

Health Characteristics of the American Indian and Alaska Native Adult Population: United States, 1999–2003

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Abstract

Objective—This report compares national estimates for selected health status indicators, health behaviors, health care utilization, and health conditions of American Indians and Alaska Natives (AIAN) with those of white, black, and Asian non-AIAN adults 18 years of age and over.

Methods—The estimates in this report were derived from the Family Core and the Sample Adult Core components of the 1999–2003 National Health Interview Surveys, conducted by the National Center for Health Statistics. Estimates were generated and compared using the SUDAAN statistical package to account for the complex sample design.

Results—AIAN adults were more likely to be current smokers than other adults. They were as likely as white adults to be moderate or heavier drinkers and as likely as black adults to be obese or never engage in leisure-time physical activity. They were at least twice as likely to have unmet medical needs due to cost and were much less likely to have seen a dentist within the last 5 years compared with white or Asian adults. Compared with other adults, AIAN adults had higher rates of diabetes and of hearing difficulty. Forty-one percent of AIAN adults had an activity limitation. In addition, AIAN adults were at least twice as likely as other adults to have experienced serious psychological distress in the past 30 days.

Conclusion—The AIAN community faces many health challenges as reflected in their higher rates of risky health behaviors, poor health status and health conditions, and lower utilization of health services.

Keywords: American Indian • Alaska Native • National Health Interview Survey • health behaviors • health care utilization • conditions • mental health status • health status

Introduction

According to the 2000 U.S. census, 2.7 million (1.3%) adults in the United States are American Indian or Alaska Native (AIANs) or AIAN in combination with one or more other races (1,2). Approximately 60% (1.7 million) American Indian and Alaska

Native adults report one race/ethnicity and the remaining 40% indicate they are AIAN in combination with one or more other races. American Indians and Alaska Natives are a heterogeneous population living throughout the United States, but more concentrated in some areas of the country than others.

According to the 2000 census, 43% of

AIANs lived in the West, 31% lived in the South, 17% lived in the Midwest, and 9% lived in the Northeast.

American Indian and Alaska Native communities face many health challenges including higher mortality rates from tuberculosis, chronic liver disease and cirrhosis, accidents, diabetes, pneumonia, suicide, and homicide compared with other race and ethnic groups (3). The relative impact of these causes of death can be seen in the rank of selected causes in the different major race and ethnic groups. For example, in the American Indian population, chronic liver disease and cirrhosis ranked sixth, but was not ranked in the top 10 for the white, black, or Asian or Pacific Islander populations in 2001 (3). During that same year, accidents accounted for almost twice the proportion of deaths (11.4%) of all American Indians compared with other population groups (3). The mortality differentials noted are conservative estimates because studies have shown underreporting on death certificates of American Indians and undercounts of these groups in the census (4–6).

In addition to disparities in cause of death, substantial health disparities exist for many conditions including heart disease, tuberculosis, sexually transmitted diseases, and injuries (7). The prevalence of diabetes is higher



among AIANs than any other major race or ethnic group in the United States and has been increasing during the past 16 years (8,9). The health disparities may be related to cultural, genetic, socioeconomic, and behavioral factors (10). In this report, national estimates for selected health status indicators, health behaviors, health care utilization, and health conditions are examined using the 1999–2003 National Health Interview Survey data (11–15).

Methods

Data source

The statistics shown in this report are based on data from the Family Core component and the Sample Adult Core component of the 1999–2003 National Health Interview Surveys (11–15). The NHIS, one of the major data collection systems of the Centers for Disease Control and Prevention's National Center for Health Statistics, is a survey of a nationally representative sample of the civilian noninstitutionalized household population of the United States. Basic health and demographic information are collected annually on all household members. Adults present at the time of the interview are asked to respond for themselves. Proxy responses are accepted for adults not present at the time of the interview and for children. Additional information is collected on one randomly selected adult age 18 years or over (the "sample adult") and one randomly selected child age 0–17 years (the "sample child") per family. Information on the sample adult is self-reported except in rare cases when the sample adult is physically or mentally incapable of responding, and information on the sample child is collected from an adult who is knowledgeable about the child's health.

Statistical analysis

Five years of data were combined to increase reliability of estimates for some of the smaller population subgroups. Even with 5 years of data, the standard errors for some subgroups are quite large. In tables shown in this report, estimates with a relative standard

error of more than 30% but less than 50% are identified with an asterisk. Estimates with a relative standard error greater than or equal to 50% have been suppressed and are indicated with a double asterisk (**). Readers should exercise caution when interpreting these statistics.

This report is based on data from 158,397 completed interviews with sample adults aged 18 years and over, representing an overall sample adult response rate of 72.8%. The household response rate was 88.8%. Procedures used in calculating response rates for combined NHIS data years are described in detail in "Appendix I" of the Survey Description of the NHIS data files (11–15).

All estimates and associated standard errors shown in this report were generated using SUDAAN, a software package that is designed to account for a complex sample design such as that used by the NHIS (16). All estimates were weighted, using the sample adult record weight, to reflect the U.S. civilian noninstitutionalized population aged 18 years and over.

Most estimates presented in this report were age adjusted to the year 2000 U.S. standard population aged 18 years and over (17,18). The SUDAAN procedure PROC DESCRIPT was used to produce age-adjusted percentages and their standard errors. Age adjustment was used to allow comparison of various sociodemographic subgroups that have different age structures. The estimates found in this report were age adjusted using the age groups 18–24 years, 25–44 years, 45–64 years, and 65 years and over.

Age-adjusted estimates were compared using two-tailed statistical tests at the 0.05 level. No adjustments were made for multiple comparisons. Terms such as "greater than" and "less than" indicate a statistically significant difference. Terms such as "similar" or "no difference" indicate that the statistics being compared were not significantly different. Lack of comment regarding the difference between any two statistics does not mean that the difference was tested and found to be not significant.

Most statistics presented in this report can be replicated using NHIS public-use data files and accompanying documentation available for downloading from the NCHS Web site at <http://www.cdc.gov/nchs/nhis.htm>. Variables for metropolitan statistical areas (MSA) and urban or rural residence are not included in the public-use data files to protect respondent confidentiality. Therefore, corresponding estimates cannot be replicated. Many of the references cited in this report are also available via the NCHS Web site at <http://www.cdc.gov/nchs>.

Results

In the following section, brief, bulleted summaries of the estimates shown in tables 1–6 and figures 1–5 are presented.

Demographic characteristics (table 1)

- Single-race American Indian or Alaska Native persons make up 0.6% of the U.S. adult population (figure 1).
- A smaller percentage of the American Indian or Alaska Native adult population (8.5%) and the Asian adult population (9.6%) compared with the black adult population (11.6%) and the white adult population (17.5%) consists of persons 65 years and over.
- American Indian or Alaska Native adults (32.5%) were more likely than black adults (25.2%) and more than twice as likely as white adults (15.8%) and Asian adults (13.9%) to have less than a high school diploma.
- About 1 in 11 American Indian or Alaska Native adults (9.3%) had a bachelor's degree or higher compared with 1 in 7 black adults (14.4%), 1 in 4 white adults (24.7%), and 1 in 2 Asian adults (45.1%).
- About 1 in 4 American Indian or Alaska Native adults (23.8%) were poor compared with 1 in 5 black adults (20.9%), 1 in 8 Asian adults (12.7%), and 1 in 11 white adults (9.0%).
- American Indian or Alaska Native adults (15.6%) were as likely as black

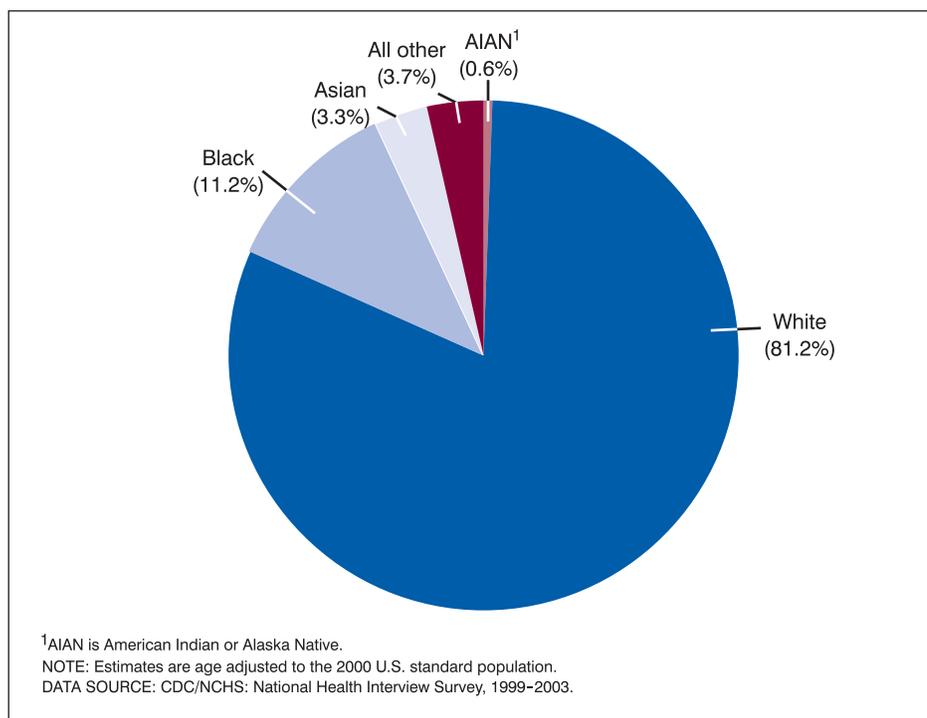


Figure 1. Percent distribution of adults 18 years of age and over, by race: United States, 1999–2003

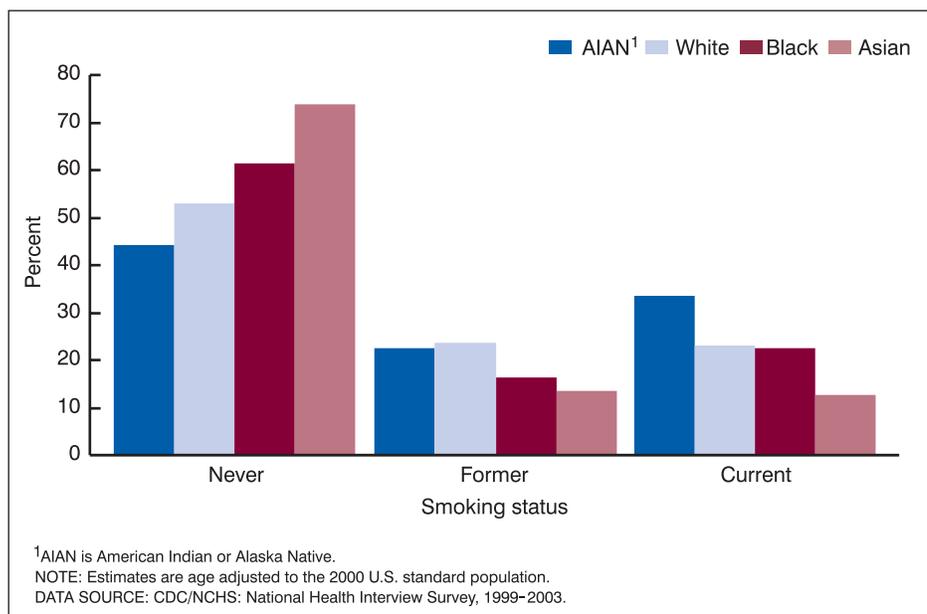


Figure 2. Percent distribution of cigarette smoking status for adults 18 years of age and over, by race: United States, 1999–2003

adults (16.5%) and more likely than white adults (9.7%) or Asian adults (4.7%) to be divorced or separated.

- American Indian or Alaska Native adults (49.7%) were more likely than black adults (38.5%) and less likely than white adults (60.8%) or Asian adults (64.9%) to be married.

- Among adults under age 65 years, American Indian or Alaska Native adults (32.6%) were about twice as likely as black adults (17.0%) and nearly five times as likely as Asian adults (6.9%) and white adults (7.2%) to have public health insurance coverage.

- Among adults under age 65 years, American Indian or Alaska Native adults (18.5%) were more likely than white adults (16.5%), as likely as Asian adults (18.8%), and less likely than black adults (22.1%) to be uninsured.
- American Indian or Alaska Native adults were more likely than adults in any of the other race groups studied to live in a rural area.
- Fewer than 1 in 10 American Indian or Alaska Native adults live in areas that were not covered by the Indian Health Service Administration.

Health behaviors (table 2)

- American Indian or Alaska Native adults (33.5%) were more likely to be current smokers than white adults (23.2%), black adults (22.4%), and Asian adults (12.7%) (figure 2).
- American Indian or Alaska Native men (27.8%) were as likely as white men (29.3%) and more likely than black men (20.5%) and Asian men (14.9%) to be current moderate or heavier drinkers.
- About one-fourth of American Indian or Alaska Native adults (24.6%) were former drinkers compared with black adults, white adults, and Asian adults (18.4%, 14.6%, and 9.3%, respectively).
- American Indian or Alaska Native adults (30.4%) were as likely as black adults (30.8%) and less likely than white adults (40.9%) and Asian adults (62.8%) to be a healthy weight (figure 3).
- American Indian or Alaska Native women (29.4%) were less likely than black women (36.6%) and more likely than white women (20.3%) and Asian women (5.8%) to be obese.
- American Indian or Alaska Native adults (50.3%) were as likely as black adults (49.9%) and more likely than Asian adults (38.1%) and white adults (36.6%) to never engage in any leisure-time physical activity.
- American Indian or Alaska Native adults (26.2%) were as likely as Asian adults (29.0%) and black adults (24.4%), but less likely than white adults (33.1%), to engage in regular leisure-time physical activity.

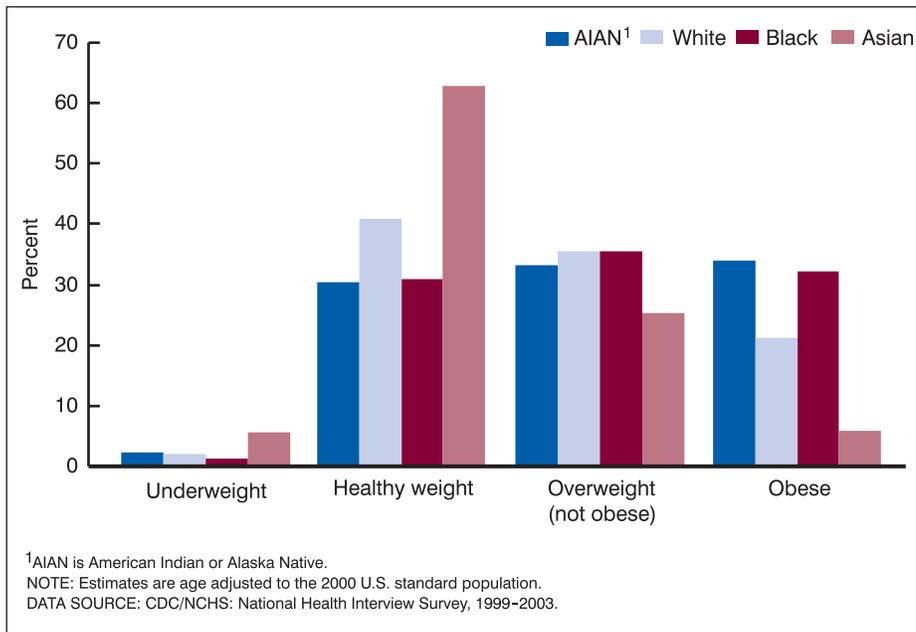


Figure 3. Percent distribution of body weight status for adults 18 years of age and over, by race: United States, 1999–2003

Health care utilization (table 3)

- Of adults with a usual place of health care, white adults (81.0%), Asian adults (78.7%), and black adults (73.0%) were noticeably more likely than American Indian or Alaska Native adults (48.7%) to consider a doctor's office or health maintenance organization (HMO) as their usual place of care (figure 4).
- Of adults with a usual place of health care, American Indian or Alaska Native adults (43.2%) were considerably more likely than black adults (18.5%), Asian adults (16.3%), and white adults (15.6%) to consider a clinic or health center as their usual place of care (figure 4).
- American Indian or Alaska Native adults (10.7%) were more likely than black adults (7.9%), about twice as likely as white adults (5.7%), and three times as likely as Asian adults (3.5%) to not receive needed medical care due to cost of care.
- American Indian or Alaska Native women (75.7%) were as likely as white women (77.0%) and black women (77.3%) and more likely than Asian women (66.8%) to have last seen or talked to a health professional within the past 6 months.

- American Indian or Alaska Native adults (16.9%) were as likely as black adults (16.0%) and more likely than white adults (12.0%) and Asian adults (10.0%) to have last seen a dentist more than 5 years ago.
- American Indian or Alaska Native men (34.6%) were more likely than white men (29.2%) and Asian men (26.9%) and less likely than black

men (45.4%) to have ever been tested for the acquired immunodeficiency syndrome (AIDS) virus.

Conditions (table 4)

- American Indian or Alaska Native adults (29.7%) were less likely than black adults (33.9%) and more likely than white adults (22.8%) and Asian adults (19.3%) to have ever been told they had hypertension.
- American Indian or Alaska Native adults (13.2%) were more likely than black adults (10.1%) and more than twice as likely as white adults (5.7%) and Asian adults (5.5%) to have ever been told they had diabetes.
- During the 3 months prior to the interview, American Indian or Alaska Native adults were more likely than white adults, black adults, and Asian adults to experience a migraine or severe headache, or pain in the neck, lower back, or down the leg below the knees.
- American Indian or Alaska Native adults (6.4%) were nearly twice as likely as white adults (3.5%) and about four times as likely as Asian adults (1.8%) and black adults (1.6%) to have a lot of trouble hearing or to be deaf.

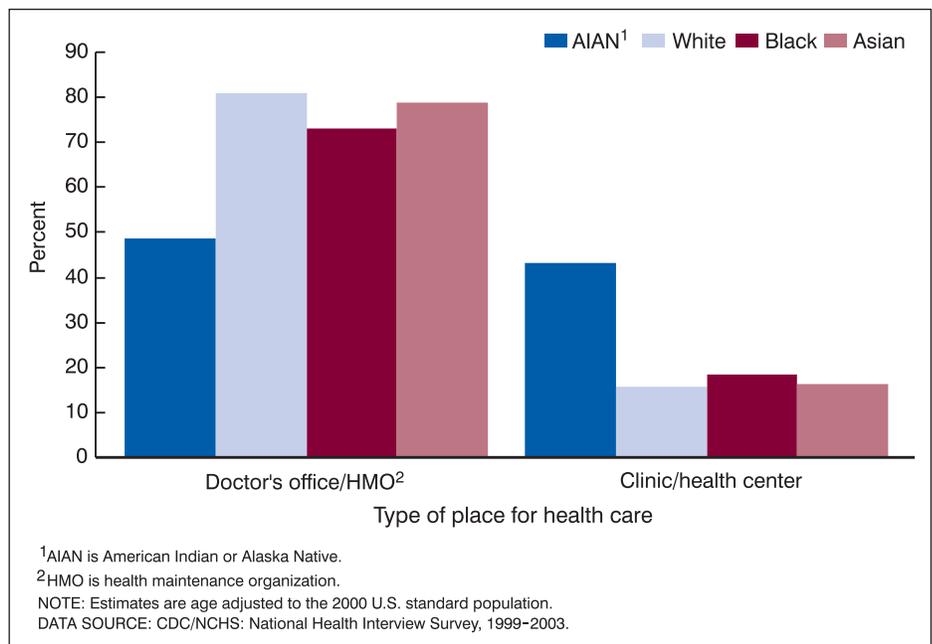


Figure 4. Percentage of adults 18 years of age and over who received health care in a specific type of place, by race: United States, 1999–2003

- American Indian or Alaska Native adults (41.1%) were more likely than black adults (31.4%), white adults (31.0%), and Asian adults (20.6%) to have an activity limitation.

Mental health status (table 5)

- Overall, American Indian or Alaska Native adults (8.2%) were about twice as likely as black adults (3.2%), three times as likely as white adults (2.8%), and five times as likely as Asian adults (1.7%) to have experienced serious psychological distress within the past 30 days (figure 5).
- American Indian or Alaska Native women (11.8%) were about three times as likely as black women (4.0%), three and a half times as likely as white women (3.4%), and five times as likely as Asian women (2.4%) to have experienced serious psychological distress within the past 30 days.
- American Indian or Alaska Native adults (5.9%) were more than twice as likely as black adults (2.1%), about three times as likely as white adults (1.9%), and four times as likely as Asian adults (1.5%) to have felt hopeless most or all of the time within the past 30 days.
- American Indian or Alaska Native adults (5.8%) were about three times as likely as black adults (1.9%), about three times as likely as white adults (1.7%), and five times as likely as Asian adults (1.2%) to have felt worthless most or all of the time within the past 30 days.

Respondent-assessed health status (table 6)

- American Indian or Alaska Native adults were as likely as black adults and less likely than white adults and Asian adults to be in excellent or very good health.
- American Indian or Alaska Native adults (12.7%) were as likely as black adults (14.2%) and more likely than white adults (8.1%) and Asian adults (7.5%) to be in fair health.
- About 8% of American Indian or Alaska Native adults were in poor

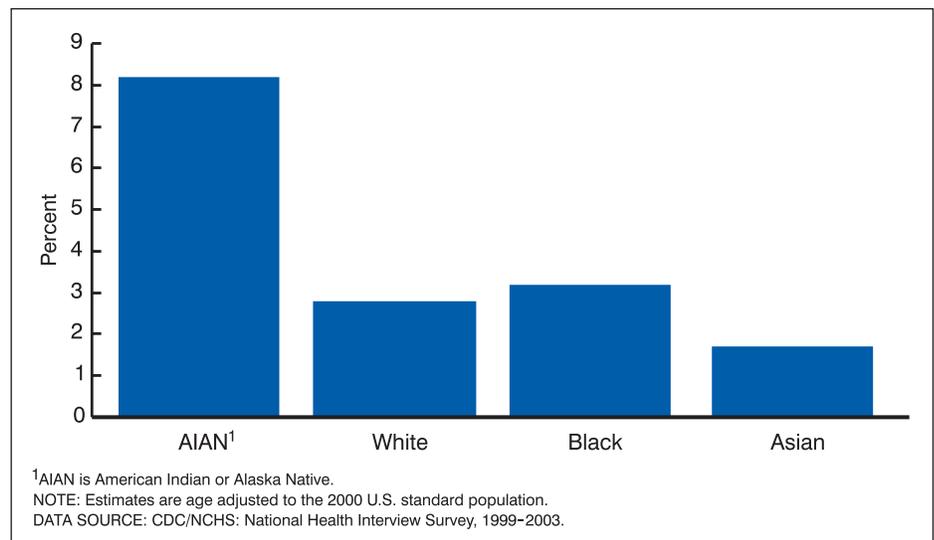


Figure 5. Percentage of adults 18 years of age and over who experienced serious psychological distress during the past 30 days, by race: United States, 1999–2003

health compared with 5% of black adults, 3% of white adults, and 2% of Asian adults.

Discussion

This analysis highlights the disparities between AIAN adults and adults of other race/ethnic groups. As shown in this report, compared with other groups, AIAN adults are more likely than adults of other race or ethnic groups to have poorer health, unmet medical needs due to cost, diabetes, trouble hearing, activity limitations, and to have experienced serious psychological distress in the past 30 days. AIAN adults are more likely to be current smokers than other adults. They are also as likely to be current moderate or heavier drinkers compared with white adults and as likely to be obese or never engage in leisure-time physical activity compared with black adults.

The finding of poorer health status of the AIAN population compared with other adults is consistent with previous research (7–10). The estimated differentials in health status indicators of AIAN adults compared with other adults may be conservative. As with other populations, it is likely that there is heterogeneity within the AIAN population in terms of demographic characteristics as well as health outcomes. Grouping all AIAN adults into a single category may mask the

differences among AIAN subgroups. Age, a characteristic associated with health status, was statistically controlled in this study through age adjustment. However, controlling for other factors was beyond the scope of this report. Other factors that may be associated with health outcomes, including tribal affiliation, were not examined in this report due to limitations on sample sizes and available information. Notwithstanding the limitations of the study, the NHIS provides an opportunity to merge data across years and thus increase the precision of the estimates for the AIAN population. In addition, the data are nationally representative, allowing generalization of these findings to the U.S. population as well as the AIAN population.

References

1. Ogunwole SU. The American Indian and Alaska Native Population: 2000. U.S. Department of Commerce. U.S. Census Bureau. Census 2000 Brief. Feb. 2002.
2. U.S. Department of Commerce. U.S. Census Bureau. DP-1. Profile of General Demographic Characteristics 2000. <http://factfinder.census.gov>.
3. Anderson RN, Arialdi MM, Fingerhut LA, Warner M, Heinen MA. Deaths: Injuries, 2001. National vital statistics reports; vol 52, no 21. Hyattsville, Maryland: National Center for Health Statistics. 2004.

4. Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. National Center for Health Statistics. Vital Health Stat 2(128). 1999.
5. Sorlie PD, Rogot E, Johnson NJ. Validity of demographic characteristics on the death certificate. *Epidemiology* 3(2):181–4. 1992.
6. Anderson RN, Smith BL. Deaths: Leading causes for 2001. National vital statistics reports; vol 52 no 9. Hyattsville, Maryland: National Center for Health Statistics. 2003.
7. Forquera R. Urban Indian Health. Issue Brief. The Henry J. Kaiser Family Foundation. November 2001.
8. Centers for Disease Control and Prevention. Surveillance Summaries, August 1, 2003. *MMWR* 52(No. SS-7). 2003.
9. Centers for Disease Control and Prevention. Diabetes Prevalence Among American Indians and Alaska Natives and the Overall Population — United States, 1994–2002. *MMWR* 2003;52 no 30: 702–4.
10. Denny CH, Taylor TL. American Indian and Alaska Native health behavior: findings from the behavioral risk factor surveillance system, 1992–95. *Ethn Dis*. Autumn;9(3):403–9. 1999.
11. National Center for Health Statistics. 1999 National Health Interview Survey (NHIS). Public-Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1999/srvydesc.pdf.
12. National Center for Health Statistics. 2000 National Health Interview Survey (NHIS). Public-Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2000/srvydesc.pdf.
13. National Center for Health Statistics. 2001 National Health Interview Survey (NHIS). Public-Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2001/srvydesc.pdf.
14. National Center for Health Statistics. 2002 National Health Interview Survey (NHIS). Public-Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2002/srvydesc.pdf.
15. National Center for Health Statistics. 2003 National Health Interview Survey (NHIS). Public-Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2003/srvydesc.pdf.
16. Research Triangle Institute. SUDAAN (Release 8.0.1) [Computer Software]. Research Triangle Park, NC: Research Triangle Institute. 2002.
17. Day JC. Population projections of the United States by age, sex, race, and Hispanic origin: 1995 to 2050, U.S. Bureau of the Census, Current Population Reports, P25–1130, U.S. Government Printing Office, Washington, DC. 1996. (<http://www.census.gov/prod/1/pop/p25-1130/>).
18. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes, no 20. Hyattsville, Maryland. National Center for Health Statistics. January 2001.
19. Office of Management and Budget. Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. *Federal Register*, 62 (210):58782–90. 1997.
20. U.S. Census Bureau. <http://www.census.gov/population/www/estimates/aboutmetro.html>.
21. Kessler RC, Barker PR, Colpe LJ, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry*. 60:184–9. 2003.

Table 1. Age-adjusted percent distributions (with standard errors) of selected demographic characteristics for adults 18 years of age and over, by race: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
	Percent distribution ² (standard error)			
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Sex				
Male	48.9 (2.47)	48.3 (0.18)	44.1 (0.43)	50.2 (0.95)
Female	51.1 (2.47)	51.7 (0.18)	55.9 (0.43)	49.8 (0.95)
Age ³				
18–24 years	17.7 (1.43)	12.3 (0.21)	16.1 (0.42)	14.9 (0.79)
25–44 years	43.5 (1.92)	38.7 (0.20)	44.1 (0.49)	47.9 (1.00)
45–64 years	30.4 (1.56)	31.6 (0.20)	28.1 (0.43)	27.7 (0.85)
65 years and over	8.5 (1.09)	17.5 (0.20)	11.6 (0.35)	9.6 (0.61)
Education				
Less than a high school diploma	32.5 (2.04)	15.8 (0.22)	25.2 (0.52)	13.9 (0.76)
High school diploma or GED ⁴	29.2 (1.81)	30.4 (0.25)	30.9 (0.43)	18.1 (0.80)
Some college	29.1 (1.77)	29.1 (0.19)	29.4 (0.47)	22.9 (0.77)
Bachelor's degree or higher	9.3 (1.12)	24.7 (0.29)	14.4 (0.42)	45.1 (1.00)
Poverty status ⁵				
Poor	23.8 (2.10)	9.0 (0.19)	20.9 (0.51)	12.7 (0.83)
Near poor	24.0 (1.63)	16.3 (0.20)	24.3 (0.46)	16.6 (0.90)
Not poor	52.2 (2.76)	74.7 (0.29)	54.8 (0.74)	70.7 (1.23)
Marital status				
Never married	17.8 (1.54)	17.4 (0.15)	29.3 (0.35)	21.2 (0.59)
Married	49.7 (2.41)	60.8 (0.23)	38.5 (0.48)	64.9 (0.78)
Cohabiting	8.8 (1.05)	5.6 (0.09)	6.3 (0.21)	2.8 (0.28)
Divorced or separated	15.6 (1.08)	9.7 (0.10)	16.5 (0.28)	4.7 (0.35)
Widowed	8.1 (1.07)	6.6 (0.07)	9.5 (0.21)	6.5 (0.44)
Health insurance coverage (under 65 years) ⁶				
Private	48.9 (3.02)	76.3 (0.26)	60.9 (0.59)	74.3 (1.00)
Public	32.6 (3.06)	7.2 (0.14)	17.0 (0.44)	6.9 (0.54)
Uninsured	18.5 (1.47)	16.5 (0.20)	22.1 (0.41)	18.8 (0.86)
Place of residence ⁷				
MSA, central city	22.2 (2.82)	23.8 (0.60)	50.5 (1.37)	39.7 (1.65)
MSA, not central city	32.8 (4.39)	53.6 (0.71)	35.1 (1.28)	56.4 (1.70)
Not MSA	44.9 (5.94)	22.6 (0.50)	14.4 (1.39)	3.9 (1.07)
Urbal or rural				
Urban	53.8 (5.67)	69.2 (0.64)	85.4 (1.13)	93.4 (0.69)
Rural	46.2 (5.67)	30.8 (0.64)	14.6 (1.13)	6.6 (0.69)
Geographic region				
Northeast	8.2 (1.94)	19.5 (0.33)	17.5 (0.66)	20.9 (1.12)
Midwest	20.9 (4.25)	26.7 (0.40)	18.5 (0.76)	13.8 (0.94)
South	40.0 (5.84)	34.6 (0.44)	57.0 (1.07)	18.9 (0.97)
West	30.8 (4.38)	19.2 (0.33)	7.0 (0.34)	46.4 (1.43)

See footnotes at end of table.

Table 1. Age-adjusted percent distributions (with standard errors) of selected demographic characteristics for adults 18 years of age and over, by race: United States, 1999–2003—Con.

Selected characteristic	Race ¹				
	American Indian or Alaska Native	White	Black or African American	Asian	
Indian Health Service (IHS) geographic regions ⁸		Percent distribution ² (standard error)			
Alaska	**	**	**	*0.2 (0.09)	
East	43.0 (5.67)	40.5 (0.50)	51.3 (1.23)	26.6 (1.22)	
Northern plains	17.3 (4.23)	14.8 (0.39)	7.2 (0.47)	6.3 (0.68)	
Pacific coast	16.2 (2.22)	12.5 (0.28)	5.7 (0.29)	36.4 (1.44)	
Southwest	11.5 (3.43)	5.7 (0.19)	1.2 (0.15)	3.3 (0.38)	
Not IHS region	9.4 (1.66)	26.3 (0.46)	34.6 (1.31)	27.1 (1.44)	

* Figure does not meet standard of reliability or precision. Estimates preceded by an asterisk have a relative standard error of greater than 30% but less than 50% and should be used with caution.

** Estimates have a relative standard error of 50% or greater and are not shown as they do not meet the standard of reliability or precision.

¹The category race refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Unknowns for education, poverty status, marital status, and health insurance coverage were not included in the denominators when calculating percentages.

³Estimates for age groups are not age adjusted.

⁴GED is General Educational Development high school equivalency diploma.

⁵Poverty status is based on family income and family size using the U.S. Census Bureau's poverty thresholds for 1998, 1999, 2000, 2001, and 2002. "Poor" persons are defined as below the poverty threshold, "near poor" persons have incomes of 100% to less than 200% of the poverty threshold, and "not poor" persons have incomes that are 200% of the poverty threshold or greater.

⁶Classification of health insurance coverage is based on a hierarchy of mutually exclusive categories. Persons with more than one type of health insurance were assigned to the first appropriate category in the hierarchy. Persons under age 65 years and those aged 65 years and over were classified separately due to the prominence of Medicare coverage in the older population. See "Definition of Terms" for more details.

⁷MSA is metropolitan statistical area.

⁸These five regions contain 36 States that are typically covered by Indian Health Service (IHS) administrative areas. The category "Not IHS region" contains the remaining 14 States and the District of Columbia. See "Definition of terms" for the States included in each region.

NOTES: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. Estimates for health insurance coverage (under 65 years of age) are age adjusted using three age groups: 18–24 years, 25–44 years, and 45–64 years.

Table 2. Age-adjusted percent distributions (with standard errors) of selected health behaviors for adults 18 years of age and over, by race: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Both sexes				
Percent distribution ² (standard error)				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Smoking status ³ :				
Never smoker	44.1 (2.67)	53.0 (0.21)	61.3 (0.45)	73.8 (0.81)
Former smoker	22.4 (1.72)	23.8 (0.15)	16.3 (0.32)	13.5 (0.65)
Current smoker	33.5 (2.09)	23.2 (0.19)	22.4 (0.39)	12.7 (0.61)
Alcohol use status ⁴ :				
Lifetime abstainer	24.7 (2.72)	20.7 (0.27)	35.1 (0.58)	47.1 (1.00)
Former drinker	24.6 (1.52)	14.6 (0.15)	18.4 (0.36)	9.3 (0.58)
Current light or infrequent drinker	33.0 (2.25)	44.3 (0.23)	33.8 (0.49)	34.6 (0.90)
Current moderate or heavier drinker	17.6 (1.53)	20.4 (0.19)	12.7 (0.30)	8.9 (0.56)
Body weight status ⁵ :				
Underweight	2.5 (0.68)	2.1 (0.05)	1.3 (0.10)	5.9 (0.45)
Healthy weight	30.4 (2.27)	40.9 (0.19)	30.8 (0.40)	62.8 (0.95)
Overweight (but not obese)	33.2 (1.92)	35.6 (0.17)	35.6 (0.40)	25.3 (0.84)
Obese	34.0 (1.86)	21.3 (0.16)	32.2 (0.39)	6.0 (0.47)
Leisure-time physical activity ⁶ :				
Never or unable to engage in activity	50.3 (3.13)	36.6 (0.34)	49.9 (0.61)	38.1 (0.99)
Engaged in some activity but less than regular	23.5 (2.01)	30.3 (0.23)	25.7 (0.41)	32.9 (0.96)
Engaged in regular activity	26.2 (2.50)	33.1 (0.25)	24.4 (0.45)	29.0 (0.90)
Male				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Smoking status ³ :				
Never smoker	40.9 (4.19)	46.9 (0.29)	52.1 (0.67)	60.4 (1.29)
Former smoker	26.9 (2.66)	28.2 (0.21)	21.1 (0.55)	20.7 (1.11)
Current smoker	32.3 (3.56)	24.8 (0.25)	26.7 (0.62)	18.9 (1.03)
Alcohol use status ⁴ :				
Lifetime abstainer	16.7 (2.72)	14.4 (0.26)	24.4 (0.70)	32.6 (1.34)
Former drinker	25.6 (2.36)	15.3 (0.20)	20.4 (0.55)	10.9 (0.94)
Current light or infrequent drinker	29.9 (2.82)	41.1 (0.27)	34.7 (0.68)	41.6 (1.36)
Current moderate or heavier drinker	27.8 (2.42)	29.3 (0.27)	20.5 (0.57)	14.9 (1.00)
Body weight status ⁵ :				
Underweight	*1.5 (0.68)	0.9 (0.05)	1.0 (0.13)	3.0 (0.53)
Healthy weight	21.5 (3.06)	32.3 (0.24)	31.7 (0.62)	59.6 (1.37)
Overweight (but not obese)	38.6 (2.34)	44.5 (0.27)	40.7 (0.67)	31.2 (1.24)
Obese	38.5 (2.84)	22.3 (0.22)	26.6 (0.57)	6.2 (0.63)
Leisure-time physical activity ⁶ :				
Never or unable to engage in activity	45.8 (3.58)	34.7 (0.37)	45.1 (0.77)	34.0 (1.34)
Engaged in some activity but less than regular	23.9 (2.61)	29.3 (0.30)	25.0 (0.62)	34.3 (1.31)
Engaged in regular activity	30.3 (2.96)	35.9 (0.31)	29.9 (0.64)	31.7 (1.31)

See footnotes at end of table.

Table 2. Age-adjusted percent distributions (with standard errors) of selected health behaviors for adults 18 years of age and over, by race: United States, 1999–2003—Con.

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
	Percent distribution ² (standard error)			
Female				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Smoking status ³ :				
Never smoker	47.6 (2.98)	58.2 (0.27)	68.2 (0.51)	87.0 (0.82)
Former smoker	17.8 (1.72)	20.2 (0.19)	12.9 (0.35)	6.4 (0.60)
Current smoker	34.7 (2.43)	21.7 (0.23)	19.0 (0.42)	6.5 (0.57)
Alcohol use status ⁴ :				
Lifetime abstainer	32.6 (3.76)	26.2 (0.34)	43.2 (0.68)	61.2 (1.25)
Former drinker	23.6 (1.98)	14.1 (0.18)	17.0 (0.44)	7.9 (0.67)
Current light or infrequent drinker	35.9 (3.00)	47.6 (0.32)	33.2 (0.58)	27.9 (1.11)
Current moderate or heavier drinker	8.0 (1.64)	12.1 (0.18)	6.5 (0.26)	3.0 (0.40)
Body weight status ⁵ :				
Underweight	*3.4 (1.26)	3.3 (0.09)	1.6 (0.13)	8.8 (0.69)
Healthy weight	39.1 (2.89)	49.4 (0.26)	30.3 (0.57)	66.0 (1.28)
Overweight (but not obese)	28.1 (2.58)	27.0 (0.22)	31.5 (0.47)	19.4 (1.07)
Obese	29.4 (2.53)	20.3 (0.20)	36.6 (0.55)	5.8 (0.67)
Leisure-time physical activity ⁶ :				
Never or unable to engage in activity	54.5 (3.43)	38.3 (0.37)	53.8 (0.70)	42.2 (1.35)
Engaged in some activity but less than regular	23.0 (2.47)	31.2 (0.27)	26.3 (0.50)	31.5 (1.24)
Engaged in regular activity	22.6 (2.92)	30.5 (0.29)	19.9 (0.49)	26.3 (1.15)

* Figure does not meet standard of reliability or precision. Estimates preceded by an asterisk have a relative standard error of greater than 30% but less than 50% and should be used with caution.

¹The category "race" refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Denominator for each percent distribution excludes persons with unknown health behavior characteristic.

³Cigarette smoking status: Never smokers never smoked at all or smoked less than 100 cigarettes in lifetime; former smokers smoked at least 100 cigarettes in lifetime but did not smoke at time of interview; current smokers smoked at least 100 cigarettes in lifetime and currently smoked.

⁴Alcohol drinking status: Lifetime abstainer drank less than 12 drinks in lifetime; former drinker drank 12 or more drinks in lifetime and none in past year; current light or infrequent drinker drank 12 or more drinks in lifetime, drank alcohol in past year, and drank 3 drinks or fewer per week, on average; current moderate or heavier drinker drank 12 or more drinks in lifetime, drank alcohol in past year, and drank more than 3 drinks per week, on average.

⁵Body weight status was based on body mass index (BMI) using self-reported height and weight. The formula for BMI is kilograms/meters². Underweight is defined as a BMI of less than 18.5; healthy weight is defined as a BMI of greater than or equal to 18.5 and less than 25; overweight, but not obese, is defined as a BMI of greater than or equal to 25 and less than 30; and obese is defined as a BMI of greater than or equal to 30.

⁶Leisure-time physical activity: "Never or unable" is adults who never or were unable to engage in light or moderate leisure-time physical activities for at least 10 minutes that cause light sweating or a slight to moderate increase in breathing or heart rate and never or were unable to engage in vigorous leisure-time physical activities for at least 10 minutes that cause heavy sweating or large increases in breathing or heart rate; "some activity but less than regular" is engaging in light or moderate leisure-time physical activities that cause light sweating or a slight to moderate increase in breathing or heart rate and last 10–29 minutes each time and/or are done less than five times per week and/or vigorous leisure-time physical activities that cause heavy sweating or large increases in breathing or heart rate and are done 10–19 minutes each time and/or less than three times per week; "regular activity" is engaging in light or moderate leisure-time physical activities that cause light sweating or a slight to moderate increase in breathing or heart rate and occur five or more times per week for at least 30 minutes each time and/or vigorous leisure-time physical activities that cause heavy sweating or large increases in breathing or heart rate and occur three or more times per week for at least 20 minutes each time.

NOTE: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over.

Table 3. Age-adjusted percent distributions (with standard errors) and age-adjusted percents (with standard errors) of selected health care access and utilization measures for adults 18 years of age and over, by race: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Both sexes				
Percent distribution ² (standard error)				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Usual place for health care:				
Has usual place	85.2 (1.36)	85.9 (0.17)	85.8 (0.31)	81.6 (0.74)
No usual place	14.2 (1.28)	13.4 (0.16)	13.4 (0.31)	17.5 (0.73)
Has more than one place	*0.6 (0.27)	0.7 (0.03)	0.8 (0.07)	0.9 (0.16)
Type of place for health care ³ :				
Doctor's office or HMO ⁴	48.7 (4.04)	81.0 (0.36)	73.0 (0.56)	78.7 (0.96)
Clinic or health center	43.2 (4.07)	15.6 (0.35)	18.5 (0.46)	16.3 (0.88)
Hospital emergency room or outpatient department	6.4 (1.30)	2.0 (0.07)	6.8 (0.27)	2.8 (0.33)
Some other place	*1.4 (0.50)	0.7 (0.04)	0.8 (0.07)	1.0 (0.22)
Doesn't go to one place most often	**	0.8 (0.04)	0.9 (0.09)	1.2 (0.23)
Time since last saw or talked to health professional:				
Never	*0.8 (0.31)	1.1 (0.05)	1.2 (0.09)	2.8 (0.36)
6 months or less	66.7 (2.31)	69.5 (0.17)	70.3 (0.43)	61.5 (0.91)
More than 6 months, but not more than 1 year ago	12.9 (1.31)	13.7 (0.13)	13.7 (0.30)	15.4 (0.66)
More than 1 year, but not more than 2 years ago	11.3 (1.34)	8.1 (0.10)	7.8 (0.24)	9.8 (0.54)
More than 2 years, but not more than 5 years ago	4.9 (0.84)	4.9 (0.08)	4.7 (0.18)	6.7 (0.44)
More than 5 years ago	3.3 (0.78)	2.6 (0.06)	2.3 (0.12)	3.9 (0.35)
Time since last saw a dentist ⁵ :				
Never	1.3 (0.38)	0.8 (0.03)	1.4 (0.11)	3.5 (0.38)
6 months or less	33.7 (2.00)	48.2 (0.25)	33.6 (0.49)	43.1 (0.99)
More than 6 months, but not more than 1 year ago	17.5 (1.54)	16.8 (0.14)	19.6 (0.34)	19.1 (0.75)
More than 1 year, but not more than 2 years ago	15.6 (1.46)	11.6 (0.11)	15.4 (0.36)	12.9 (0.64)
More than 2 years, but not more than 5 years ago	15.1 (1.55)	10.6 (0.12)	14.1 (0.31)	11.3 (0.64)
More than 5 years ago	16.9 (1.46)	12.0 (0.16)	16.0 (0.36)	10.0 (0.61)
Percent ² (standard error)				
Measures of health care access ⁶ :				
Delayed medical care due to cost	12.7 (1.55)	8.3 (0.11)	8.7 (0.23)	4.6 (0.40)
Did not receive medical care due to cost	10.7 (1.36)	5.7 (0.09)	7.9 (0.22)	3.5 (0.37)
Ever tested for HIV ^{7,8}	39.0 (2.10)	31.3 (0.20)	47.2 (0.51)	27.9 (0.81)
Male				
Percent distribution ² (standard error)				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Usual place for health care:				
Has usual place	78.3 (2.13)	81.6 (0.24)	80.3 (0.57)	78.1 (1.11)
No usual place	20.9 (2.01)	17.6 (0.23)	18.7 (0.55)	21.1 (1.10)
Has more than one place	**	0.9 (0.05)	1.0 (0.13)	0.9 (0.20)
Type of place for health care ³ :				
Doctor's office or HMO ⁴	48.6 (4.32)	79.3 (0.40)	71.4 (0.79)	78.8 (1.31)
Clinic or health center	42.2 (4.84)	15.9 (0.39)	16.9 (0.64)	15.7 (1.20)
Hospital emergency room or outpatient department	7.7 (1.91)	2.7 (0.10)	9.2 (0.47)	3.1 (0.56)
Some other place	**	1.0 (0.06)	1.2 (0.15)	*0.9 (0.31)
Doesn't go to one place most often	**	1.1 (0.07)	1.3 (0.18)	1.4 (0.31)
Time since last saw or talked to health professional:				
Never	*1.3 (0.56)	1.5 (0.07)	1.3 (0.15)	3.8 (0.59)
6 months or less	57.1 (3.04)	61.8 (0.25)	61.6 (0.69)	56.2 (1.27)
More than 6 months, but not more than 1 year ago	14.6 (2.39)	14.6 (0.18)	15.1 (0.51)	14.9 (0.98)
More than 1 year, but not more than 2 years ago	14.1 (2.07)	10.7 (0.16)	10.7 (0.42)	11.9 (0.82)
More than 2 years, but not more than 5 years ago	7.2 (1.33)	7.3 (0.14)	7.4 (0.32)	8.1 (0.69)
More than 5 years ago	5.7 (1.51)	4.0 (0.10)	3.9 (0.25)	5.1 (0.58)
Time since last saw a dentist ⁵ :				
Never	*2.5 (0.77)	1.0 (0.05)	1.6 (0.17)	4.3 (0.62)
6 months or less	27.6 (2.74)	45.1 (0.31)	31.0 (0.65)	41.6 (1.44)
More than 6 months, but not more than 1 year ago	17.8 (2.09)	16.3 (0.20)	17.7 (0.49)	18.4 (1.07)
More than 1 year, but not more than 2 years ago	18.0 (2.17)	12.2 (0.16)	16.0 (0.52)	13.4 (0.94)
More than 2 years, but not more than 5 years ago	15.4 (2.19)	11.8 (0.17)	15.4 (0.50)	11.2 (0.91)
More than 5 years ago	18.8 (2.31)	13.5 (0.21)	18.3 (0.54)	11.1 (0.95)

See footnotes at end of table.

Table 3. Age-adjusted percent distributions (with standard errors) and age-adjusted percents (with standard errors) of selected health care access and utilization measures for adults 18 years of age and over, by race: United States, 1999–2003—Con.

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Men—Continued				
Percent ² (standard error)				
Measures of health care access ⁶ :				
Delayed medical care due to cost	9.7 (1.43)	7.3 (0.14)	7.5 (0.32)	4.9 (0.58)
Did not receive medical care due to cost	8.4 (1.37)	5.0 (0.12)	7.1 (0.32)	3.7 (0.52)
Ever tested for HIV ^{7,8}	34.6 (2.83)	29.2 (0.26)	45.4 (0.73)	26.9 (1.18)
Female				
Percent distribution ² (standard error)				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Usual place for health care:				
Has usual place	91.5 (1.31)	90.1 (0.16)	90.3 (0.32)	85.2 (0.85)
No usual place	8.1 (1.27)	9.3 (0.16)	9.1 (0.31)	13.9 (0.83)
Has more than one place	**	0.6 (0.04)	0.6 (0.08)	0.9 (0.22)
Type of place for health care ³ :				
Doctor's office or HMO ⁴	49.0 (4.92)	82.3 (0.38)	74.2 (0.60)	78.5 (1.25)
Clinic or health center	43.5 (4.58)	15.2 (0.36)	19.6 (0.51)	16.8 (1.15)
Hospital emergency room or outpatient department	*5.4 (1.76)	1.4 (0.08)	5.2 (0.27)	2.5 (0.38)
Some other place	*1.7 (0.78)	0.6 (0.04)	0.5 (0.07)	1.1 (0.29)
Doesn't go to one place most often	**	0.5 (0.03)	0.5 (0.08)	1.0 (0.26)
Time since last saw or talked to health professional:				
Never	**	0.8 (0.05)	1.0 (0.11)	1.7 (0.32)
6 months or less	75.7 (2.27)	77.0 (0.21)	77.3 (0.46)	66.8 (1.19)
More than 6 months, but not more than 1 year ago	11.0 (1.62)	12.8 (0.16)	12.7 (0.36)	15.9 (0.88)
More than 1 year, but not more than 2 years ago	8.8 (1.75)	5.5 (0.11)	5.4 (0.25)	7.6 (0.69)
More than 2 years, but not more than 5 years ago	*2.9 (0.99)	2.6 (0.08)	2.6 (0.19)	5.2 (0.52)
More than 5 years ago	*1.2 (0.47)	1.3 (0.05)	1.0 (0.10)	2.8 (0.41)
Time since last saw a dentist ⁵ :				
Never	**	0.5 (0.03)	1.2 (0.13)	2.8 (0.41)
6 months or less	39.4 (2.55)	51.2 (0.29)	35.6 (0.59)	44.8 (1.25)
More than 6 months, but not more than 1 year ago	17.1 (1.92)	17.2 (0.18)	21.0 (0.45)	19.7 (1.01)
More than 1 year, but not more than 2 years ago	13.4 (1.79)	11.0 (0.15)	15.0 (0.41)	12.4 (0.80)
More than 2 years, but not more than 5 years ago	14.9 (2.03)	9.5 (0.15)	13.2 (0.36)	11.4 (0.85)
More than 5 years ago	15.1 (2.20)	10.5 (0.18)	14.1 (0.43)	9.0 (0.74)
Measures of health care access ⁶ :				
Percent ² (standard error)				
Delayed medical care due to cost	15.9 (2.33)	9.3 (0.14)	9.6 (0.30)	4.4 (0.50)
Did not receive medical care due to cost	13.1 (2.05)	6.3 (0.12)	8.6 (0.28)	3.3 (0.44)
Ever tested for HIV ^{7,8}	42.7 (2.36)	33.6 (0.25)	48.8 (0.59)	28.9 (1.09)

* Figure does not meet standard of reliability or precision. Estimates preceded by an asterisk have a relative standard error of greater than 30% but less than 50% and should be used with caution.

** Estimates have a relative standard error of 50% or greater and are not shown as they do not meet the standard of reliability or precision.

¹The category "race" refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Denominator for each percent distribution and percent excludes persons with unknown characteristic.

³Only persons who reported one or more usual places to go for health care were asked about the type of place.

⁴HMO is a health maintenance organization.

⁵In 1999 and 2000, the question wording included "seen or talked to" a dentist. In 2001, the words "or talked to" were dropped from the question.

⁶When asked about delaying or not getting medical care due to cost, respondents were instructed to exclude dental care.

⁷HIV is human immunodeficiency virus.

⁸In 1999, the question read: "Have you ever been tested for the AIDS virus infection." Beginning in 2000, it was changed to read: "Have you ever been tested for HIV?"

NOTE: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over.

Table 4. Age-adjusted percentages (with standard errors) of adults 18 years of age and over with selected conditions, sensory problems, and functional limitation status, by race: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Both sexes	Percent ² (standard error)			
Selected circulatory conditions:				
Heart disease ³	13.6 (1.36)	11.5 (0.11)	10.4 (0.26)	7.0 (0.53)
Hypertension	29.7 (1.69)	22.8 (0.14)	33.9 (0.37)	19.3 (0.71)
Stroke	3.6 (0.67)	2.2 (0.04)	3.3 (0.15)	2.0 (0.30)
Selected respiratory conditions:				
Emphysema	*1.2 (0.41)	1.6 (0.04)	1.0 (0.08)	*0.4 (0.14)
Asthma	11.8 (1.27)	9.8 (0.11)	10.2 (0.24)	6.5 (0.47)
Hayfever	9.5 (1.18)	9.4 (0.11)	7.5 (0.24)	8.9 (0.54)
Sinusitis	15.8 (1.69)	15.8 (0.15)	15.7 (0.34)	7.7 (0.50)
Chronic bronchitis	6.1 (0.77)	4.8 (0.07)	4.4 (0.17)	1.7 (0.22)
Other selected conditions:				
Cancer	5.7 (0.88)	7.4 (0.08)	3.5 (0.16)	2.3 (0.31)
Diabetes ⁴	13.2 (1.64)	5.7 (0.08)	10.1 (0.24)	5.5 (0.44)
Ulcer	14.5 (1.65)	8.1 (0.11)	7.0 (0.21)	4.7 (0.46)
Migraine or severe headache	22.9 (1.54)	15.5 (0.15)	15.0 (0.31)	11.3 (0.61)
Pain in neck	20.7 (1.70)	15.3 (0.15)	11.9 (0.28)	9.4 (0.53)
Pain in lower back	33.9 (2.07)	28.3 (0.20)	25.0 (0.43)	19.1 (0.77)
Pain down leg below knees	45.4 (3.50)	29.5 (0.31)	34.8 (0.73)	26.4 (1.87)
Selected sensory problems:				
A lot of trouble hearing or deaf	6.4 (1.30)	3.5 (0.06)	1.6 (0.11)	1.8 (0.29)
Absence of all natural teeth	11.3 (1.25)	8.7 (0.12)	10.1 (0.25)	6.9 (0.52)
Functional limitation status ⁵ :				
Limited ⁶	41.4 (1.99)	31.0 (0.23)	31.4 (0.41)	20.6 (0.76)
Limited; caused by at least 1 chronic condition ⁷	40.3 (1.97)	29.3 (0.22)	29.7 (0.40)	18.8 (0.74)
Male				
Selected circulatory conditions:				
Heart disease ³	13.3 (1.82)	12.5 (0.15)	10.2 (0.38)	7.1 (0.79)
Hypertension	31.6 (2.54)	23.1 (0.19)	31.2 (0.55)	19.8 (1.07)
Stroke	*2.9 (0.98)	2.3 (0.07)	3.8 (0.25)	1.9 (0.46)
Selected respiratory conditions:				
Emphysema	**	2.0 (0.07)	1.3 (0.15)	*0.5 (0.24)
Asthma	7.5 (1.61)	8.3 (0.14)	8.3 (0.36)	7.1 (0.77)
Hayfever	9.5 (1.73)	8.4 (0.15)	6.4 (0.35)	8.9 (0.75)
Sinusitis	12.6 (1.92)	11.4 (0.17)	10.7 (0.42)	6.7 (0.63)
Chronic bronchitis	4.0 (0.96)	3.2 (0.09)	2.7 (0.23)	1.5 (0.32)
Other selected conditions:				
Cancer	4.9 (1.27)	7.0 (0.12)	3.7 (0.28)	1.9 (0.38)
Diabetes ⁴	14.3 (2.04)	6.4 (0.12)	9.4 (0.38)	6.5 (0.70)
Ulcer	14.0 (2.33)	8.0 (0.14)	6.6 (0.32)	4.3 (0.60)
Migraine or severe headache	15.5 (1.70)	9.5 (0.16)	9.3 (0.36)	6.9 (0.67)
Pain in neck	15.8 (1.99)	12.6 (0.18)	9.6 (0.39)	8.5 (0.77)
Pain in lower back	30.5 (2.87)	26.6 (0.26)	21.8 (0.58)	17.1 (1.11)
Pain down leg below knees	42.4 (4.79)	27.2 (0.45)	31.1 (1.30)	25.0 (2.70)
Selected sensory problems:				
A lot of trouble hearing or deaf	7.6 (1.85)	4.7 (0.11)	1.8 (0.17)	2.1 (0.49)
Absence of all natural teeth	10.9 (1.69)	8.4 (0.14)	8.8 (0.37)	5.6 (0.75)
Functional limitation status ⁵ :				
Limited ⁶	36.1 (2.76)	27.0 (0.27)	25.7 (0.57)	16.4 (0.95)
Limited; caused by at least 1 chronic condition ⁷	34.9 (2.74)	25.7 (0.27)	24.4 (0.55)	14.9 (0.93)

See footnotes at end of table.

Table 4. Age-adjusted percentages (with standard errors) of adults 18 years of age and over with selected conditions, sensory problems, and functional limitation status, by race: United States, 1999–2003—Con.

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Female	Percent ² (standard error)			
Selected circulatory conditions:				
Heart disease ³	14.2 (1.94)	10.8 (0.14)	10.5 (0.34)	6.9 (0.69)
Hypertension	28.2 (1.76)	22.4 (0.19)	36.0 (0.46)	18.8 (0.91)
Stroke	4.3 (0.83)	2.1 (0.06)	3.0 (0.17)	2.2 (0.44)
Selected respiratory conditions:				
Emphysema	*1.2 (0.50)	1.3 (0.05)	0.7 (0.10)	**
Asthma	15.9 (1.80)	11.3 (0.15)	11.6 (0.33)	5.9 (0.54)
Hayfever	9.7 (1.51)	10.4 (0.15)	8.4 (0.29)	9.0 (0.75)
Sinusitis	19.2 (2.05)	20.0 (0.20)	19.6 (0.47)	8.8 (0.77)
Chronic bronchitis	8.1 (1.25)	6.2 (0.12)	5.7 (0.23)	1.8 (0.32)
Other selected conditions:				
Cancer	6.4 (1.26)	7.9 (0.11)	3.5 (0.18)	2.7 (0.45)
Diabetes ⁴	12.1 (2.32)	5.3 (0.10)	10.7 (0.31)	4.4 (0.54)
Ulcer	14.9 (2.21)	8.3 (0.13)	7.2 (0.27)	5.0 (0.66)
Migraine or severe headache	30.1 (2.38)	21.3 (0.22)	19.5 (0.42)	15.8 (0.97)
Pain in neck	25.6 (2.29)	17.8 (0.20)	13.7 (0.39)	10.3 (0.74)
Pain in lower back	37.3 (2.32)	29.9 (0.24)	27.6 (0.54)	21.1 (1.08)
Pain down leg below knees	47.6 (4.35)	31.4 (0.40)	37.0 (0.91)	27.6 (2.49)
Selected sensory problems:				
A lot of trouble hearing or deaf	5.2 (1.36)	2.4 (0.06)	1.4 (0.14)	1.5 (0.31)
Absence of all natural teeth	11.6 (1.87)	8.9 (0.15)	11.0 (0.32)	8.1 (0.69)
Functional limitation status ⁵ :				
Limited ⁶	46.7 (2.79)	34.6 (0.28)	35.8 (0.49)	24.8 (1.07)
Limited; caused by at least 1 chronic condition ⁷	45.5 (2.77)	32.6 (0.26)	33.7 (0.48)	22.8 (1.04)

* Figure does not meet standard of reliability or precision. Estimates preceded by an asterisk have a relative standard error of greater than 30% but less than 50% and should be used with caution.

** Estimates have a relative standard error of 50% or greater and are not shown as they do not meet the standard of reliability or precision.

¹The category "race" refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Denominator for each percent excludes persons with unknown characteristic.

³Heart disease includes coronary heart disease, angina pectoris, heart attack, or any other heart condition or disease.

⁴Female respondents were instructed to exclude pregnancy-related diabetes. Responses from persons who said they had "borderline" diabetes were treated as unknown with respect to diabetes.

⁵Functional limitation is based on any degree of difficulty the respondent had in performing specific physical tasks (e.g., walking a quarter of a mile, walking up 10 steps, standing for 2 hours, carrying a 10-pound object), and engaging in social activities and recreation without the assistance of another person or using special equipment.

⁶Limited includes caused by at least one chronic condition, not caused by chronic condition, and unknown if condition causing limitation activity is chronic.

⁷The category "Limited; caused by at least 1 chronic conditions" is a subset of the category "Limited." Conditions lasting more than 3 months are classified as chronic; selected conditions (e.g., arthritis, diabetes, cancer, heart conditions) are considered chronic regardless of duration.

NOTE: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. See "technical appendix" for information regarding time frame for questions asking about conditions.

Table 5. Age-adjusted percentages (with standard errors) of adults 18 years of age and over with feelings of psychological distress, by race: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Both sexes	Percent ² (standard error)			
Serious psychological distress ³	8.2 (1.25)	2.8 (0.06)	3.2 (0.16)	1.7 (0.25)
Feel sad:				
Most or all of the time	7.0 (1.06)	2.9 (0.06)	4.1 (0.16)	2.3 (0.31)
Some of the time	12.8 (1.37)	7.6 (0.11)	10.6 (0.29)	8.6 (0.56)
Feel nervous:				
Most or all of the time	8.9 (1.29)	4.2 (0.09)	3.7 (0.16)	2.1 (0.26)
Some of the time	12.5 (1.31)	12.1 (0.13)	10.0 (0.25)	8.5 (0.50)
Feel restless:				
Most or all of the time	9.6 (1.56)	5.1 (0.09)	5.2 (0.20)	2.2 (0.27)
Some of the time	14.7 (1.21)	11.9 (0.14)	11.0 (0.27)	8.0 (0.51)
Feel hopeless:				
Most or all of the time	5.9 (0.87)	1.9 (0.05)	2.1 (0.11)	1.5 (0.24)
Some of the time	7.6 (0.93)	3.8 (0.07)	4.5 (0.18)	4.1 (0.41)
Feel like everything is an effort:				
Most or all of the time	9.6 (1.15)	4.5 (0.08)	7.2 (0.24)	4.0 (0.39)
Some of the time	12.2 (1.13)	7.6 (0.11)	8.6 (0.24)	7.0 (0.49)
Feel worthless:				
Most or all of the time	5.8 (1.01)	1.7 (0.05)	1.9 (0.12)	1.2 (0.22)
Some of the time	5.9 (0.82)	3.1 (0.06)	3.4 (0.16)	3.1 (0.40)
Male				
Serious psychological distress ³	4.6 (1.17)	2.2 (0.08)	2.2 (0.19)	1.0 (0.25)
Feel sad:				
Most or all of the time	3.7 (0.81)	2.2 (0.07)	2.9 (0.20)	1.6 (0.32)
Some of the time	10.7 (1.69)	5.9 (0.13)	8.5 (0.38)	7.6 (0.77)
Feel nervous:				
Most or all of the time	7.0 (1.36)	3.2 (0.10)	2.9 (0.23)	1.4 (0.31)
Some of the time	9.2 (1.59)	9.9 (0.16)	7.8 (0.34)	7.8 (0.70)
Feel restless:				
Most or all of the time	6.3 (1.39)	4.7 (0.12)	4.1 (0.27)	1.7 (0.33)
Some of the time	13.4 (1.71)	10.8 (0.17)	9.1 (0.37)	8.2 (0.78)
Feel hopeless:				
Most or all of the time	*2.4 (0.73)	1.6 (0.06)	1.5 (0.14)	1.1 (0.27)
Some of the time	7.1 (1.37)	3.1 (0.09)	3.5 (0.23)	4.1 (0.58)
Feel like everything is an effort:				
Most or all of the time	7.9 (1.48)	3.9 (0.11)	6.1 (0.33)	2.8 (0.48)
Some of the time	8.5 (1.43)	6.6 (0.14)	7.1 (0.35)	7.1 (0.73)
Feel worthless:				
Most or all of the time	*3.1 (1.04)	1.5 (0.06)	1.5 (0.16)	0.9 (0.22)
Some of the time	3.9 (0.98)	2.6 (0.08)	2.8 (0.20)	2.5 (0.49)

See footnotes at end of table.

Table 5. Age-adjusted percentages (with standard errors) of adults 18 years of age and over with feelings of psychological distress, by race: United States, 1999–2003—Con.

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Female	Percent ² (standard error)			
Serious psychological distress ³	11.8 (1.97)	3.4 (0.09)	4.0 (0.22)	2.4 (0.45)
Feel sad:				
Most or all of the time	10.2 (1.66)	3.5 (0.09)	5.1 (0.23)	3.0 (0.49)
Some of the time	14.9 (1.85)	9.2 (0.15)	12.3 (0.38)	9.6 (0.79)
Feel nervous:				
Most or all of the time	11.0 (2.28)	5.2 (0.11)	4.2 (0.21)	2.9 (0.40)
Some of the time	15.7 (1.96)	14.1 (0.18)	11.8 (0.33)	9.2 (0.74)
Feel restless:				
Most or all of the time	13.0 (2.39)	5.5 (0.11)	6.1 (0.27)	2.8 (0.43)
Some of the time	16.0 (1.79)	12.9 (0.18)	12.6 (0.37)	7.8 (0.71)
Feel hopeless:				
Most or all of the time	9.3 (1.38)	2.3 (0.07)	2.6 (0.16)	2.0 (0.42)
Some of the time	8.2 (1.37)	4.4 (0.10)	5.4 (0.26)	4.2 (0.53)
Feel like everything is an effort:				
Most or all of the time	11.3 (1.54)	5.0 (0.11)	8.0 (0.31)	5.1 (0.62)
Some of the time	15.6 (1.77)	8.6 (0.14)	9.7 (0.30)	7.1 (0.65)
Feel worthless:				
Most or all of the time	8.5 (1.47)	2.0 (0.07)	2.3 (0.16)	1.5 (0.38)
Some of the time	7.8 (1.21)	3.5 (0.08)	3.8 (0.22)	3.7 (0.54)

* Figure does not meet standard of reliability or precision. Estimates preceded by an asterisk have a relative standard error of greater than 30% but less than 50% and should be used with caution.

¹The category "race" refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Denominator for each percent excludes persons with unknown characteristic.

³Serious psychological distress: six psychological distress questions are included in the Sample Adult component. These questions ask how often a respondent experienced certain symptoms of psychological distress during the past 30 days. The response codes (0–4) of the six items for each person are summed to yield a scale with a 0 to 24 range. A value of 13 or more for this scale is used here to define serious psychological distress.

NOTE: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over.

Table 6. Age-adjusted percent distributions (with standard errors) of respondent-assessed health status, by race for adults 18 years of age and over: United States, 1999–2003

Selected characteristic	Race ¹			
	American Indian or Alaska Native	White	Black or African American	Asian
Both sexes				
Percent distribution ² (standard error)				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Excellent	24.9 (1.83)	32.3 (0.22)	24.3 (0.40)	32.9 (0.87)
Very good	25.6 (1.68)	32.9 (0.17)	27.9 (0.38)	32.9 (0.87)
Good	28.9 (1.80)	24.0 (0.17)	28.7 (0.40)	24.4 (0.85)
Fair	12.7 (1.18)	8.1 (0.10)	14.2 (0.31)	7.5 (0.52)
Poor	8.0 (1.23)	2.8 (0.07)	5.0 (0.20)	2.3 (0.30)
Male				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Excellent	27.7 (2.36)	33.7 (0.28)	27.4 (0.60)	34.9 (1.28)
Very good	23.4 (2.12)	32.4 (0.25)	27.9 (0.60)	33.2 (1.30)
Good	28.5 (2.76)	23.4 (0.23)	26.5 (0.61)	23.7 (1.18)
Fair	12.1 (1.84)	7.8 (0.14)	13.3 (0.46)	6.8 (0.70)
Poor	8.3 (1.46)	2.8 (0.10)	4.8 (0.30)	1.4 (0.32)
Female				
Total	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)
Excellent	22.1 (2.13)	30.9 (0.26)	21.8 (0.45)	30.9 (1.14)
Very good	27.9 (2.62)	33.4 (0.21)	27.9 (0.46)	32.5 (1.14)
Good	29.3 (2.17)	24.6 (0.21)	30.3 (0.49)	25.2 (1.16)
Fair	13.2 (1.51)	8.4 (0.13)	14.8 (0.37)	8.2 (0.77)
Poor	7.4 (1.80)	2.8 (0.08)	5.1 (0.24)	3.1 (0.47)

¹The category race refers to persons who indicated only a single race group. Persons who indicated a single race other than the groups shown are not shown separately due to small sample sizes. Persons who indicated multiple race or unknown race are excluded from the table.

²Denominator for each percent distribution excludes persons with unknown respondent-assessed health status.

NOTE: Estimates are age adjusted to the year 2000 standard U.S. population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over.

Technical Notes

Sample design

The National Health Interview Survey (NHIS) is a cross-sectional household interview survey of the U.S. civilian noninstitutionalized population. Data are collected continuously throughout the year in all 50 States and the District of Columbia. The NHIS uses a multistage, clustered sample design to produce national estimates for a variety of health indicators. Information on basic health topics is collected for all household members, if necessary, by proxy from one adult family member. Additional information is collected for one randomly selected adult and one randomly selected child in each family. Self-response is required for the Sample Adult questionnaire except in rare cases where sample adults are physically or mentally incapable of responding for themselves. Interviews are conducted in the home using a computer-assisted personal interview (CAPI), with telephone interviewing permitted for followup, if necessary.

Response rates

Combining years 1999–2003, NHIS interviews were completed in 187,220 households and 190,472 families with 158,397 adults aged 18 years and over completing the Sample Adult questionnaire. The final response rate for the 1999–2003 combined sample adult files was 72.8%. The household response rate for the combined years was 88.8%. Procedures used in calculating response rates for combined data years are described in detail in “Appendix I” of the Survey Description of the NHIS data files (11–15). The number of completed household, family, and sample adult interviews by year and household and sample adult response rates by year are in [table I](#).

Item nonresponse

Item nonresponse for each of the sociodemographic indicators shown in this report was about 1% or less, with the exception of poverty status, which is based on detailed family income asked for in the family component of the

Table I. Completed interviews and response rates by year: National Health Interview Survey, 1999–2003

Interviews and rates	Year				
	1999	2000	2001	2002	2003
	Number				
Completed interviews					
Household	37,573	38,633	38,932	36,161	35,921
Family	38,171	39,264	39,633	36,831	36,573
Sample adult	30,801	32,374	33,326	31,044	30,852
	Percent				
Response rate					
Household	87.6	88.9	88.9	89.6	89.2
Sample adult	69.6	72.1	73.8	74.3	74.2

questionnaire. Item nonresponse for the poverty indicator was 24.2%. Item nonresponse for the health behavior, health care, conditions, and other health related items ranged from 0.1% to 4.5%. The denominators for statistics shown in [tables 2–6](#) exclude persons with unknown health-related characteristics for a given table. Results for persons with unknown sociodemographic characteristics are not shown separately, but are included in the total of [table 1](#).

Age adjustment

Data shown in this report were age adjusted using the year 2000 U.S. standard population provided by the U.S. Census Bureau (17,18). Age adjustment was used to allow comparison among various population subgroups that have different age structures. This is particularly important for demographic characteristics such as race and ethnicity, education, and

marital status. It is also helpful for other characteristics. The following age groups were used for age adjustment: 18–24 years, 25–44 years, 45–64 years, and 65 years and over ([table II](#)). Health insurance is restricted to certain age groups and is, therefore, adjusted accordingly.

Estimates were calculated using software for statistical analysis of correlated data (SUDAAN) (16). The SUDAAN procedure PROC DESCRIPT was used to produce age-adjusted percents and their standard errors.

Tests of significance

Statistical tests performed to assess significance of differences in the estimates were two-tailed with no adjustments for multiple comparisons. The test statistic used to determine statistical significance of differences between two percents was

$$Z = \frac{|X_a - X_b|}{\sqrt{S_a^2 + S_b^2}}$$

Table II. Age distributions used in age adjusting data shown in tables 1–6 and figures 1–5

Age	2000 U.S. standard population (in thousands)
18 years and over	203,851
18–24 years	26,258
25–44 years	81,892
45–64 years	60,991
65 years and over	34,710
Health insurance	
18–64 years	169,141
18–24 years	26,258
25–44 years	81,892
45–64 years	60,991

where X_a and X_b are the two percents being compared, and S_a and S_b are the standard errors of those percents. The critical value used for two-sided tests at the 0.05 level of significance was 1.96.

Relative standard error

Estimates with a relative standard error greater than 30% but less than 50% are considered unreliable and are indicated with an asterisk (*). Estimates with a relative standard error greater than or equal to 50% have been suppressed and are indicated with a double asterisk (**). The relative standard errors are calculated as follows:

$$\text{Relative standard error} \\ \text{(as a percent)} = (\text{SE}/\text{Est}) 100,$$

where SE is the standard error of the estimate, and Est is the estimate.

Definition of terms

Demographic terms

Age—The age recorded for each person is the age at the last birthday.

Education—The categories of education are based on the years of school completed or highest degree obtained for persons aged 18 years and over. Respondents were shown a flash card to choose an appropriate category. Only years completed in a school that advances a person toward an elementary or high school diploma, General Educational Development high school equivalency diploma (GED), college, university, or professional degree are included. Education in other schools or home schooling is counted only if the credits are accepted in a regular school system.

Health insurance coverage—NHIS respondents were asked about their health insurance coverage at the time of the interview. Respondents reported whether they were covered by private insurance (obtained through the employer or workplace, purchased directly, or through a local or community program), Medicare, Medigap, (supplemental Medicare coverage), Medicaid, State Children's Health Insurance Program (CHIP), Indian Health Service (IHS), military

coverage (including VA, TRICARE, or CHAMP-VA), a State-sponsored health plan, another government program, and/or any single service plans. This information was used to create a health insurance hierarchy that consisted of three mutually exclusive categories. Persons with more than one type of health insurance were assigned to the first appropriate category in the following hierarchy: private coverage, public coverage (includes persons with Medicare, Medigap, Medicaid, SCHIP, IHS, military coverage, a State-sponsored health plan, and/or another government program), and uninsured (also includes persons with only single service plans).

Indian Health Service (IHS) geographic regions—This category consists of five regions that contain 36 States that are typically covered by the IHS administrative areas. An additional category of "Not IHS region" was included so all 50 States and the District of Columbia would be accounted for. The five regions and the additional category are as follows:

<i>Region</i>	<i>States included</i>
Alaska	Alaska
East	Alabama, Connecticut, Florida, Kansas, Louisiana, Maine, Massachusetts, Mississippi, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Texas
Northern Plains	Indiana, Iowa, Michigan, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming
Pacific Coast	California, Idaho, Oregon, and Washington
Southwest	Arizona, Colorado, Nevada, New Mexico, and Utah
Not IHS region	Arkansas, Delaware, District of Columbia, Georgia,

Hawaii, Illinois, Kentucky, Maryland, Missouri, New Hampshire, New Jersey, Ohio, Vermont, Virginia, and West Virginia

Marital status—Respondents were asked to choose a marital status category most appropriate for their marital situation. In some cases, persons reporting their marital status as "married" may have been living in common-law marital unions. Alternatively, these individuals could have identified their marital status as "living with partner." Adults who were living with a partner were considered to be members of the same family (as if married) and are categorized as "cohabiting" in the table and text of this report. The distinction between "married" and "living with partner" was made by the respondent.

Race—The 1997 Office of Management and Budget (OMB) Federal guidelines (19) for reporting race require that persons of "single race" be distinguished from persons of "multiple race." "Single race" refers to persons who indicated only a single race group. Estimates for the smaller subcategories of single race persons and multiple race combinations can only be reported to the extent that the estimates meet the requirements for confidentiality and statistical reliability. In this report, four categories are shown for single race individuals (American Indian or Alaska Native, single race; white, single race; black or African American, single race; and Asian, single race). Other subcategories of single race persons and multiple race persons are not shown due to statistical unreliability as measured by the relative standard errors of the estimates.

The text in this report uses shorter versions of the new OMB race terms for conciseness, and the tables use the complete terms. For example, the category "Black or African American, single race" in the table is referred to as "black" in the text.

Place of residence—Metropolitan statistical area (MSA), a term first used in 1983, was defined by the U.S. Office

of Management and Budget and is used by the U.S. Census Bureau to classify geographic areas (20). The categories shown in this report are: (a) “MSA, central city,” which generally refers to cities with populations of 50,000 or more; (b) “MSA, not central city,” which refers to communities adjacent to the central city of an MSA that have a high degree of economic and social integration with the central city; and (c) “Not MSA,” which refers to more rural areas of the country. The classification of areas in the 1999–2003 NHIS is based on data from the 1990 decennial census.

Poverty status—Poverty status is based on family income and family size using the U.S. Census Bureau’s poverty thresholds. “Poor” persons are defined as below the poverty threshold, “near poor” persons have family incomes of 100% to less than 200% of the poverty threshold, and “not poor” persons have family incomes that are 200% of the poverty threshold or greater.

Region—In the geographic classification of the U.S. population, States are grouped into four regions used by the U.S. Census Bureau:

Region	States included
Northeast	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania
Midwest	Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, and Nebraska
South	Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, Arkansas, and Texas
West	Washington, Oregon, California, Nevada, New Mexico, Arizona, Idaho, Utah, Colorado, Montana,

Wyoming, Alaska, and Hawaii

Urban or rural—The assignment of “urban” or “rural” is based on a block’s 1990 census designation.

Health behavior terms

Alcohol consumption status

Lifetime abstainer—Adults who had fewer than 12 drinks in entire lifetime.

Former drinker—Adults who had 12 drinks or more in lifetime, but had no drinks in the past year.

Current infrequent or light drinker—Adults who had at least 12 drinks in their lifetime and 1–11 drinks in the past year (infrequent) or three drinks or fewer per week, on average (light).

Current moderate or heavier drinker—Adults who had at least 12 drinks in their lifetime and more than three drinks per week up to 14 drinks per week, on average for men and more than three drinks per week up to seven drinks per week, on average for women (moderate) or more than 14 drinks per week, on average for men and more than seven drinks per week, on average for women (heavier).

Body weight status

Body weight status is based on body mass index (BMI), which is calculated from self-reported height and weight without shoes. BMI is calculated as weight divided by height² using metric units (i.e., kilograms/meter²).

Underweight—Adults with a body mass index of less than 18.5.

Healthy weight—Adults with a body mass index of at least 18.5, but less than 25.

Overweight, but not obese—Adults with a body mass index of at least 25, but less than 30.

Obese—Adults with a body mass index of 30 or more.

Smoking status

Never—Adults who never smoked a cigarette or who smoked fewer than 100 cigarettes in their entire lifetime.

Former—Adults who had smoked at least 100 cigarettes in their lifetime, but did not currently smoke.

Current—Adults who had smoked at least 100 cigarettes in their lifetime and currently smoked cigarettes every day or some days.

Leisure-time physical activity

Never or unable—Never engaging or being unable to engage in light or moderate leisure-time physical activities for at least 10 minutes that cause light sweating or a slight to moderate increase in breathing or heart rate and never engaging or being unable to engage in vigorous leisure-time physical activities for at least 10 minutes that cause heavy sweating or large increases in breathing or heart rate.

Some activity but less than regular—Engaging in light or moderate leisure-time physical activities that cause light sweating or a slight to moderate increase in breathing or heart rate and last 10–29 minutes each time and/or are done less than five times per week, and/or engaging in vigorous leisure-time physical activities that cause heavy sweating or large increases in breathing or heart rate and are done 10–19 minutes each time and/or less than three times per week.

Regular activity—Engaging in light or moderate leisure-time physical activities that cause light sweating or a slight to moderate increase in breathing or heart rate and occur five or more times per week for at least 30 minutes each time, and/or engaging in vigorous leisure-time physical activities that cause heavy sweating or large increases in breathing or heart rate and occur three or more times per week for at least 20 minutes each time.

Health care utilization terms

Doctor or other health care professional—This refers to medical doctors (MDs) and osteopathic physicians (DOs), including general practitioners as well as specialists, dermatologists, psychiatrists, ophthalmologists, psychologists, nurses, physical therapists, and chiropractors.

Usual place for health care—Usual place of health care was based on a question that asked whether respondents had a place that they usually went when they were sick or needed advice about

their health. These places include a walk-in clinic, doctor's office, clinic, health center, health maintenance organization, hospital emergency room or outpatient clinic, or a military or Veterans' Administration (VA) health care facility.

Time since last physician contact or other health professional contact—The time since the last contact with a physician or other health care professional is the length of time prior to the week of interview since the respondent last consulted a physician or other health care professional in person or by telephone for health treatment or advice of any type. This may include a contact while a patient is in the hospital as well as a contact from a home visit.

Time since last dental contact—The time since last dental contact is the time since the respondent last saw or talked to a dentist, including dental specialists as well as dental hygienists, prior to the week of interview.

Human immunodeficiency virus (HIV) testing status—This variable is based on a question that asked whether the respondent has ever had his/her blood tested for HIV. This question for 2000–03 is slightly different than the one used in 1997–99 that asked about acquired immunodeficiency syndrome (AIDS) virus testing status (not HIV).

Chronic condition—This category includes any specific illness (physical or mental) or injury that (a) had an onset of more than 3 months before the date of interview, or (b) is a type of condition that ordinarily lasts more than 3 months. Examples of conditions considered chronic regardless of onset are diabetes, emphysema, and arthritis.

Functional limitation—This category is based on any degree of difficulty the respondent had in performing specific tasks (e.g., walking a quarter of a mile, walking up 10 steps, standing for 2 hours, carrying a 10-pound object) and engaging in social activities and recreation without the assistance of another person or using special equipment because of a physical, mental, or emotional problem.

Serious psychological distress—Six psychological distress questions are included in the Sample Adult Core component. These questions ask how

often a respondent experienced certain symptoms of psychological distress during the past 30 days. The response codes (0–4) of the six items for each person are summed to yield a scale with a 0 to 24 range. A value of 13 or more for this scale is used to define serious psychological distress (21).

Respondent-assessed health status—Respondent-assessed health status was based on the question, “Would you say your health, in general, was excellent, very good, good, fair, or poor?” Information was obtained from all respondents with proxy responses allowed for adults not taking part in the interview and required for all children 17 years of age and under.

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