populations (Lucas, Parker, Arias)
- Demographic and contextual determinants of primary race selection (Arias, Lucas)
- Use of imputation methods bridge the transition from single race to multiple race reporting (Schenker, Parker)

# **Web site information**

**National Health Interview Survey information:**

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

**(Special section on race and ethnicity data in the survey)**

**Office of Management and Budget Guidelines for  
the Collection of Data on Race and Ethnicity:**

<http://www.whitehouse.gov/OMB/inforeg>

**(Statistical Policy Section, Data on Race and Ethnicity)**