Impact of Revised OMB Standards for the Classification of Race and Ethnicity in the National Immunization Survey

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Data on Race and Ethnicity

>One of the most commonly used demographic variables in analysis of health and epidemiological data

Disparities by race in many health outcomes of interest – e.g., hypertension, diabetes, cancer morbidity, immunization and mortality

➤ DHHS Disparities Initiatives - Longevity and Healthy People 2010 objectives

Important to know whether changes in health outcomes by race over time are due to changes in behavior or changes in the way we collect information on race/ethnicity

New OMB Standards for Race and Ethnicity Data Collection

- > Revised Race Categories
 - ➤ White, Black/African American, Asian, American Indian or Alaska Native (AIAN), and Native Hawaiian or Other Pacific Islander (NHOPI)
 - >Other race
- ➤ Hispanic origin (Hispanic/Latino)
 - Ask prior to and separately from race

Revised Guidelines

- > Data collection and tabulation
 - ➤ Interviewing systems (e.g., CAPI, CATI, or PAPI) must allow respondents to select more than one race
 - Data systems must tabulate and report information on multiple race persons, provided data meet agency's standards

How Do the New OMB Standards Affect Population-Based Surveys?

- > Allow respondents to select more than one race
- > Single and "multiple race" groups must be tabulated, reported as a minimum (and detailed groups should be shown) where data standards are met
- During the transitional period (through 2003), a "Bridge" to the old categories of collecting and tabulating data by single race is permitted
- > Generally, official tabulations are based on single race question

National Immunization Survey (NIS)

- > List-Assisted Random-Digit-Dialing Telephone Survey
- ➤ Eligible Households Contain Children Aged 19-35 Months
- > 34,000 Telephone Interviews Per Year Based on Quarterly RDD Samples
 - > Collects Socio-Demographic Information, Vaccination History, and a Consent to contact the Child's Provider
- ➤ Mail Survey to Collect Vaccination Histories from the Child's Health Providers
- > Monitor Vaccination Coverage Levels in the U.S.
- > 50 States and 28 Urban Areas (78 IAP area)
- > New OMB Standards Implemented in Q3/1999
- > Results for 2000-2001 NIS

Current Hispanic Origin Question used in the NIS (Q3 1999+)

C2. Is [FILL VAR: NAME OF CHILD] of Spanish, Hispanic, or Latino origin, that is Mexican, Mexican-American, Central American, South American, Chicano, or Puerto Rican, Cuban, or other Spanish-Caribbean? [CHECK ALL THAT APPLY]

NO, NOT SPANISH/HISPANIC	1	
YES, MEXICAN/MEXICANO	2	
YES, MEXICAN-AMERICAN	3	
YES, CENTRAL AMERICAN	4	
YES, SOUTH AMERICAN	5	
YES, CHICANO	6	
YES, PUERTO RICAN	7	
YES, CUBAN/CUBAN AMERICAN	8	
YES, SPANISH-CARIBBEAN	9	
YES, OTHER SPANISH/HISPANIC (SPECIFY)	10	
DON'T KNOW	96	
REFUSED	97	

Current Race Question used in the NIS (Q3 1999+)

C3. Please choose one or more of the following categories to describe [FILL VAR: NAME OF CHILD]'s race. Is [FILL VAR: NAME OF CHILD] White, Black or African American, American Indian, Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander? [CHECK ALL THAT APPLY]

WHITE	1
BLACK/AFRICAN AMERICAN2	
AMERICAN INDIAN	3
ALASKA NATIVE	4
ASIAN	5
NATIVE HAWAIIN	6
PACIFIC ISLANDER	7
OTHER (SPECIFY)	8
DON'T KNOW	96
REFUSED	97

Current Primary Race Question, NIS (Q3 1999+)

C4. Which do you feel best describes [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s race?

WHILE	I
BLACK/AFRICAN AMERICAN2	
AMERICAN INDIAN	3
ALASKA NATIVE	4
ASIAN	5
NATIVE HAWAIIN	6
PACIFIC ISLANDER	7
OTHER (SPECIFY)	8
DON'T KNOW	96
REFUSED	97

Categories for Reporting Race in the NIS

1994-1999 Categories

- White
- Black
- American Indian
- Asian
- Other race Specify

2000+ Categories

- White
- Black/African American
- AIAN
 - American Indian
 - Alaska Native
- Asian
- NHOPI
 - Native Hawaiian
 - Other Pacific Islander
- •Other race Specify

Procedure to Recode Single and Multiple Race Groups, 2000-2001 NIS

- > Up to 5 races retained for a multiple race respondent (child or mother)
- > Composite race categories were created by combining six single race categories
- > Single and multiple race groups were created following an algorithm developed at the NCHS
- For weighting and tabulation, multiple race groups were recoded to a single race group using the child's primary race or mother's race

Item Nonresponse for Current Hispanic Origin and Race Questions, 2000-2001 NIS

	2000 (n = 34,087)	2001 (n = 33,437)	2000-2001 (n = 67,524)
Hispanic Origin	0.75%	0.83%	0.79%
Race	9.15%	7.99%	8.57%
Race/Ethnicity	1.58%	1.32%	1.45%

Distribution of Race/Ethnicity of Child Using Old and New OMB Race Categories, 2000-2001 NIS

Old Race	Percent in	New Race	Percent in
Category	Population	Category	Population
Non-		Non-	
Hispanic		Hispanic	
White	55.54	White	54.51
Black	14.75	Black	13.98
American	0.88	AIAN	0.80
Indian		Asian	3.20
Asian	3.75	NHOPI	0.28
Other	0.02	Other	0.01
Unknown	2.61	Multiple	3.23
Note: 22.45% Hi	spanics	Race	
3		Unknown	1.54

Distribution of Children with Multiple Race Groups, 2000-2001 NIS

New Race Category: Non- Hispanic	Percent (n=66,908)	Multiple Race Category: Non-Hispanic	Percent (n=2,238)
Single	72.78		
Race		White/Black	43.93
Two Races	3.04	White/ AIAN	16.85
Three or	0.19	White/Asian	18.74
More Races		Other Combination	20.49

Distribution of Mother's Race for Children with Single Race, 2000-2001 NIS

Child's Race,	Mother's Race, Non-Hispanic (%)				
Non- Hispanic	White	Black	AIAN	Asian	NHOPI
White	97.5				
Black	3.6	93.2			
AIAN	22.8		69.9		
Asian	6.9			90.3	
NHOPI	10.0			7.8	70.0

Note: smaller percentages are not shown

Distribution of Mother's Race for Children with Multiple Race, 2000-2001 NIS

Child's Race: Mother's Race: Non-Hispanic (%)

White and	White	Black	AIAN	Asian	NHOPI	Multiple Race
Black	75.6	13.3				9.0
AIAN	58.8		13.3			27.5
Asian	37.4			49.4		11.4
Other Combinations	22.5	10.7	3.4	15.5	12.0	34.0

Note: smaller percentages are not shown

Distribution of Primary Race for Children with Multiple Race, 2000-2001 NIS

Child's Race: Primary Race: Non-Hispanic (%)

White and	White	Black	American Indian	Asian	Not Given
Black	16.8	42.9			40.4
AIAN	76.8		11.4		11.8
Asian	45.8			25.7	28.4
Other Combination	23.4	26.0	3.3	20.7	26.8

Note: smaller percentages are not shown

Comparison of Vaccination Coverage Rates by New and Old Classification of Race/Ethnicity, 2000-2001 NIS

New Classification	4:3:1:3 UTD	Old Classification	4:3:1:3 UTD
Hispanic	74.97 (0.73)	Hispanic	74.97 (0.73)
Non-Hispanic White	79.23 (0.39)	Non-Hispanic White	79.19 (0.38)
Non-Hispanic Black	70.69 (0.96)	Non-Hispanic Black	70.76 (0.93)
Non-Hispanic American Indian or Alaska Native	73.62 (3.01)	Non-Hispanic American Indian	72.50 (2.93)
Non-Hispanic Asian	75.16 (2.06)	Non-Hispanic Asian	75.60 (1.83)
Non-Hispanic Native Hawaiian or Other Pacific Islander	70.44 (5.36)		
Non-Hispanic Multiple Race	75.32 (1.72)		

Summary

- **►** Multiple Race
- **➤** Mother's Race of children with Multiple Race
 - > White/Black: mostly White
 - > White/Asian: Asian followed by White
- > Primary Race of children with Multiple Race
 - ➤ White/Black: more likely to be Black
 - > White/Asian: more likely to be White
 - > Item nonresponse on primary race question highest for children who are White/Black
- ➤ Most weighting control totals still use single-race categories

Summary

- > Need single-race categories to monitor trends over time
- > Methods
 - > Impute single-race categories for children with multiple races
 - > Use primary race
 - > Use mother's race
- **▶ 4:3:1:3 Vaccination Coverage Rates**
 - No significant differences were observed in the coverage rates between old and new race/ethnic groups
 - ➤ With new race/ethnic classification vaccination rates are available for additional groups NHOPI and children with multiple race