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# Vital and Health Statistics

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## Dental Services and Oral Health: United States, 1989

Series 10:  
Data From the National Health Survey  
No. 183

Includes estimates on volume of dental visits, time interval since last dental visit, edentulous population, private dental health insurance, use of fluoride products and dental sealants, and dentition status. Estimates are based on data collected in the National Health Interview Survey of 1989.

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Centers for Disease Control and Prevention  
National Center for Health Statistics

Hyattsville, Maryland  
December 1992  
DHHS Publication No. (PHS) 93-1511

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### Suggested Citation

Bloom B, Gift HC, Jack SS. Dental services and oral health; United States, 1989. National Center for Health Statistics. Vital Health Stat 10(183). 1992.

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### Library of Congress Cataloging-in-Publication Data

Dental service and oral health: United States. 1989.  
p. cm. -- (Vital and health statistics. Series 10, Data from the National Health Survey; no. 183) (DHHS publication; no. (PHS) 93-1511)  
By Barbara Bloom, Helen C. Gift, and Susan S. Jack.  
"December 1992."  
ISBN 0-8406-0469-6  
1. Dental public health--United States--Statistics. 2. Dental care--United States--Utilization--Statistics. 3. Dental surveys--United States.  
4. United States--Statistics, Medical. I. Bloom, Barbara, 1950-. II. Gift, Helen C. III. Jack, Susan S. IV. National Center for Health Statistics (U.S.) V. Series. VI. Series: DHHS publication no. (PHS) 93-1511.  
[DNLM: 1. Dental Health Service--United States--statistics. 2. Mouth Diseases--United States--statistics. 3. Oral Health--United States--statistics. W2 A N148v no. 183] RA407.3A346 no. 183 [RK 52.2] 362.1'0973021 s--dc20 [362.1'976'00973021] DNLM/DLC  
for Library of Congress

92-48918  
CIP

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### *Cooperation of the U.S. Bureau of the Census*

Under the legislation establishing the National Health Interview Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the U.S. Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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**Symbols**

- Data not available
  - ... Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standard of reliability or precision (more than 30-percent relative standard error in numerator of percent or rate)
  - # Figure suppressed to comply with confidentiality requirements
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# Dental Services and Oral Health

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## Introduction

In 1989, the National Health Interview Survey (NHIS), a cross-sectional household survey conducted by the National Center for Health Statistics (NCHS), collected data on the oral health of the civilian noninstitutionalized population of the United States. Some items were repeated from previous years of the NHIS, including the number of dental visits, the interval since the last dental visit, edentulousness (the loss of all natural teeth), the use of fluoride products, dental sealants, and private dental insurance. Other items were addressed for the first time on the NHIS, including the reasons for not visiting the dentist in the past year and time lost from work or school for dental visits or problems. Additional special health topics for 1989 were health insurance, orofacial pain, diabetes, mental health, digestive disorders, immunization, and AIDS knowledge and attitudes.

The NHIS enables systematic monitoring of prevention and early intervention activities of individuals and families. This is particularly important for national initiatives such as *Healthy People 2000*. *Healthy People 2000* includes 16 oral health objectives and 20 subobjectives directed toward reduced oral disease, increased oral health screening, access to care, and appropriate use of protective dental sealants and fluorides, particularly among special target populations. The 1989 NHIS provides an opportunity to establish timely baseline data for

several of these objectives and to demonstrate progress in preventive behaviors during the 1980's, both for the overall population and for targeted subgroups of minorities and older adults. Analyses of the 1989 NHIS show progress on access to regular care, preventive behaviors (including use of fluorides and dental sealants), and retention of teeth. The 1989 NHIS data set provides information that helps direct health promotion strategies toward continued improvements until the year 2000.

This report contains national estimates of the number and timing of dental visits, the oral health practices of and the use of fluoride products and dental sealants by children, the edentulous population, private dental insurance coverage, and the use of dental services by persons with and without private dental insurance. Data on the use of dental services and other topics from earlier years of the NHIS are available in several reports from the NCHS (1-5).

In addition to written reports from the NHIS, data also are available on microdata tapes. Public use tapes are available on oral health and the many other special health topics included in the NHIS from 1973 through 1989. Information on these tapes is available from the Systems and Programming Branch, Division of Health Interview Statistics, National Center for Health Statistics, 6525 Belcrest Road, Hyattsville, MD 20782.

# Highlights

- In 1989 more than half the population 2 years of age and older (57.2 percent) reported having had a dental visit in the past year.
- Approximately 11 million Americans 2 years of age and older had never had a dental visit.
- Proportionately, many more black persons than white persons (6.9 and 4.2 percent, respectively) had never had a dental visit. Three times as many Hispanic persons as non-Hispanic persons (12.6 and 3.9 percent, respectively) had never had a dental visit.
- Americans 2 years of age and over made an estimated 492 million dental visits in 1989. The estimated number of dental visits made by persons 65 years of age and over was 59.1 million, an increase from 32.5 million in 1980.
- White women had a higher dental visit rate (2.4) than did their male counterparts (2.1); however, white males still had a significantly higher visit rate than did black females (1.4) and black males (1.0).
- Of the population 2 years of age and over, 40.5 percent, or 95 million persons, were reported to have private dental insurance coverage. Dental coverage as part of a comprehensive insurance plan was reported by 32.7 percent; 6.8 percent held policies for dental care only; and 1 percent said they were covered by both types of plan.
- A larger proportion of white persons (41.8 percent) than of black persons (32.4 percent) had private dental insurance coverage. Non-Hispanics were more likely to be covered than Hispanics (41.5 and 29.7 percent, respectively).
- In 1989, 21.9 percent of persons 45 years of age and over had lost all their natural teeth (16.5 million persons), a decrease from 24.0 percent (18 million) in 1986. However, most edentulous persons were 65 years of age and over. Edentulousness was relatively more common among persons who had a family income less than \$10,000.
- Overall, a greater proportion of white than black Americans were edentulous (7.9 percent compared with 6.0 percent). In the 75-years-and-over age group, however, edentulism was 25 percent higher among black persons than among white persons (53.0 and 41.9 percent, respectively).
- Comparisons between Hispanic and non-Hispanic populations aged 65 years and under show significantly less edentulism among Hispanic persons. There was no significant difference in the percentage of Hispanic and non-Hispanic persons aged 65 years and over who were edentulous.
- In 1989 about 11 percent of children 2–17 years old had had dental sealants applied. The proportion of white children who had had dental sealants applied (12.4 percent) was triple the proportion of black children with sealants (4.2 percent). Similarly, the percentage of non-Hispanic children with sealants was more than double that of Hispanic children (11.7 and 5.1 percent, respectively).

# Source and limitations of the data

The information from the National Health Interview Survey (NHIS) presented in this report is based on data collected in a continuing nationwide household-interview survey. Each week a probability sample of the civilian noninstitutionalized population of the United States is interviewed by personnel of the U.S. Bureau of the Census. Information is obtained about the health and other characteristics of each member of the household.

The 1989 NHIS was conducted with a full sample, composed of 45,711 households containing 116,929 persons. The total noninterview rate for the basic survey was 5.1 percent: 3.0 percent due to respondent refusal, and the remainder primarily due to failure to locate an eligible respondent at home after repeated calls.

The interviewed sample for the 1989 dental health topic included 109,603 persons. The noninterview rate for this section was 3.1 percent. The combined overall response rate, 92.0 percent, can be estimated as the product of the response rate for the basic questionnaire (94.9 percent) and the dental health questionnaire (96.9 percent).

For this report, most information about oral health was obtained for all persons 2 years of age and over ( $n=109,603$ ) because younger children are still growing their first teeth and rarely, if ever, visit a dentist. Data on the use of fluoride supplements, however, is presented for all children 17 years of age and below. In addition, one question on participation in school fluoride mouthrinse programs was limited to children 2–17 years of age.

Because the estimates in this report are based on a sample of the population, they are subject to sampling errors. The section of appendix I entitled "Reliability of the estimates" presents formulas for calculating standard errors and instructions for their use. Persons making comparisons of the 1989 and 1986 estimates should note that the sampling errors for the 1986 estimates are larger than those in other years. This is because the 1986 NHIS was conducted with a sample approximately half the size of the full sample (5).

All survey information was collected from family members residing in the household. When possible, all adult family members participate in the interview. However, proxy responses were accepted for family members who were not at home and were required for all children and family members who did not meet the NHIS criteria for a respondent. Although a considerable effort was made to ensure accurate reporting, the information from both proxy and self-respondents may be inaccurate. This

inaccuracy may be because the respondent was unaware of relevant information, had forgotten it, did not wish to reveal it to an interviewer, or did not understand the intended meaning of a question.

The major concepts for which estimates are shown are defined in appendix II. Appendix III includes a copy of the questions used in 1989 to obtain oral health information. The entire questionnaire for 1989 is presented in *Vital and Health Statistics*, Series 10, Number 176 (6).

Most of the detailed tables (tables 1–15) in this report appear in parallel sets of three, showing dental visits and oral health variables by groups of demographic, socioeconomic, and health-related factors. Table 1 shows the number and table 2 the percent distribution of persons by interval since their last dental visit, according to various demographic variables. Tables 3 and 4 show the same interval data by socioeconomic factors, and tables 5 and 6, by health-related factors. Tables 7–9, 10–12, and 13–15 show other oral health variables by the same three groups of demographic, socioeconomic, and health-related variables. Table 16 presents estimates on the reasons people did not visit the dentist in the past year. Table 17 concentrates on the preventive practices of children 2–17 years of age. Table 18 shows information on the dentate, partially dentate, and edentulous population. Table 19 focuses on the interrelated factors of education and income and the use of dental services. Table 20 presents data on private dental insurance status and measures of dental health. Tables 21–24 show the populations used to calculate the unstandardized rates used in this report.

Since the age distributions in the various population groups may differ considerably, the data have been age-adjusted to a standard population. Age-adjusted data are presented in text tables C–O and R. The section of appendix I entitled "Adjustment of rates" describes the method for calculating age adjustment, age categories, and the standard populations used.

In this report, terms such as "similar" and "no difference" mean that there is no statistically significant difference between the measures being compared. Terms relating to difference (for example, "greater than" and "less than") indicate that differences are statistically significant. The *t*-test, with a critical value of 1.96 (0.05 level of significance), was used to test all comparisons discussed. Lack of comment regarding the difference between any two statistics does not mean the difference was tested and found not to be significant.



# Selected topics

## Dental data: Trends 1983, 1986, and 1989

The proportion of the population 2 years old and over with a recent dental visit (within the past year) increased from 55.0 percent in 1983 to 57.1 percent in 1986, but remained unchanged overall (57.2 percent) in 1989. There were no significant changes in the proportion with a recent visit among persons of different age categories from 1986 to 1989; however, there were decreases among those with family incomes of \$10,000–\$19,000 and \$20,000–\$34,999 (table A).

The average number of dental visits per person per year was 1.9 in 1983, 2.0 in 1986, and 2.1 in 1989. The rate of dental visits was lower in 1989 for black persons and for those with family incomes of \$20,000–\$34,999.

The estimated number of dental visits made by persons 65 years of age and over increased from 32,498,000 in 1980, to 39,574,000 in 1983, to 58,381,000 in 1986, to 59,145,000 in 1989.

In 1989 the proportion of persons 45 years of age or older who were edentulous was 21.9 percent (16.5 million

persons), a decrease from 24.0 percent (18 million) in 1986 (table B). This continues the downward trend in the rate of edentulism over the past 20 years.

## Interval since last dental visit

There were wide variations among population subgroups in the proportions reporting dental visits in the year before the interview. Well over half the population (57.3 percent, or about 135 million persons) reported having a dental visit in the year prior to the interview (tables C, 1–6). Using age-adjusted data (table C), the characteristics associated with a relatively high proportion of persons with a recent dental visit were female, white, non-Hispanic, suburban, college educated, with a family income over \$35,000, covered by private dental insurance, and in excellent or very good health.

An important measure of inadequate dental care is the proportion of the population who have never visited a dentist. Although the vast majority of Americans over the age of 2 had visited a dentist, 11 million Americans had not. Proportionately, many more black persons than white persons (6.9 and 4.2 percent, respectively) had never had a dental visit. Three times as many Hispanic persons as non-Hispanic persons (12.6 and 3.9 percent, respectively) had never visited a dentist.

The reported use of dental care services varied greatly by age as well as by other demographic characteristics. While 32.1 percent of children 2–4 years of age had had a recent dental visit, 55 percent had not. Children 5–17 years of age were most likely to have reported a visit within the past year, followed by those aged 25–44 years. At age 45 and over, the proportion with a recent visit decreased with age, mostly due to increased edentulism in this age group.

Overall, females were more likely than were males to have had a visit in the past year (59.4 and 54.9 percent, respectively). A smaller proportion of black persons than white persons (44.5 and 59.3 percent, respectively) had recent dental visits. This difference became more pronounced with increasing age: By 65 years of age, black persons were half as likely as white persons to have had a recent dental visit.

In general, Hispanic persons were less likely than non-Hispanic persons to have visited a dentist in the past year, due primarily to the significantly lower usage rates of Mexican-Americans. Just over one-fifth of all Hispanic

**Table A. Percent of persons 2 years of age and over with dental visits in past year and number of visits per person per year, by selected characteristics: United States, 1983, 1986, and 1989**

Characteristic	Persons with visit in past year			Visits per person per year		
	1983	1986	1989	1983	1986	1989
Age <sup>1</sup>	Percent			Number		
All ages . . . . .	55.0	57.1	57.2	1.9	2.0	2.1
2–4 years . . . . .	28.4	31.3	32.1	0.7	0.7	0.9
5–17 years . . . . .	67.0	70.3	69.0	2.5	2.4	2.4
18–34 years . . . . .	57.0	58.0	56.9	1.7	1.8	1.8
35–54 years . . . . .	57.4	60.5	61.4	2.1	2.1	2.3
55–64 years . . . . .	51.3	51.2	54.0	2.1	2.5	2.4
65 years and over . . . . .	38.6	41.7	43.2	1.5	2.1	2.0
Sex						
Male . . . . .	53.0	54.9	54.9	1.7	1.9	1.9
Female . . . . .	56.9	59.2	59.4	2.1	2.2	2.2
Race						
White . . . . .	57.0	59.2	59.3	2.0	2.1	2.2
Black . . . . .	41.8	43.6	44.5	1.2	1.4	1.2
Family income						
Less than \$10,000 . . . . .	38.8	40.9	40.9	1.2	1.3	1.3
\$10,000–\$19,999 . . . . .	47.5	47.5	43.4	1.5	1.6	1.5
\$20,000–\$34,999 . . . . .	61.4	61.0	58.3	2.3	2.3	2.0
\$35,000 and over . . . . .	74.0	73.5	73.0	2.7	2.7	2.8

<sup>1</sup>Includes persons of other races and unknown income (not shown separately).

**Table B. Percent of persons 45 years of age and over who were edentulous, by age, sex, and race: United States, 1986 and 1989**

Characteristic	Total 45 years and over		45-54 years		55-64 years		65-74 years		75 years and over	
	1986	1989	1986	1989	1986	1989	1986	1989	1986	1989
Population <sup>1</sup>	24.0	21.9	11.7	10.0	21.7	19.0	29.7	28.4	46.3	43.0
Sex										
Male	22.4	20.7	11.3	9.7	20.4	18.4	28.3	28.3	47.6	43.2
Female	25.4	22.9	12.0	10.4	22.7	19.5	30.8	28.5	45.6	42.8
Race										
White	24.1	22.1	12.0	10.4	21.8	19.0	29.4	28.4	45.5	41.9
Black	24.6	22.1	10.5	8.6	22.1	20.4	33.0	29.1	56.8	53.0

<sup>1</sup>Includes persons of other races (not shown separately).

**Table C. Age-adjusted percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected demographic characteristics: United States, 1989**

Characteristic	Interval since last dental visit					
	All intervals <sup>1</sup>	Less than 1 year	1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
All ages	100.0	57.3	9.5	12.3	11.0	4.6
Sex						
Male	100.0	54.7	9.6	13.4	12.1	4.9
Female	100.0	59.9	9.4	11.2	10.1	4.4
Race						
White	100.0	59.5	9.1	11.6	10.5	4.4
Black	100.0	43.2	12.3	16.9	15.1	5.8
Other	100.0	51.6	9.7	14.0	10.8	6.7
Hispanic origin						
Non-Hispanic	100.0	58.5	9.4	12.0	10.8	4.1
Hispanic	100.0	46.0	10.5	14.6	13.0	9.7
Mexican-American	100.0	40.5	8.9	15.3	15.8	13.1
Other Hispanic	100.0	53.2	12.3	13.7	9.9	5.1
Place of residence						
MSA	100.0	58.4	9.4	11.9	10.1	4.5
Central city	100.0	54.9	10.1	12.9	10.9	5.1
Not central city	100.0	60.6	9.0	11.3	9.6	4.2
Not MSA	100.0	53.6	9.7	13.6	14.1	5.1
Geographic region						
Northeast	100.0	60.7	10.4	10.7	9.0	3.5
Midwest	100.0	61.5	8.3	11.3	10.7	3.5
South	100.0	52.2	10.3	13.9	13.6	5.9
West	100.0	57.8	8.6	12.3	9.1	4.9

<sup>1</sup>Includes unknown interval (not shown separately).

NOTE: MSA is metropolitan statistical area.

children 2-4 years of age had had a dental visit in the year prior to the interview, compared with almost one-third of all non-Hispanic children in the same age group. By 65 years of age, however, there was no statistical difference between the Hispanic and non-Hispanic usage rates (40.2 and 43.3 percent, respectively).

Family income, private dental insurance coverage, and educational attainment for adults were related to the use of dental services (tables 3 and 4). As family income level increased, so did the proportion of persons with a recent dental visit: 40.9 percent of those with a family income less than \$10,000 had a dental visit within the year prior to

the interview compared with 73.0 percent of those with a family income of \$35,000 or more. In the two lower income groups, however, the differences among income groups are only apparent among those over the age of 35.

Persons with private dental insurance were significantly more likely to have had a recent dental visit than were those without this type of insurance. Overall, 71.4 percent of those with coverage had had a recent dental visit, compared with 50 percent of those without coverage. Among those with coverage, the proportion with a recent visit was greatest among children 5-11 years of age and adolescents 12-17 years of age. This may be due

**Table D. Age-adjusted percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected socioeconomic characteristics: United States, 1989**

Characteristic	Interval since last dental visit					
	All intervals <sup>1</sup>	Less than 1 year	1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
Education level						
Percent distribution						
Less than 9 years . . . . .	100.0	30.6	9.0	18.4	30.6	5.9
9–11 years . . . . .	100.0	39.0	10.7	20.3	23.5	1.3
12 years . . . . .	100.0	54.6	10.6	15.0	14.4	0.5
13 years or more . . . . .	100.0	70.2	8.5	10.3	6.9	0.2
Family income						
Less than \$10,000 . . . . .	100.0	42.2	10.9	16.3	20.1	7.0
\$10,000–\$19,999 . . . . .	100.0	43.9	11.8	17.4	16.1	6.6
\$20,000–\$34,999 . . . . .	100.0	58.2	10.5	13.2	10.4	4.6
\$35,000 or more . . . . .	100.0	72.5	7.8	8.5	5.5	2.9
Dental insurance coverage						
Having private dental insurance . . . . .	100.0	70.4	8.7	9.2	6.6	3.3
Without private dental insurance . . . . .	100.0	50.8	10.7	15.4	14.2	6.0

<sup>1</sup>Includes unknown interval (not shown separately).

**Table E. Age-adjusted percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected health characteristics: United States, 1989**

Characteristic	Interval since last dental visit					
	All intervals <sup>1</sup>	Less than 1 year	1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
Assessed health status						
Percent distribution						
Excellent or very good . . . . .	100.0	61.4	9.3	11.2	9.0	4.3
Good . . . . .	100.0	51.9	10.1	13.9	12.6	5.8
Fair or poor . . . . .	100.0	45.1	10.0	16.6	17.4	5.9
Limitation of activity						
Unable to carry on usual activity . . . . .	100.0	46.6	9.8	15.6	16.6	5.1
Limited in amount or kind of major activity . . . . .	100.0	52.3	9.8	14.0	14.4	4.7
Limited, but not in major activity . . . . .	100.0	59.1	8.3	12.8	11.7	4.2
Not limited in activity . . . . .	100.0	58.5	9.5	12.0	10.1	4.6
Dentition status						
Dentate . . . . .	100.0	65.5	9.6	12.8	10.1	0.5
Edentulous . . . . .	100.0	14.3	6.4	19.8	55.2	0.4

<sup>1</sup>Includes unknown interval (not shown separately).

to the self-selecting factor that parents whose children need dental care may be more likely to select health insurance with dental coverage than are other persons. Another explanation could be that children with private dental insurance coverage may receive preventive, restorative, and orthodontic care that uninsured children do not receive.

For adults 22 years of age and over, the higher the educational level, the greater the proportion with a recent dental visit. About one-quarter of those with less than nine years of formal education had had a recent dental visit compared with nearly three-quarters of those with some college education. Among young adults 22–34 years of age, about 12 percent of those with 9 years of education or less had never visited a dentist, while less than 1 percent of those with some college had never had a dental visit.

## Number of visits in the past 12 months

The traditional measure for preventive orientation toward professional dental care is one or two dental visits during a year. The absence of a dental visit indicates inadequate dental care. Three or more visits in a year is usually indicative of a treatment regimen (7). Complex restorations and orthodontic care are examples of care requiring a series of visits. The proportion of the population with either three or more dental visits or no visits in the past year varied among the population subgroups (tables 7–9).

Using age-adjusted data, a larger proportion of females, white persons, non-Hispanics, persons with higher income and education, and persons with private dental insurance had three or more visits (tables F–H). Those with the largest proportion having three or more visits in

**Table F. Age-adjusted percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected demographic characteristics: United States, 1989**

Characteristic	Number of visits in past year				
	Total <sup>1</sup>	None	1	2	3 or more
Percent distribution					
All ages . . . . .	100.0	38.8	22.6	19.4	14.7
Sex					
Male. . . . .	100.0	41.4	22.1	18.6	13.5
Female. . . . .	100.0	36.3	23.1	20.2	15.8
Race					
White . . . . .	100.0	36.7	23.0	20.7	15.4
Black . . . . .	100.0	52.2	20.8	11.4	10.2
Other . . . . .	100.0	42.7	20.6	16.1	13.8
Hispanic origin					
Non-Hispanic . . . . .	100.0	37.7	22.9	20.0	15.0
Hispanic . . . . .	100.0	49.4	20.3	13.1	11.7
Mexican-American. . . . .	100.0	54.9	18.4	11.2	10.3
Other Hispanic. . . . .	100.0	42.4	23.0	15.7	13.3
Place of residence					
MSA. . . . .	100.0	37.2	22.6	19.9	15.2
Central city . . . . .	100.0	40.4	22.8	17.4	14.0
Not central city. . . . .	100.0	35.2	22.6	21.4	15.9
Not MSA . . . . .	100.0	44.2	22.7	17.7	12.8
Geographic region					
Northeast . . . . .	100.0	34.9	22.2	21.2	16.4
Midwest . . . . .	100.0	35.0	24.6	22.2	14.1
South . . . . .	100.0	45.0	22.1	16.9	12.7
West . . . . .	100.0	36.5	21.8	18.7	16.8

<sup>1</sup>Includes unknown number of visits (not shown separately).

NOTE: MSA is metropolitan statistical area.

**Table G. Age-adjusted percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected socioeconomic characteristics: United States, 1989**

Characteristic	Number of visits in past year				
	Total <sup>1</sup>	None	1	2	3 or more
Percent distribution					
Education level					
Less than 9 years . . . . .	100.0	66.1	14.8	7.6	7.8
9-11 years. . . . .	100.0	57.7	16.5	10.8	11.1
12 years . . . . .	100.0	41.8	20.6	18.3	15.1
13 years or more. . . . .	100.0	26.6	23.8	25.5	20.3
Family income					
Less than \$10,000 . . . . .	100.0	55.7	20.0	11.3	10.0
\$10,000-\$19,999. . . . .	100.0	53.5	20.1	12.7	10.6
\$20,000-\$34,999. . . . .	100.0	39.9	23.3	19.1	15.4
\$35,000 or more . . . . .	100.0	25.5	24.9	27.2	19.7
Dental insurance coverage					
Having private dental insurance. . . . .	100.0	28.9	24.2	26.2	19.3
Without private dental insurance . . . . .	100.0	47.9	22.5	15.4	12.3

<sup>1</sup>Includes unknown number of visits (not shown separately).

the past year were adolescents 12-17 years of age (19.4 percent). Adolescent girls (21.7 percent) were more likely than adolescent boys (17.3 percent) to have had three or more visits. Although oral health is improving in all age groups, oral disease requiring treatment increases during the teenage years. By ages 15-17, four-fifths of the Nation's children have had at least one decayed, missing, or filled tooth surface (DMFS). The average DMFS count increases from 1.12 among 10-year-old children to 4.96 among 17-year-olds (8). Also, this is the same group

receiving orthodontic treatment, if it is needed. Those groups with the largest proportion reporting no dental visits were 2-4-year-olds (62.2 percent), and those 75 years of age and over (59.6 percent).

Available epidemiological data show demographic and socioeconomic differences in DMFS numbers that parallel variations in the number of dental visits by these different groups. For example, the NHIS data indicate that white adolescents have more visits per year than black youth. Among 17-year-old white youths, 92 percent of

**Table H. Age-adjusted percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected health characteristics: United States, 1989**

Characteristic	Number of visits in past year				
	Total <sup>1</sup>	None	1	2	3 or more
Assessed health status		Percent distribution			
Excellent or very good . . . . .	100.0	34.9	23.9	21.6	15.3
Good . . . . .	100.0	44.0	21.2	16.2	13.9
Fair or poor . . . . .	100.0	51.7	17.5	13.0	14.0
Limitation of activity					
Unable to carry on usual activity . . . . .	100.0	48.7	17.4	14.5	14.1
Limited in amount or kind of major activity . . . . .	100.0	44.4	20.6	16.2	15.1
Limited, but not in major activity . . . . .	100.0	38.3	21.4	19.0	18.2
Not limited in activity . . . . .	100.0	37.5	23.1	20.1	14.7
Dentition status					
Dentate . . . . .	100.0	34.0	22.4	23.3	19.2
Edentulous . . . . .	100.0	85.2	6.6	2.1	5.4

<sup>1</sup>Includes unknown number of visits (not shown separately).

dental caries are filled, but only 71 percent of the dental caries of 17-year-old black youths are filled. Similarly, employed black adults have a higher rate of untreated dental caries than do white adults. Epidemiological data on tooth loss show the same correlations with income and education seen in these self-reported data (8,9).

Black persons were more likely than white persons to have had no dental visits in the past year and less likely to have had three or more visits. There were large differences between the races in the proportion of persons with three or more visits in the past year: The percent of white adolescents was nearly double that of black adolescents (21.2 and 11.2 percent, respectively), and the percent of white elderly persons was nearly triple that of black elderly persons (13.7 and 5.0 percent, respectively). As noted previously, Hispanic persons were more likely than non-Hispanic persons to have had no dental visits in the past year, due primarily to the significantly lower usage rates of Mexican-Americans (54.3 percent with no visits). Far more non-Hispanic adolescents than Hispanic adolescents saw a dentist three or more times in the past year (20.4 and 12.4 percent, respectively); however, among persons 65 years of age and over, no differences were reported between ethnic groups.

The higher the educational level of those 22 years of age and over, the higher the proportion having had three or more dental visits (table 8). Higher family income also was positively associated with an increased number of visits.

Almost half of the persons with no private dental insurance reported no dental visits in the past year compared with about one-quarter of the persons with coverage. Those with dental insurance were more likely than those without coverage to have had three or more visits in the past year (19.3 and 12.2 percent, respectively).

As might be expected, those people who currently had some natural teeth, the dentate population, were more likely to have had dental visits and, specifically, more likely

to have had three or more visits, than those who were edentulous at the time of the interview (19.2 and 4.6 percent, respectively). Furthermore, because oral diseases have a cumulative impact, restoration treatments associated with retained teeth may become increasingly complex and time consuming, thus increasing the likelihood of multiple visits.

## Dental visits per person per year

One of the more common measures of access to dental care is the average number of dental visits per person per year. The actual number of visits made to dentists is also of interest to those concerned with the provision of dental services (tables 10–12). The number of dental visits per person per year may be affected by the actual need for care, the perceived need for care, and the ability to pay for care.

Americans 2 years of age and over made an estimated 491,975,000 dental visits in 1989. Those with high rates of dental visits per person per year (age adjusted) included females, whites, non-Hispanics, those living in metropolitan statistical areas (MSA's) and in the West, those with higher family income and education, and those with private dental insurance (table J). Overall, females had a higher number of dental visits per person per year (2.2) than males had (1.9) (table 10). Female adolescents had 3.1 dental visits per person per year. In older age groups of females, the rate per year ranged from 1.8 dental visits per person among those 18–24 years of age to 2.5 dental visits per person among those 35–54 years of age. By 55 years of age and over, however, there was no significant difference in the visit rates of males and females.

**Table J. Age-adjusted number of dental visits per person per year, by sex and selected demographic characteristics: United States, 1989**

Characteristic	Total population	Male	Female
Number of visits per person			
All ages . . . . .	2.1	1.9	2.3
Race			
White . . . . .	2.2	2.1	2.4
Black . . . . .	1.2	1.0	1.4
Other . . . . .	2.0	1.9	2.2
Hispanic origin			
Non-Hispanic . . . . .	2.2	2.0	2.3
Hispanic . . . . .	1.6	1.5	1.6
Mexican-American . . . . .	1.5	1.6	1.3
Other Hispanic . . . . .	1.7	1.4	2.0
Place of residence			
MSA . . . . .	2.2	2.1	2.3
Central city . . . . .	1.9	1.8	2.1
Not central city . . . . .	2.4	2.2	2.5
Not MSA . . . . .	1.7	1.5	2.0
Geographic region			
Northeast . . . . .	2.2	2.0	2.4
Midwest . . . . .	2.1	2.1	2.2
South . . . . .	1.8	1.6	2.0
West . . . . .	2.4	2.3	2.6

NOTE: MSA is metropolitan statistical area.

**Table K. Age-adjusted number of dental visits per person per year, by sex and selected socioeconomic characteristics: United States, 1989**

Characteristic	Total population	Male	Female
Education level			
Number of visits per person			
Less than 9 years . . . . .	1.1	1.2	1.1
9-11 years . . . . .	1.5	1.3	1.6
12 years . . . . .	2.0	1.8	2.2
13 years or more . . . . .	2.8	2.6	2.9
Family income			
Less than \$10,000 . . . . .	1.3	1.1	1.4
\$10,000-\$19,999 . . . . .	1.4	1.3	1.6
\$20,000-\$34,999 . . . . .	2.1	1.8	2.3
\$35,000 or more . . . . .	2.8	2.7	3.0
Dental insurance coverage			
Having private dental insurance . . .	2.8	2.6	3.0
Without private dental insurance . . .	1.7	1.6	1.8

**Table L. Age-adjusted number of dental visits per person per year, by sex and selected health characteristics: United States, 1989**

Characteristic	Total population	Male	Female
Assessed health status			
Number of visits per person			
Excellent or very good . . . . .	2.2	2.1	2.4
Good . . . . .	1.8	1.8	2.0
Fair or poor . . . . .	1.9	1.5	2.2
Limitation of activity			
Unable to carry on usual activity . . .	2.1	2.0	2.1
Limited in amount or kind of major activity . . . . .	2.2	1.9	2.7
Limited, but not in major activity . . .	2.4	2.3	2.5
Not limited in activity . . . . .	2.1	2.0	2.2
Dentition status			
Dentate . . . . .	2.6	2.5	2.8
Edentulous . . . . .	0.8	0.7	0.9

White women had a higher dental visit rate (2.4) than did their male counterparts (2.1); however, white males still had a significantly higher visit rate than did black females (1.4) or black males (1.0). Different age and sex rate patterns appeared on examination of other demographic variables, such as place of residence and region.

For both genders, dental visit rates increased with income and level of education (table 11). Persons with private dental insurance had higher dental visit rates than persons without such coverage. The difference is particularly striking for adolescent girls, whose visit rates were nearly twice as high for those with insurance (4.1) than for those without coverage (2.2).

## Dental insurance

Private dental insurance has been a factor of increasing significance in the use of dental services since the 1970's. The public health policy assumption is that persons will be more likely to use dental services if some portion of the cost is covered by a third-party payer. In 1986 a

question was added to the National Health Interview Survey (NHIS) concerning health insurance coverage for dental care. Additional questions on this topic were asked in 1989. However, respondents with dental coverage were not asked if the dental care received was covered by the policy.

The tables in this report are restricted to private dental insurance. There are Federal and State assistance programs for dental care, but they are very limited. Medicare has no dental benefits. States are mandated to provide dental services to children under Medicaid, but very few States provide dental services to adults under that program. Medicaid expenditures for dental services decreased by more than one-third as a percent of overall Medicaid expenditures between 1975 and 1987. Moreover, only 32 percent of those eligible for Medicaid received dental care in a year (10). Despite these trends, Medicaid has continued to be an important enabling factor for dental services for some low-income persons, although it is not addressed in this report.

Of the total population 2 years of age and over, 40.5 percent, or 95 million persons, reported having some private dental insurance coverage at the time of the NHIS interview; 32.7 percent of the population reported coverage of any dental services other than oral surgery as part of a comprehensive insurance plan; 6.8 percent reported coverage of dental services by a single service plan, that is, a plan that covers only dental care; and 1 percent reported coverage by both types of plans. Approximately half the population, 51.9 percent or 122 million persons, did not have coverage, and it was not known whether or not the remaining 18 million persons had any insurance (tables M, 13-15). For an overwhelming proportion of the uninsured respondents the reason reported for not having health insurance was the high cost.

People between the ages of 35 and 54 were more likely than persons of other ages to have dental coverage, and males were more likely to have coverage than were females, particularly those 45 years of age and over (table 13). A larger proportion of white persons (41.8 percent) than of black persons (32.4 percent) had coverage, and non-Hispanics were more likely to be covered than were Hispanics (41.5 and 29.7 percent). When the data were age-adjusted (table M), these relationships did not change: 42.2 percent of white persons reported having private dental care insurance, compared with 31.8 percent of black persons; and 41.8 percent of non-Hispanics reported having private dental care insurance, compared with 29.1 percent of Hispanics.

Coverage by a single-service plan only was reported most often among adults 35-54 years of age and children 5-17 years of age, and least often among the elderly. Males were somewhat more likely than females to have a single-service dental plan. Nearly twice as many white persons as black persons had this type of coverage. Similarly, a larger percentage of non-Hispanic persons (7.0 percent) than Hispanic persons (5.3 percent) had coverage.

**Table M. Age-adjusted percent distribution of persons 2 years of age and over by private dental insurance status, according to selected demographic characteristics: United States, 1989**

Characteristic	Total population <sup>1</sup>	With private dental insurance		
		Without private dental insurance	Any private dental insurance	Comprehensive plan only
Percent distribution				
All ages . . . . .	100.0	51.8	40.6	32.8
Sex				
Male . . . . .	100.0	51.2	41.0	33.2
Female . . . . .	100.0	52.2	40.2	32.5
Race				
White . . . . .	100.0	50.4	42.2	34.0
Black . . . . .	100.0	59.6	31.8	26.9
Other . . . . .	100.0	55.4	34.8	26.5
Hispanic origin				
Non-Hispanic . . . . .	100.0	50.5	41.8	33.8
Hispanic . . . . .	100.0	63.3	29.1	23.4
Mexican-American . . . . .	100.0	66.6	25.5	20.0
Other Hispanic . . . . .	100.0	59.3	33.3	27.3
Place of residence				
MSA . . . . .	100.0	49.3	42.8	33.9
Central city . . . . .	100.0	55.0	36.9	29.4
Not central city . . . . .	100.0	45.7	46.5	36.9
Not MSA . . . . .	100.0	60.5	32.8	28.7
Geographic region				
Northeast . . . . .	100.0	49.5	42.6	34.6
Midwest . . . . .	100.0	49.9	42.9	35.1
South . . . . .	100.0	56.3	36.2	30.7
West . . . . .	100.0	48.7	43.3	31.8

<sup>1</sup>Includes persons with unknown insurance coverage.

NOTE: MSA is metropolitan statistical area.

A greater proportion of those living in the suburbs had dental coverage (46.8 percent) than those residing in central cities (36.8 percent) or outside an MSA (32.0 percent). There were differences among regions in the proportion of people with dental insurance: Those in the West had the highest rate of coverage (43.6 percent), and those residing in the South had the lowest (36.1 percent). Westerners were twice as likely as Southerners to be covered by a single-service dental insurance plan (10.2 and 4.8 percent, respectively).

As expected, the proportion of persons with dental insurance was positively associated with increasing levels of education and income. Health insurance is typically provided as an employee benefit, and persons with higher education and income are likely to be employed in jobs that provide dental coverage. According to age-adjusted data, 15.9 percent of those with less than 9 years of schooling had coverage, compared with 48.4 percent of those with some college education (table N). Similarly, 10.4 percent of those with income of less than \$10,000 had coverage, compared with 58.6 percent of those with an income of \$35,000 or more.

The better the reported health status, the greater the probability of private dental insurance coverage. Those who were unable to perform their usual activities due to a health problem were less likely to have dental coverage (20.0 percent) than those with no limitation of activity (42.7 percent). However, those with severe limitation were also less likely to be employed, and employers are

the major source of health insurance coverage. With age adjustment, the large differences by limitation status decline slightly (tables O and 15).

## The oral health of children

Dental care received in childhood is a major factor instrumental in preventing poor oral health in later years. About one-third of all children 2–4 years of age, or 3.6 million children, had visited a dentist in the past year. This proportion more than doubled for children 5–17 years of age, who were more likely to have visited a dentist in the past year than persons of any other age. Among these children, the proportion with a dental visit ranged from 72.3 percent (9–11 years of age) to 66.9 percent (5–8 years of age). The two most frequently reported reasons that children of all ages had no dental visit in the past year were that they had no dental problem (46.8 percent) and high cost (15.0 percent) (tables 16,17).

Among children 2–17 years of age, girls (63.7 percent) were as likely as boys (61.4 percent) to have visited a dentist in the past year, but racial and ethnic differences were striking. The proportion of white children with a dental visit in the past year was about 25 percent greater than the proportion of black children (64.8 and 50.8 percent, respectively). The proportion of non-Hispanic children with a dental visit in the past year was about 33 percent greater than the proportion of Hispanic children (63.7 and 47.9 percent, respectively).

**Table N. Age-adjusted percent distribution of persons 2 years of age and over by private dental insurance status, according to selected socioeconomic characteristics: United States, 1989**

Characteristic	Total population <sup>1</sup>	Without private dental insurance	With private dental insurance	
			Any private dental insurance	Comprehensive plan only
Education level				
Percent distribution				
Less than 9 years . . . . .	100.0	76.3	15.9	13.8
9-11 years . . . . .	100.0	66.4	25.4	21.9
12 years . . . . .	100.0	53.0	38.6	31.8
13 years or more . . . . .	100.0	44.0	48.4	38.1
Family income				
Less than \$10,000 . . . . .	100.0	86.1	10.4	9.4
\$10,000-\$19,999 . . . . .	100.0	70.5	24.6	21.1
\$20,000-\$34,999 . . . . .	100.0	50.5	45.7	37.5
\$35,000 or more . . . . .	100.0	37.4	58.6	45.3
Poverty index				
Below poverty threshold . . . . .	100.0	86.0	10.6	9.5
At or above poverty threshold . . . . .	100.0	47.7	47.4	38.0

<sup>1</sup>Includes persons with unknown insurance coverage.

**Table O. Age-adjusted percent distribution of persons 2 years of age and over by private dental insurance status, according to selected health characteristics: United States, 1989**

Characteristic	Total population <sup>1</sup>	Without private dental insurance	With private dental insurance	
			Any private dental insurance	Comprehensive plan only
Assessed health status				
Percent distribution				
Excellent or very good . . . . .	100.0	48.3	44.2	35.5
Good . . . . .	100.0	57.5	34.8	28.5
Fair or poor . . . . .	100.0	68.3	25.0	20.4
Limitation of activity				
Unable to carry on usual activity . . . . .	100.0	69.3	23.9	19.8
Limited in amount or kind of major activity . . . . .	100.0	59.9	33.0	26.1
Limited, but not in major activity . . . . .	100.0	53.5	40.7	31.5
Not limited in activity . . . . .	100.0	50.3	41.9	33.8
Dentition status				
Dentate . . . . .	100.0	54.0	41.2	32.9
Edentulous . . . . .	100.0	65.5	28.3	24.8

<sup>1</sup>Includes persons with unknown insurance coverage.

Fluoride products are effective in preventing dental caries. Fluoride toothpaste was the most commonly used fluoride product in 1986, when 9 out of 10 children used fluoride toothpaste (5). Other fluoride products included fluoride supplements, in either pill or liquid form, and fluoride mouthrinses.

In 1989 about 1 out of 10 children aged 17 years and below used fluoride supplements, that is, fluoride drops, fluoride tablets, vitamin drops with fluoride, or vitamin tablets with fluoride. Use of fluoride supplements was highest among children aged 2-4 years (16.4 percent), under 2 years (15.1 percent), and 5-8 years (13.5 percent); usage was lowest among teenagers aged 15-17 years (2.6 percent) (tables 17,P). The percent of white children who used fluoride supplements (10.6 percent) was double the percent of black children who did (5.4 percent). Fewer Mexican-American children used fluoride supplements (7.1 percent) than did other Hispanic

children and non-Hispanic children (9.7 and 10.0 percent, respectively).

Fluoride mouthrinses were another decay-preventive product used by children. About 11 percent of children were in a fluoride mouthrinse program at school. The proportion of black students in a fluoride program was larger than that of white students (15.3 and 10.1 percent, respectively). There was no significant difference between Hispanic and non-Hispanic participation in a program. School mouthrinse programs generally targeted low income populations, as the data reflect (7). The use of fluoride mouthrinses at school was greater among children in families with incomes less than \$10,000 per year (16.9 percent) than in families with incomes of \$35,000 or more (7.2 percent).

About 9 percent of children aged 2-17 years used a fluoride mouthrinse at home. There was no difference in home use of fluoride mouthrinse by race. However, the



**Table P. Number of total population and percent of children under 2 years of age using a fluoride supplement, by selected characteristics: United States, 1989**

Characteristic	Total population <sup>1</sup>	Persons using fluoride supplement
	Number in thousands	Percent
<b>Age</b>		
All ages . . . . .	64,003	10.4
Under 2 years . . . . .	7,674	15.1
<b>Sex</b>		
Male:		
All ages . . . . .	32,752	10.4
Under 2 years . . . . .	3,906	14.9
Female:		
All ages . . . . .	31,251	10.4
Under 2 years . . . . .	3,768	15.4
<b>Race</b>		
White:		
All ages . . . . .	51,549	11.3
Under 2 years . . . . .	6,188	16.6
Black:		
All ages . . . . .	9,959	5.5
Under 2 years . . . . .	1,179	6.4
Other:		
All ages . . . . .	2,495	11.1
Under 2 years . . . . .	308	18.8
<b>Hispanic origin</b>		
Non-Hispanic:		
All ages . . . . .	56,060	10.6
Under 2 years . . . . .	6,579	15.5
Hispanic:		
All ages . . . . .	7,943	8.7
Under 2 years . . . . .	1,095	12.9
Mexican-American:		
All ages . . . . .	4,938	7.6
Under 2 years . . . . .	684	11.0
Other Hispanic:		
All ages . . . . .	3,005	10.5
Under 2 years . . . . .	412	16.0
<b>Family income</b>		
Less than \$10,000:		
All ages . . . . .	7,447	5.7
Under 2 years . . . . .	1,059	6.8
\$10,000–\$19,999:		
All ages . . . . .	10,640	8.2
Under 2 years . . . . .	1,428	11.5
\$20,000–\$34,999:		
All ages . . . . .	15,776	11.5
Under 2 years . . . . .	1,944	17.1
\$35,000 or more:		
All ages . . . . .	21,488	13.6
Under 2 years . . . . .	2,213	22.3

<sup>1</sup>Includes persons with unknown income.

proportion of non-Hispanic children who used fluoride mouthrinse at home was greater than that of Hispanic children (9.0 and 5.7 percent, respectively). The use of fluoride mouthrinse at home was greater among children in families with incomes of \$20,000 or more, than in families with lower incomes.

Dental sealants are plastic coatings “painted” on the chewing surfaces of the teeth to prevent decay. In 1989 about 11 percent of children aged 2–17 years had had dental sealants applied. The proportion of white children who had had this treatment (12.4 percent) was triple the proportion of black children with sealants. Similarly, the percentage of non-Hispanic children was more than

double that of Hispanic children (11.7 and 5.1 percent, respectively). Significantly more children in families with an income of \$35,000 or more (17.6 percent) had had dental sealants applied than did children in families with an income of \$20,000–\$34,999 (9.9 percent), \$10,000–\$19,999 (5.9 percent), and less than \$10,000 (4.3 percent).

## The edentulous population

One of the primary criteria of good dental care and good oral health is the retention of natural teeth. In 1989 this basic standard was not met by the estimated 17.7 million Americans (7.5 percent) who were edentulous. This figure is an underestimate of the total number of edentulous persons since the National Health Interview Survey (NHIS) does not include persons who are living in nursing homes or other types of institutions where there is likely to be substantial edentulism. Among respondents 45 years of age and over, the percentage reported to be edentulous was far greater and increased with age; 10.0 percent of persons aged 45–54 years were edentulous, compared with 28.4 percent of those aged 65–74 years and 52.5 percent of those aged 85 years and over. Overall, a greater proportion of females were edentulous than were males (8.3 and 6.7 percent, respectively). However, there were no significant differences in the proportion of females and males aged 65 and over who were edentulous (tables 18 and Q).

**Table Q. Number and percent distribution of edentulous population and percent of total population who were edentulous, according to selected characteristics: United States, 1989**

Characteristic	Edentulous population		Percent of population who were edentulous
	Number in thousands	Percent distribution	
<b>Age</b>			
All ages <sup>1</sup> . . . . .	17,705	100.0	7.5
Under 45 years . . . . .	1,198	6.8	0.7
45–54 years . . . . .	2,480	14.0	10.0
55–64 years . . . . .	4,072	23.0	19.0
65–74 years . . . . .	5,061	28.6	28.4
75–84 years . . . . .	3,740	21.1	40.7
85 years and over . . . . .	1,153	6.5	52.5
<b>Sex</b>			
Male . . . . .	7,591	42.9	6.7
Female . . . . .	10,114	57.1	8.3
<b>Race</b>			
White . . . . .	15,674	88.5	7.9
Black . . . . .	1,723	9.7	6.0
Other . . . . .	308	1.7	3.8
<b>Hispanic origin</b>			
Non-Hispanic . . . . .	17,149	96.9	7.9
Hispanic . . . . .	556	3.1	2.8
<b>Family income</b>			
Less than \$10,000 . . . . .	4,063	22.9	16.2
\$10,000–\$34,999 . . . . .	7,944	44.9	8.4
\$35,000 or more . . . . .	2,221	12.5	2.8
<b>Poverty index</b>			
Below poverty threshold . . . . .	2,304	13.0	9.4
At or above poverty threshold . . . . .	12,898	72.8	6.8

<sup>1</sup>Includes persons of unknown income and unknown poverty status.

Overall, a greater proportion of white than black Americans were edentulous (7.9 and 6.0 percent, respectively). In the 75-years-and-over age group, however, edentulism was 25 percent higher among black persons than among white persons (53.0 and 41.9 percent, respectively). Comparison of Hispanic with non-Hispanic populations aged 65 years and under show significantly less edentulism among Hispanic persons. There was no statistical difference between the percentage of Hispanic and non-Hispanic persons aged 65 years and over who were edentulous.

The proportion of the population that was edentulous in 1989 declined with increased family income. The most dramatic differences were found in the population aged 65–74 years: 46.1 percent of those with an income under \$10,000 were edentulous, compared with 28.8 percent of those with an income of \$10,000–\$34,999 and 12.0 percent of those with an income of \$35,000 or more.

Nearly three-fourths of edentulous persons aged 35 years and over did not have private dental insurance coverage (72.5 percent) compared with about one-half of dentate persons (52.1 percent). The proportion of edentulous persons who did have private dental insurance (20.0 percent) was largely composed of those whose coverage was part of a comprehensive health insurance plan (17.6 percent) (table 15).

Among persons aged 35 years and over, as expected, those who were edentulous at the time of the interview were significantly less likely to have been to a dentist in the past year, than was the dentate population (12.5 and 65.6 percent, respectively)(table 6). Edentulous persons also were less likely to have visited a dentist for at least 5 years. Even among the youngest edentulous persons shown, those 35–44 years of age, nearly half (47.6 percent) had not visited a dentist in 5 or more years, compared with 9.8 percent of dentate persons. The lack of dental visits among the edentulous population is of concern because it precludes routine examinations for and early treatment of oral soft-tissue diseases, the most serious of which is oral cancer.

## **Income, education, and the use of dental services**

The separate and combined effects of education and income on the use of dental services among adults 22 years of age and over are shown in table 19. In most income and age groups, the proportion with a visit in the past year increased with higher educational attainment. Among those with a family income less than \$15,000, about one-fourth of those who had less than 12 years of education, compared with about one-half of those who had attended college, visited the dentist in the past year. Similarly, among those with a family income of \$35,000 or more, nearly half of those who had not completed high school had visited the dentist in the past year, compared with more than three-fourths of those who had attended college. The effects of income and education can also be seen in the number of dental visits per person per year. In 1989, the higher the educational attainment, the greater the rate of dental visits reported in most age groups.

## **Private health insurance and the use of dental services**

Persons with private dental insurance had a higher number of dental visits per person per year (2.7) than did persons with no coverage (1.7). This group also had a higher proportion reporting a dental visit in the past year and a lower proportion who were edentulous (tables 20 and R). These differences existed in most age, sex, and race groups; however, differences by age, sex, and race still appeared within insurance-coverage groups. The usual pattern of increased use of dental services with higher income was not as clear in the two lower-income categories for those with private dental insurance coverage. Persons with a family income less than \$10,000 who had dental insurance coverage used dental services more often than those with an income of \$10,000–\$19,999.

**Table R. Age-adjusted selected dental variables by private dental health insurance status and selected characteristics: United States, 1989**

Characteristic	Total population	Rate of dental visits per person per year	Persons with dental visit in past year		
			1 or more dental visits	3 or more dental visits	Edentulous persons
Total <sup>1</sup>	Number in thousands		Percent		
Having insurance . . . . .	95,436	2.8	70.3	19.3	5.4
Without insurance . . . . .	122,368	1.7	50.9	12.3	8.5
Sex					
Male:					
Having insurance . . . . .	47,216	2.6	67.5	18.0	5.4
Without insurance . . . . .	58,106	1.6	48.1	11.2	8.2
Female:					
Having insurance . . . . .	48,219	3.0	72.9	20.5	5.3
Without insurance . . . . .	64,262	1.8	53.5	13.5	8.8
Race					
White:					
Having insurance . . . . .	83,222	2.9	71.6	19.7	5.4
Without insurance . . . . .	101,096	1.9	53.2	13.1	8.6
Black:					
Having insurance . . . . .	9,309	1.7	57.6	14.9	6.0
Without insurance . . . . .	16,957	1.0	38.1	8.2	8.7
Family income					
Less than \$10,000:					
Having insurance . . . . .	2,568	2.0	59.4	15.6	11.3
Without insurance . . . . .	21,078	1.2	39.6	9.6	13.2
\$10,000–\$19,999:					
Having insurance . . . . .	9,105	2.2	54.8	15.2	8.1
Without insurance . . . . .	27,883	1.3	41.7	9.5	9.9
\$20,000–\$34,999:					
Having insurance . . . . .	24,933	2.5	66.2	18.3	5.6
Without insurance . . . . .	26,907	1.8	53.4	13.7	7.4
\$35,000 or more:					
Having insurance . . . . .	47,441	3.2	77.3	21.9	3.4
Without insurance . . . . .	26,339	2.5	67.7	17.3	4.2

<sup>1</sup>Includes persons of other races and unknown income (not shown separately). Persons with unknown insurance coverage are excluded.

## Discussion

The 1989 National Health Interview Survey (NHIS) provides data regarding the public's knowledge and behavior and the social and environmental conditions that may influence the patterns of oral diseases in the United States, as well as the receipt of treatment for those diseases. The survey's design and high response rate enable a high level of generalization of the findings concerning the national noninstitutionalized civilian population. However, as in any questionnaire survey, recall bias may be introduced when people are asked to remember past events or to recall behaviors and habits of other members of the family. This should be considered in the use and interpretation of this data. In the case of the dental health care supplement, responses were more reliable concerning the complete loss of teeth than about dental visits and preventive behaviors, based on a telephone recontact with an available household member for a sample of the interviews. This section of the report discusses the findings from the 1989 NHIS in relation to findings from the 1986 NHIS on the same topic and to other work in the field.

Professional dental services are a primary source of oral hygiene education and preventive dental regimens. The receipt of regular professional services (defined in this report as at least once during the past 12 months) can help sustain oral health throughout a lifetime, especially if begun at an early age (8,11). These results show that only one-third of those aged 2-4 had visited a dental professional and only two-thirds of children aged 5-17 had visited a dental office during the past 12 months. At the other age extreme, older adults have a relatively low dental visit rate (43.2 percent). There was no change in the proportion of individuals' dental visits from those reported for 1986 to those for 1989 (57 percent); nor was there a change in the patterns for disadvantaged groups (5). In both years, 41 percent of those in families with incomes less than \$10,000 per year had a dental visit compared with 73 percent of those in families with an income of \$35,000 or more.

Black persons, Hispanics, and individuals with limited family resources (income and/or insurance) were less likely than others to visit a dentist. For example, 44.5 percent of black persons and 46.4 percent of Hispanics, compared with 59.3 percent of white persons and 58.2 percent of non-Hispanics, had a dental visit in the past 12 months. Approximately 41 percent of individuals

with family incomes less than \$10,000 per year visited a dentist, compared with 73 percent of those with incomes of \$35,000 or more.

The inability to pay dental bills was an evident barrier to having a dental visit and also affected the number of dental visits during a year. For example, individuals with family incomes less than \$10,000 had 1.3 visits per year compared with 2.8 for those with incomes of \$35,000 or more. Similarly, individuals with dental insurance had 2.8 visits per year, compared with 1.7 for those with no dental insurance.

The direct association between income or insurance and number of dental visits is particularly apparent in age groups that might be expected to have had greater restorative needs. For example, on average, teenagers had more dental visits than other children (probably reflecting the treatment for occlusal dental caries and/or orthodontic regimens). Nonetheless, the lower number of visits for minorities and financially disadvantaged youth parallels the high level of untreated caries seen for these groups in epidemiological studies (8,9,11).

These descriptive data indicate that considerably more effort is needed to promote appropriate use of dental sealants. Most of the decay in children's teeth is on chewing surfaces. Dental sealants are more effective than fluoride in preventing this type of decay, yet only 10.9 percent of children have received dental sealants. Visits to a dental professional, improved knowledge about the value of sealants, and coverage under public programs and private insurance could help improve sealant rates. Application of dental sealants shortly after molars erupt might decrease dental visits for restorative purposes in the long term, particularly among disadvantaged teenagers.

The major reason given for not visiting a dental professional during the past 12 months was "no dental problem" (46.8 percent). It can be inferred that individuals or parents who perceive "no need" for themselves or their children do not have a preventive orientation. *Healthy People 2000* identifies the need for preschool children to visit a dental professional (11). Early visits facilitate screening for oral diseases and conditions, establishing appropriate preventive regimens, counseling on nutrition and healthy behaviors, and providing oral hygiene education. Early and regular visits to a dental professional also provide an opportunity to establish an appropriate fluoride regimen, balancing community water

fluoridation and use of fluoride dentifrices with other vehicles of administration. These results suggest that more parents and children need to visit a dental professional for oral health education to improve understanding of the need for care and that efforts need to be made to increase the proportion of children having early exposure to a dental professional.

"Cost" was the second main reason for not visiting a dentist in the past year (13.7 percent), especially among the those with limited family financial and insurance resources. Approximately 20 percent of those with family incomes less than \$10,000, versus 6.8 percent of those with incomes of \$35,000 or more, gave cost as a reason for no visit. Also, 18.5 percent of those without dental insurance, compared with 7.2 percent of those with coverage, gave cost as a reason. The challenge of meeting costs for preventive services must be met to curtail the potentially heavier financial burden associated with restorations.

The 1989 NHIS shows a continued decline in total tooth loss in the United States, down from 25.5 percent in 1983 and 21.9 percent in 1986. Even though the disparities among socioeconomic groups still exist, there is reason to believe that the impact of several decades of widely available preventive therapies (community water fluoridation and fluoride dentifrices) will result in the near elimination of edentulism among younger cohorts of the elderly age. This dramatic change in the oral health of older adults creates new challenges in health-promotion activities, patient education, delivery of services, and research and monitoring activities. While edentulousness has been a major measure of the Nation's oral health in the past, the value of edentulousness as a measure of oral health status may be significantly reduced over the next decade.

The apparently low use of dental services among older adults was almost exclusively due to the larger percentage of individuals in this age group who have no teeth: 65.6 percent of dentate, versus 12.5 percent of edentulous, older adults had a dental visit in the past 12 months. In comparisons of dentate with edentulous individuals, older adults with teeth had visited a dentist as often as adults of other ages. The number of dental visits among dentate older adults (2.8 visits per year) reflects the expected visit pattern for restorative treatment in an aging population.

These descriptive data indicate that resource limitations and lack of oral health education continue to be critical barriers to regular dental visits and appropriate use of preventive therapies. For example, among children ages 9–11 years, 3.9 percent of those with family incomes of less than \$10,000 have received dental sealants compared with 29.2 percent of those with family incomes of \$35,000 or more. That more than half of children and adults aged 18–34 years give "no problem" as a reason for no visit is evidence of need for oral health education to increase awareness of the value of preventive services. In oral health and oral health behaviors, the great disparity between disadvantaged individuals and other segments of the general population should continue to be monitored

for change through the NHIS. The importance of this area of investigation is more obvious against the significant growth of minority populations expected to occur during the 1990's and beyond. Considerable efforts will be needed to achieve the objectives of *Healthy People 2000*.

During the past decade, there has been continued improvement in the oral health of the Nation's children. Fifty percent of children under age 18 had no decay or fillings in their permanent teeth in 1986–87, compared with 37 percent in 1979–80. Among those children with decay, the cavities were fewer and smaller than among their agemates of less than a decade ago (8). Similar evidence of improving oral health within the working adult population has been observed in measures of edentulism, dental caries, and periodontal health (9). Also, older Americans overall showed improvements in oral health, compared with those a generation ago.

Despite improvements in oral health in the U.S. population in the past several decades, there is still considerable evidence of unnecessary oral disease (8,9,11). These other reports show that 84 percent of 17-year-olds had experienced dental decay; the typical youth 18–19 years of age had experienced 12 decayed, missing, or filled tooth surfaces (DMFS); 20 percent of children accounted for 60 percent of the dental decay in the population; older adults with teeth had more dental caries in the roots of teeth and more severe and extensive periodontal disease than younger adults; approximately half the population experienced gingival infection at any point in time; and there were many older adults without teeth. Across all age groups, individuals with minority and low-socioeconomic status or physically compromising conditions had more oral diseases and used fewer self-care and professional preventive services.

There are numerous social conditions that contributed to these levels of oral diseases and lack of treatment. Over 100 million Americans did not have the benefits of fluoridated water (10). This survey shows that less than half of the population had any private dental insurance. Neither the resources available for public dental clinics and entitlement programs nor other mechanisms available for providing care to the socially and financially disadvantaged have kept up with need during the past decade and in many cases have decreased. For example, dental Medicaid expenditures decreased as a percent of overall Medicaid expenditures between 1975 and 1987, and only 32 percent of those eligible in a year received dental care (10). Medicaid expanded its coverage of oral health services under Federal legislation passed in 1989. This should help finance oral health care for mothers and children, despite increased economic pressures. However, there are few public resources available for adult oral health; oral health services are not covered under Medicare and many State Medicaid programs and public clinics do not provide other-than-emergency services to adults (10).

Many of the positive trends in oral health observed over the decade are the result of concerted efforts to prevent or control disease. Most notable is community

water fluoridation. Gains in oral health over the past several decades also can be attributed to the preventive approaches through professional services and self-care, including widespread availability of fluorides and increasing use of dental sealants. Other factors, including improvements in oral hygiene, diet, the standard of living, and the level of education, also play a role.

Considerably more research is needed to increase knowledge and improve behaviors associated with oral health. In spite of significant progress in prevention, oral disease of all kinds remains among the most costly of U.S. health problems (10,11).

Future monitoring efforts must address prevention activities; use of professional preventive, diagnostic, and early-intervention dental services; risk factors; risk behaviors; and barriers, such as ability to pay for prevention and intervention. Surveys must provide more opportunities to interrelate sociodemographic and economic factors,

attitudes, knowledge, cultural predisposition, and medical risk factors with oral health behaviors. More attention must be given to the social impact of oral conditions and diseases and to ways of measuring risk factors associated with oral functional disabilities. More in-depth questioning in surveys would lead to an improved understanding of oral health care services in relation to needs and demands of high-risk populations, including older adults minorities.

It is now recognized that oral health promotion is a multifaceted enterprise going far beyond the traditional practices of previous decades. This is a challenge for researchers, program administrators, and health care providers. Continued prevention and control of oral diseases and conditions require comprehensive strategies, as well as the efforts and resources of many organizations, groups, and individuals. It also requires that the NHIS continue monitoring the oral health of the general population to identify target groups for oral health promotion.

# References

1. Wilder CS. Dental visits, volume and interval since last visit, United States, 1969. National Center for Health Statistics. *Vital Health Stat* 10(76). 1972.
2. Burnham CE. Edentulous persons, United States, 1971. National Center for Health Statistics. *Vital Health Stat* 10(89). 1974.
3. Wilder CS. Dental visits, volume and interval since last visit, United States, 1978 and 1979. National Center for Health Statistics. *Vital Health Stat* 10(138). 1982.
4. Jack SS. Use of dental services, United States, 1983. Advance Data From Vital and Health Statistics; no 122. Hyattsville, Maryland: National Center for Health Statistics. 1986.
5. Jack SS, Bloom B. Use of dental services and dental health, United States, 1986. National Center for Health Statistics. *Vital Health Stat* 10(165). 1988.
6. Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1989. National Center for Health Statistics. *Vital Health Stat* 10(176). 1990.
7. Maas WR. 1987. Personal communication. Rockville, Maryland.
8. National Institute of Dental Research. Oral Health of United States Children, The National Survey of Dental Caries in U.S. School Children: 1986–87. 1989.
9. National Institute of Dental Research. Oral Health of the United States Adults, The National Survey of Oral Health in the U.S. Employed Adults and Seniors, 1985–86. 1987.
10. Public Health Workshop on Oral Health of Mothers and Children. Background issue papers. *J Public Health Dent* 50(6) special issue. 1990.
11. Public Health Service. Healthy People 2000, National Promotion and Disease Prevention Objectives. 1991.
12. Massey JT, Moore TF, Parsons VL, Tadros W. Design and estimation for the National Health Interview Survey, 1985–94. National Center for Health Statistics. *Vital Health Stat* 2(110). 1989.
13. Kovar MG, Poe GS. The National Health Interview Survey design, 1973–84, and procedures, 1975–83. National Center for Health Statistics. *Vital Health Stat* 1(18). 1985.
14. Koons DA. Quality control and measurement of nonsampling error in the Health Interview Survey. National Center for Health Statistics. *Vital Health Stat* 2(54). 1973.
15. Balamuth E, Shapiro S. Health interview responses compared with medical records. National Center for Health Statistics. *Vital Health Stat* 2(7). 1965.
16. Cannell CF, Fowler FJ Jr. Comparison of hospitalization reporting in three survey procedures. National Center for Health Statistics. *Vital Health Stat* 2(8). 1965.
17. Madow WG. Interview data on chronic conditions compared with information derived from medical records. National Center for Health Statistics. *Vital Health Stat* 2(23). 1967.
18. Cannell CF, Fowler FJ Jr., Marquis KH. The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. National Center for Health Statistics. *Vital Health Stat* 2(26). 1968.
19. National Center for Health Statistics. Reporting of hospitalization in the Health Interview Survey. *Vital Health Stat* 2(6). 1965.

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**Table 1. Number of persons 2 years of age and over, by interval since last dental visit and selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	Unknown
		Total	Less than 6 months	6-11 months					
Age									
Number in thousands									
All ages . . . . .	235,858	135,023	85,466	45,145	22,330	28,964	26,279	10,973	12,288
2-4 years . . . . .	11,094	3,563	2,280	1,136	307	113	...	6,103	1,009
5-17 years . . . . .	45,235	31,218	20,130	9,842	4,298	3,504	937	3,262	2,015
5-11 years . . . . .	25,230	17,454	11,203	5,559	2,196	1,550	257	2,602	1,172
12-17 years . . . . .	20,005	13,764	8,927	4,283	2,103	1,954	680	660	844
18-34 years . . . . .	68,214	38,790	22,909	14,631	8,054	10,780	5,953	1,036	3,601
18-24 years . . . . .	25,401	14,042	8,026	5,526	3,222	4,240	1,973	492	1,432
25-34 years . . . . .	42,814	24,748	14,883	9,105	4,831	6,541	3,980	544	2,169
35-54 years . . . . .	60,667	37,246	23,762	12,312	5,859	7,842	6,445	360	2,913
35-44 years . . . . .	35,982	22,632	14,359	7,558	3,605	4,625	3,206	256	1,659
45-54 years . . . . .	24,685	14,615	9,403	4,754	2,255	3,217	3,240	105	1,254
55-64 years . . . . .	21,429	11,577	7,877	3,407	1,767	2,884	4,008	75	1,119
65 years and over . . . . .	29,219	12,629	8,507	3,817	2,044	3,841	8,936	137	1,632
65-74 years . . . . .	17,828	8,494	5,737	2,561	1,324	2,363	4,722	71	854
75 years and over . . . . .	11,391	4,135	2,770	1,256	720	1,478	4,214	67	778
Sex									
Male:									
All ages . . . . .	114,102	62,643	39,104	21,558	10,942	15,196	13,314	5,874	6,133
2-4 years . . . . .	5,700	1,790	1,127	584	152	40	...	3,199	519
5-11 years . . . . .	12,859	8,832	5,595	2,888	1,129	806	129	1,347	616
12-17 years . . . . .	10,287	6,870	4,394	2,172	1,156	1,076	359	361	465
18-34 years . . . . .	33,455	17,243	9,918	6,815	3,971	6,077	3,631	614	1,920
35-44 years . . . . .	17,589	10,476	6,653	3,513	1,776	2,452	1,858	182	845
45-54 years . . . . .	11,967	6,844	4,327	2,333	1,099	1,656	1,694	59	614
55-64 years . . . . .	10,103	5,371	3,588	1,666	816	1,424	1,909	41	542
65 years and over . . . . .	12,143	5,218	3,502	1,586	841	1,665	3,735	71	612
65-74 years . . . . .	7,935	3,762	2,527	1,152	585	1,065	2,144	*36	343
75 years and over . . . . .	4,208	1,456	975	435	256	601	1,591	*35	269
Female:									
All ages . . . . .	121,755	72,380	46,361	23,586	11,387	13,769	12,965	5,099	6,155
2-4 years . . . . .	5,394	1,773	1,153	551	155	73	...	2,903	490
5-11 years . . . . .	12,371	8,622	5,608	2,671	1,066	744	128	1,255	556
12-17 years . . . . .	9,718	6,894	4,533	2,111	946	879	321	299	378
18-34 years . . . . .	34,759	21,547	12,991	7,815	4,082	4,704	2,322	422	1,680
35-44 years . . . . .	18,393	12,156	7,706	4,046	1,829	2,173	1,348	73	815
45-54 years . . . . .	12,718	7,771	5,076	2,421	1,155	1,561	1,546	45	640
55-64 years . . . . .	11,326	6,206	4,289	1,741	951	1,460	2,099	*34	576
65 years and over . . . . .	17,076	7,411	5,005	2,231	1,202	2,175	5,200	66	1,020
65-74 years . . . . .	9,893	4,732	3,210	1,409	739	1,298	2,578	*34	511
75 years and over . . . . .	7,183	2,679	1,795	821	463	877	2,623	*32	509
Race									
White:									
All ages . . . . .	199,124	118,038	75,962	38,409	18,001	23,204	21,731	8,380	9,771
2-4 years . . . . .	8,922	2,966	1,924	910	239	68	...	4,876	772
5-11 years . . . . .	20,304	14,623	9,599	4,469	1,668	1,047	158	1,951	856
12-17 years . . . . .	16,136	11,625	7,756	3,434	1,549	1,390	470	433	668
18-34 years . . . . .	56,664	33,408	19,948	12,427	6,510	8,628	4,595	736	2,788
35-44 years . . . . .	30,765	19,932	12,793	6,531	2,948	3,813	2,601	163	1,308
45-54 years . . . . .	21,236	13,020	8,494	4,152	1,806	2,582	2,728	72	1,029
55-64 years . . . . .	18,785	10,552	7,311	2,988	1,472	2,426	3,367	58	912
65 years and over . . . . .	26,312	11,911	8,137	3,496	1,809	3,250	7,811	91	1,439
65-74 years . . . . .	15,984	7,943	5,457	2,308	1,162	1,986	4,099	48	745
75 years and over . . . . .	10,328	3,968	2,681	1,189	647	1,263	3,712	44	694
Black:									
All ages . . . . .	28,712	12,780	6,879	5,282	3,545	4,668	3,813	1,992	1,914
2-4 years . . . . .	1,702	459	261	185	56	*30	...	980	177
5-11 years . . . . .	3,954	2,236	1,204	921	456	413	93	515	242
12-17 years . . . . .	3,123	1,684	883	694	485	480	169	185	120
18-34 years . . . . .	8,873	3,999	2,145	1,666	1,231	1,714	1,097	204	628
35-44 years . . . . .	3,894	1,968	1,112	781	511	633	491	49	242
45-54 years . . . . .	2,588	1,120	620	433	358	499	419	*14	178
55-64 years . . . . .	2,125	764	377	348	252	388	551	*10	161
65 years and over . . . . .	2,453	552	276	255	195	512	994	*34	166
65-74 years . . . . .	1,545	424	212	197	138	336	539	*17	91
75 years and over . . . . .	908	128	64	58	57	176	455	*17	76

**Table 1. Number of persons 2 years of age and over, by interval since last dental visit and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	Unknown
		Total	Less than 6 months	6-11 months					
Race—Con. <span style="float: right;">Number in thousands</span>									
Other:									
All ages	8,021	4,206	2,624	1,454	784	1,092	735	601	603
2-4 years	470	138	94	40	*12	*15	...	246	60
5-11 years	971	595	400	169	71	90	*5	136	74
12-17 years	747	455	288	155	68	84	41	42	56
18-34 years	2,677	1,383	817	538	313	438	261	96	186
35-44 years	1,324	732	454	247	146	179	114	44	109
45-54 years	860	475	289	169	91	137	93	*19	47
55-64 years	519	262	189	71	44	71	90	*8	46
65 years and over	454	167	94	66	39	79	131	*12	*26
65-74 years	299	127	68	56	*24	40	84	*6	*18
75 years and over	155	39	*26	*10	*16	39	46	*6	*8
Hispanic origin									
Non-Hispanic:									
All ages	215,936	125,780	80,182	41,644	20,296	26,200	24,150	8,463	11,047
2-4 years	9,610	3,229	2,066	1,025	265	106	...	5,136	875
5-11 years	22,194	15,716	10,215	4,906	1,943	1,371	209	1,975	979
12-17 years	17,677	12,554	8,221	3,869	1,815	1,652	533	422	700
18-34 years	61,460	35,800	21,243	13,440	7,294	9,501	5,136	547	3,182
35-44 years	33,307	21,326	13,633	7,046	3,303	4,191	2,802	142	1,542
45-54 years	23,154	13,836	8,975	4,447	2,084	2,977	3,018	82	1,157
55-64 years	20,255	11,068	7,575	3,213	1,646	2,683	3,775	52	1,030
65 years and over	28,278	12,251	8,253	3,698	1,945	3,718	8,676	108	1,582
Hispanic, total:									
All ages	19,921	9,243	5,283	3,501	2,034	2,765	2,129	2,510	1,241
2-4 years	1,484	333	213	110	43	*7	...	967	134
5-11 years	3,036	1,738	988	653	252	179	48	626	193
12-17 years	2,328	1,210	706	415	287	302	147	238	144
18-34 years	6,754	2,990	1,666	1,190	759	1,279	817	489	419
35-44 years	2,675	1,305	726	512	302	434	404	113	117
45-54 years	1,530	779	428	307	170	240	221	*23	97
55-64 years	1,174	509	302	193	121	200	232	*23	88
65 years and over	941	378	254	119	99	123	260	*30	51
Hispanic, Mexican-American:									
All ages	11,317	4,626	2,745	1,782	996	1,629	1,399	1,943	724
2-4 years	890	162	106	56	*21	*5	...	638	65
5-11 years	1,922	996	584	387	153	129	*33	496	114
12-17 years	1,442	641	402	220	172	223	101	216	88
18-34 years	3,881	1,466	844	585	358	748	587	437	285
35-44 years	1,460	643	383	247	134	246	286	95	57
45-54 years	706	320	188	126	72	114	128	*21	51
55-64 years	594	256	146	110	49	110	119	*16	43
65 years and over	422	143	92	50	*36	55	144	*23	*21
Hispanic, other:									
All ages	8,604	4,617	2,539	1,718	1,037	1,135	730	567	518
2-4 years	593	172	108	54	*21	*3	...	329	69
5-11 years	1,114	742	404	267	99	49	*15	131	78
12-17 years	896	569	304	194	116	78	45	*22	55
18-34 years	2,873	1,524	823	605	401	531	231	52	134
35-44 years	1,215	663	343	265	168	189	118	*18	60
45-54 years	825	459	240	181	98	126	93	*2	47
55-64 years	580	254	156	83	72	91	113	*7	45
65 years and over	518	235	162	69	63	69	116	*6	*30
Place of residence									
MSA, total:									
All ages	183,721	107,287	67,898	35,771	17,358	21,945	18,544	8,343	10,243
2-4 years	8,700	2,873	1,848	905	254	92	...	4,650	831
5-11 years	19,491	13,567	8,676	4,348	1,672	1,138	178	1,947	989
12-17 years	15,258	10,711	6,934	3,317	1,501	1,382	485	477	703
18-34 years	54,658	31,366	18,537	11,812	6,413	8,481	4,459	810	3,128
35-44 years	28,539	18,302	11,625	6,063	2,856	3,465	2,273	224	1,419
45-54 years	19,347	11,809	7,588	3,834	1,758	2,430	2,228	79	1,043
55-64 years	16,340	9,166	6,264	2,663	1,314	2,080	2,814	64	903
65 years and over	21,388	9,494	6,428	2,828	1,591	2,876	6,106	93	1,228
MSA, central city:									
All ages	71,810	39,352	23,992	13,674	7,265	9,326	7,883	3,660	4,324
2-4 years	3,431	1,042	633	358	93	44	...	1,866	387
5-11 years	7,465	4,852	2,953	1,659	718	482	96	873	445
12-17 years	5,713	3,680	2,103	1,331	696	603	224	228	282
18-34 years	22,769	12,420	7,218	4,717	2,769	3,781	2,043	416	1,339
35-44 years	10,216	6,292	3,927	2,102	1,076	1,298	871	134	546
45-54 years	6,900	3,888	2,414	1,298	714	984	853	43	418
55-64 years	6,469	3,317	2,193	1,010	546	956	1,191	49	409
65 years and over	8,848	3,861	2,551	1,198	654	1,177	2,606	52	498

**Table 1. Number of persons 2 years of age and over, by interval since last dental visit and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	Unknown
		Total	Less than 6 months	6-11 months					
Place of residence—Con.									
MSA, not central city:									
All ages . . . . .	111,911	67,936	43,906	22,097	10,093	12,620	10,661	4,683	5,919
2-4 years . . . . .	5,269	1,831	1,215	547	161	48	...	2,784	445
5-11 years . . . . .	12,026	8,715	5,723	2,688	955	656	83	1,074	544
12-17 years . . . . .	9,546	7,031	4,831	1,986	805	779	262	249	421
18-34 years . . . . .	31,889	18,946	11,319	7,095	3,645	4,700	2,416	394	1,789
35-44 years . . . . .	18,324	12,010	7,698	3,961	1,780	2,167	1,402	91	873
45-54 years . . . . .	12,447	7,921	5,174	2,536	1,045	1,446	1,375	*35	624
55-64 years . . . . .	9,871	5,849	4,070	1,654	767	1,124	1,623	*15	493
65 years and over . . . . .	12,540	5,633	3,877	1,629	936	1,699	3,500	41	730
Not MSA:									
All ages . . . . .	52,137	27,736	17,568	9,374	4,971	7,019	7,735	2,630	2,045
2-4 years . . . . .	2,394	690	432	230	53	*21	...	1,453	177
5-11 years . . . . .	5,739	3,887	2,527	1,211	523	412	78	655	183
12-17 years . . . . .	4,747	3,053	1,993	966	602	572	195	184	141
18-34 years . . . . .	13,556	7,424	4,373	2,819	1,641	2,299	1,494	225	472
35-44 years . . . . .	7,443	4,330	2,735	1,496	749	1,160	933	*31	240
45-54 years . . . . .	5,338	2,806	1,815	920	496	787	1,012	*26	211
55-64 years . . . . .	5,090	2,411	1,613	743	454	804	1,194	*11	216
65 years and over . . . . .	7,831	3,135	2,080	989	453	964	2,830	45	404
Geographic region									
Northeast:									
All ages . . . . .	47,549	28,512	17,660	9,247	4,915	5,239	4,673	1,440	2,769
2-4 years . . . . .	1,904	647	369	236	67	*8	...	970	212
5-11 years . . . . .	4,345	3,317	2,081	1,011	407	149	*11	246	215
12-17 years . . . . .	3,702	2,805	1,731	842	388	241	49	*34	185
18-34 years . . . . .	13,594	8,362	4,888	3,020	1,776	1,815	813	103	725
35-44 years . . . . .	7,292	4,759	2,975	1,496	811	849	480	*38	354
45-54 years . . . . .	5,099	3,149	1,949	1,023	525	617	507	*15	286
55-64 years . . . . .	4,696	2,589	1,760	753	423	638	760	*12	274
65 years and over . . . . .	6,918	2,883	1,908	866	519	921	2,053	*22	519
Midwest:									
All ages . . . . .	57,761	35,538	23,003	11,634	4,816	6,495	6,200	2,049	2,663
2-4 years . . . . .	2,745	1,015	660	326	66	*20	...	1,425	219
5-11 years . . . . .	6,249	4,822	3,142	1,549	444	269	51	394	269
12-17 years . . . . .	5,011	3,801	2,552	1,140	501	376	120	58	164
18-34 years . . . . .	16,619	10,172	6,166	3,739	1,790	2,469	1,274	101	812
35-44 years . . . . .	8,798	5,896	3,818	1,950	762	1,034	676	*25	405
45-54 years . . . . .	6,174	3,817	2,531	1,202	486	773	812	*20	267
55-64 years . . . . .	5,249	2,912	1,983	848	392	624	1,088	*4	228
65 years and over . . . . .	6,917	3,103	2,150	880	386	930	2,179	*21	298
South:									
All ages . . . . .	80,457	42,006	26,141	14,635	8,296	11,113	10,959	4,847	3,237
2-4 years . . . . .	3,873	1,149	767	337	97	56	...	2,328	243
5-11 years . . . . .	8,863	5,468	3,485	1,749	911	723	146	1,331	285
12-17 years . . . . .	6,989	4,261	2,775	1,336	849	851	395	421	211
18-34 years . . . . .	23,274	12,218	7,096	4,786	2,961	4,026	2,610	507	953
35-44 years . . . . .	11,930	6,945	4,253	2,495	1,305	1,791	1,373	117	398
45-54 years . . . . .	8,125	4,320	2,735	1,477	796	1,233	1,384	*33	358
55-64 years . . . . .	7,481	3,763	2,556	1,118	627	1,118	1,611	39	323
65 years and over . . . . .	9,923	3,882	2,475	1,335	749	1,314	3,441	71	465
West:									
All ages . . . . .	50,090	28,968	18,661	9,629	4,303	6,118	4,447	2,637	3,619
2-4 years . . . . .	2,572	751	484	236	77	*30	...	1,380	334
5-11 years . . . . .	5,772	3,847	2,494	1,249	434	410	48	631	403
12-17 years . . . . .	4,304	2,897	1,869	966	374	485	117	147	283
18-34 years . . . . .	14,727	8,038	4,759	3,086	1,527	2,471	1,256	325	1,111
35-44 years . . . . .	7,963	5,031	3,313	1,618	726	951	678	75	502
45-54 years . . . . .	5,287	3,329	2,188	1,052	449	594	537	*36	343
55-64 years . . . . .	4,003	2,312	1,579	687	326	503	548	*20	293
65 years and over . . . . .	5,461	2,761	1,974	735	390	675	1,263	*23	350

NOTE: MSA is metropolitan statistical area.

**Table 2. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals <sup>1</sup>	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6-11 months				
Age								
Percent distribution								
All ages . . . . .	100.0	57.2	36.2	19.1	9.5	12.3	11.1	4.7
2-4 years . . . . .	100.0	32.1	20.6	10.2	2.8	1.0	...	55.0
5-17 years . . . . .	100.0	69.0	44.5	21.8	9.5	7.7	2.1	7.2
5-11 years . . . . .	100.0	69.2	44.4	22.0	8.7	6.1	1.0	10.3
12-17 years . . . . .	100.0	68.8	44.6	21.4	10.5	9.8	3.4	3.3
18-34 years . . . . .	100.0	56.9	33.6	21.4	11.8	15.8	8.7	1.5
18-24 years . . . . .	100.0	55.3	31.6	21.8	12.7	16.7	7.8	1.9
25-34 years . . . . .	100.0	57.8	34.8	21.3	11.3	15.3	9.3	1.3
35-64 years . . . . .	100.0	61.4	39.2	20.3	9.7	12.9	10.6	0.6
35-44 years . . . . .	100.0	62.9	39.9	21.0	10.0	12.9	8.9	0.7
45-54 years . . . . .	100.0	59.2	38.1	19.3	9.1	13.0	13.1	0.4
55-64 years . . . . .	100.0	54.0	36.8	15.9	8.2	13.5	18.7	0.3
65 years and over . . . . .	100.0	43.2	29.1	13.1	7.0	13.1	30.6	0.5
65-74 years . . . . .	100.0	47.6	32.2	14.4	7.4	13.3	26.5	0.4
75 years and over . . . . .	100.0	36.3	24.3	11.0	6.3	13.0	37.0	0.6
Sex								
Male:								
All ages . . . . .	100.0	54.9	34.3	18.9	9.6	13.3	11.7	5.1
2-4 years . . . . .	100.0	31.4	19.8	10.2	2.7	0.7	...	56.1
5-11 years . . . . .	100.0	68.7	43.5	22.5	8.8	6.3	1.0	10.5
12-17 years . . . . .	100.0	66.8	42.7	21.1	11.2	10.5	3.5	3.5
18-34 years . . . . .	100.0	51.5	29.6	20.4	11.9	18.2	10.9	1.8
35-44 years . . . . .	100.0	59.6	37.8	20.0	10.1	13.9	10.6	1.0
45-54 years . . . . .	100.0	57.2	36.2	19.5	9.2	13.8	14.2	0.5
55-64 years . . . . .	100.0	53.2	35.5	16.5	8.1	14.1	18.9	0.4
65 years and over . . . . .	100.0	43.0	28.8	13.1	6.9	13.7	30.8	0.6
65-74 years . . . . .	100.0	47.4	31.8	14.5	7.4	13.4	27.0	*0.5
75 years and over . . . . .	100.0	34.6	23.2	10.3	6.1	14.3	37.8	*0.8
Female:								
All ages . . . . .	100.0	59.4	38.1	19.4	9.4	11.3	10.6	4.2
2-4 years . . . . .	100.0	32.9	21.4	10.2	2.9	1.4	...	53.8
5-11 years . . . . .	100.0	69.7	45.3	21.6	8.6	6.0	1.0	10.1
12-17 years . . . . .	100.0	70.9	46.6	21.7	9.7	9.0	3.3	3.1
18-34 years . . . . .	100.0	62.0	37.4	22.5	11.7	13.5	6.7	1.2
35-44 years . . . . .	100.0	66.1	41.9	22.0	9.9	11.8	7.3	0.4
45-54 years . . . . .	100.0	61.1	39.9	19.0	9.1	12.3	12.2	0.4
55-64 years . . . . .	100.0	54.8	37.9	15.4	8.4	12.9	18.5	*0.3
65 years and over . . . . .	100.0	43.4	29.3	13.1	7.0	12.7	30.5	0.4
65-74 years . . . . .	100.0	47.8	32.4	14.2	7.5	13.1	26.1	*0.3
75 years and over . . . . .	100.0	37.3	25.0	11.4	6.4	12.2	36.5	*0.4
Race								
White:								
All ages . . . . .	100.0	59.3	38.1	19.3	9.0	11.7	10.9	4.2
2-4 years . . . . .	100.0	33.2	21.6	10.2	2.7	0.8	...	54.7
5-11 years . . . . .	100.0	72.0	47.3	22.0	8.2	5.2	0.8	9.6
12-17 years . . . . .	100.0	72.0	48.1	21.3	9.6	8.6	2.9	2.7
18-34 years . . . . .	100.0	59.0	35.2	21.9	11.5	15.2	8.1	1.3
35-44 years . . . . .	100.0	64.8	41.6	21.2	9.6	12.4	8.5	0.5
45-54 years . . . . .	100.0	61.3	40.0	19.6	8.5	12.2	12.8	0.3
55-64 years . . . . .	100.0	56.2	38.9	15.9	7.8	12.9	17.9	0.3
65 years and over . . . . .	100.0	45.3	30.9	13.3	6.9	12.4	29.7	0.3
65-74 years . . . . .	100.0	49.7	34.1	14.4	7.3	12.4	25.6	0.3
75 years and over . . . . .	100.0	38.4	26.0	11.5	6.3	12.2	35.9	0.4
Black:								
All ages . . . . .	100.0	44.5	24.0	18.4	12.3	16.3	13.3	6.9
2-4 years . . . . .	100.0	27.0	15.3	10.9	3.3	*1.8	...	57.6
5-11 years . . . . .	100.0	56.6	30.5	23.3	11.5	10.4	2.4	13.0
12-17 years . . . . .	100.0	53.9	28.3	22.2	15.5	15.4	5.4	5.9
18-34 years . . . . .	100.0	45.1	24.2	18.8	13.9	19.3	12.4	2.3
35-44 years . . . . .	100.0	50.5	28.6	20.1	13.1	16.3	12.6	1.3
45-54 years . . . . .	100.0	43.3	24.0	16.7	13.8	19.3	16.2	*0.5
55-64 years . . . . .	100.0	36.0	17.7	16.4	11.9	18.3	25.9	*0.5
65 years and over . . . . .	100.0	22.5	11.3	10.4	7.9	20.9	40.5	*1.4
65-74 years . . . . .	100.0	27.4	13.7	12.8	8.9	21.7	34.9	*1.1
75 years and over . . . . .	100.0	14.1	7.0	6.4	6.3	19.4	50.1	*1.9

See footnote at end of table.

**Table 2. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals <sup>1</sup>	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6–11 months				
Race—Con.								
Percent distribution								
Other:								
All ages . . . . .	100.0	52.4	32.7	18.1	9.8	13.6	9.2	7.5
2–4 years . . . . .	100.0	29.4	20.0	8.5	*2.6	*3.2	...	52.3
5–11 years . . . . .	100.0	61.3	41.2	17.4	7.3	9.3	*0.5	14.0
12–17 years . . . . .	100.0	60.9	38.6	20.7	9.1	11.2	5.5	5.6
18–34 years . . . . .	100.0	51.7	30.5	20.1	11.7	16.4	9.7	3.6
35–44 years . . . . .	100.0	55.3	34.3	18.7	11.0	13.5	8.6	3.3
45–54 years . . . . .	100.0	55.2	33.6	19.7	10.6	15.9	10.8	*2.2
55–64 years . . . . .	100.0	50.5	36.4	13.7	8.5	13.7	17.3	*1.5
65 years and over . . . . .	100.0	36.8	20.7	14.5	8.6	17.4	28.9	*2.6
65–74 years . . . . .	100.0	42.5	22.7	18.7	*8.0	13.4	28.1	*2.0
75 years and over . . . . .	100.0	25.2	*16.8	*6.5	*10.3	25.2	29.7	*3.9
Hispanic origin								
Non-Hispanic:								
All ages . . . . .	100.0	58.2	37.1	19.3	9.4	12.1	11.2	3.9
2–4 years . . . . .	100.0	33.6	21.5	10.7	2.8	1.1	...	53.4
5–11 years . . . . .	100.0	70.8	46.0	22.1	8.8	6.2	0.9	8.9
12–17 years . . . . .	100.0	71.0	46.5	21.9	10.3	9.3	3.0	2.4
18–34 years . . . . .	100.0	58.2	34.6	21.9	11.9	15.5	8.4	0.9
35–44 years . . . . .	100.0	64.0	40.9	21.2	9.9	12.6	8.4	0.4
45–54 years . . . . .	100.0	59.8	38.8	19.2	9.0	12.9	13.0	0.4
55–64 years . . . . .	100.0	54.6	37.4	15.9	8.1	13.2	18.6	0.3
65 years and over . . . . .	100.0	43.3	29.2	13.1	6.9	13.1	30.7	0.4
Hispanic, total:								
All ages . . . . .	100.0	46.4	26.5	17.6	10.2	13.9	10.7	12.6
2–4 years . . . . .	100.0	22.4	14.4	7.4	2.9	*0.5	...	65.2
5–11 years . . . . .	100.0	57.2	32.5	21.5	8.3	5.9	1.6	20.6
12–17 years . . . . .	100.0	52.0	30.3	17.8	12.3	13.0	6.3	10.2
18–34 years . . . . .	100.0	44.3	24.7	17.6	11.2	18.9	12.1	7.2
35–44 years . . . . .	100.0	48.8	27.1	19.1	11.3	16.2	15.1	4.2
45–54 years . . . . .	100.0	50.9	28.0	20.1	11.1	15.7	14.4	*1.5
55–64 years . . . . .	100.0	43.4	25.7	16.4	10.3	17.0	19.8	*2.0
65 years and over . . . . .	100.0	40.2	27.0	12.6	10.5	13.1	27.6	*3.2
Hispanic, Mexican-American:								
All ages . . . . .	100.0	40.9	24.3	15.7	8.8	14.4	12.4	17.2
2–4 years . . . . .	100.0	18.2	11.9	6.3	*2.4	*0.6	...	71.7
5–11 years . . . . .	100.0	51.8	30.4	20.1	8.0	6.7	*1.7	25.8
12–17 years . . . . .	100.0	44.5	27.9	15.3	11.9	15.5	7.0	15.0
18–34 years . . . . .	100.0	37.8	21.7	15.1	9.2	19.3	15.1	11.3
35–44 years . . . . .	100.0	44.0	26.2	16.9	9.2	16.8	19.6	6.5
45–54 years . . . . .	100.0	45.3	26.6	17.8	10.2	16.1	18.1	*3.0
55–64 years . . . . .	100.0	43.1	24.6	18.5	8.2	18.5	20.0	*2.7
65 years and over . . . . .	100.0	33.9	21.8	11.8	*8.5	13.0	34.1	*5.5
Hispanic, other:								
All ages . . . . .	100.0	53.7	29.5	20.0	12.1	13.2	8.5	6.6
2–4 years . . . . .	100.0	29.0	18.2	9.1	*3.5	*0.5	...	55.5
5–11 years . . . . .	100.0	66.6	36.3	24.0	8.9	4.4	*1.3	11.8
12–17 years . . . . .	100.0	64.2	34.3	21.9	13.1	8.8	5.1	*2.5
18–34 years . . . . .	100.0	53.0	28.6	21.1	14.0	18.5	8.0	1.8
35–44 years . . . . .	100.0	54.6	28.2	21.8	13.8	15.6	9.7	*1.5
45–54 years . . . . .	100.0	55.6	29.1	21.9	11.9	15.3	11.3	*0.2
55–64 years . . . . .	100.0	43.8	26.9	14.3	12.4	15.7	19.5	*1.2
65 years and over . . . . .	100.0	45.4	31.3	13.3	12.2	13.3	22.4	*1.2
Place of residence								
MSA, total:								
All ages . . . . .	100.0	58.4	37.0	19.5	9.4	11.9	10.1	4.5
2–4 years . . . . .	100.0	33.0	21.2	10.4	2.9	1.1	...	53.4
5–11 years . . . . .	100.0	69.6	44.5	22.3	8.6	5.8	0.9	10.0
12–17 years . . . . .	100.0	70.2	45.4	21.7	9.8	9.1	3.2	3.1
18–34 years . . . . .	100.0	57.4	33.9	21.6	11.7	15.5	8.2	1.5
35–44 years . . . . .	100.0	64.1	40.7	21.2	10.0	12.1	8.0	0.8
45–54 years . . . . .	100.0	61.0	39.2	19.8	9.1	12.6	11.5	0.4
55–64 years . . . . .	100.0	56.1	38.3	16.3	8.0	12.7	17.2	0.4
65 years and over . . . . .	100.0	44.4	30.1	13.2	7.4	13.4	28.5	0.4

See footnote at end of table.

**Table 2. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II.]

Characteristic	Interval since last dental visit							
	All intervals <sup>1</sup>	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6–11 months				
Place of residence—Con. <span style="float: right;">Percent distribution</span>								
MSA, central city:								
All ages . . . . .	100.0	54.8	33.4	19.0	10.1	13.0	11.0	5.1
2–4 years . . . . .	100.0	30.4	18.4	10.4	2.7	1.3	...	54.4
5–11 years . . . . .	100.0	65.0	39.6	22.2	9.6	6.5	1.3	11.7
12–17 years . . . . .	100.0	64.4	36.8	23.3	12.2	10.6	3.9	4.0
18–34 years . . . . .	100.0	54.5	31.7	20.7	12.2	16.6	9.0	1.8
35–44 years . . . . .	100.0	61.6	38.4	20.6	10.5	12.7	8.5	1.3
45–54 years . . . . .	100.0	56.3	35.0	18.8	10.3	14.3	12.4	0.6
55–64 years . . . . .	100.0	51.3	33.9	15.6	8.4	14.8	18.4	0.8
65 years and over . . . . .	100.0	43.6	28.8	13.5	7.4	13.3	29.5	0.6
MSA, not central city:								
All ages . . . . .	100.0	60.7	39.2	19.7	9.0	11.3	9.5	4.2
2–4 years . . . . .	100.0	34.8	23.1	10.4	3.1	0.9	...	52.8
5–11 years . . . . .	100.0	72.5	47.6	22.4	7.9	5.5	0.7	8.9
12–17 years . . . . .	100.0	73.7	50.6	20.8	8.4	8.2	2.7	2.6
18–34 years . . . . .	100.0	59.4	35.5	22.2	11.4	14.7	7.6	1.2
35–44 years . . . . .	100.0	65.5	42.0	21.6	9.7	11.8	7.7	0.5
45–54 years . . . . .	100.0	63.6	41.6	20.4	8.4	11.6	11.0	*0.3
55–64 years . . . . .	100.0	59.3	41.2	16.8	7.8	11.4	16.4	*0.2
65 years and over . . . . .	100.0	44.9	30.9	13.0	7.5	13.5	27.9	0.3
Not MSA:								
All ages . . . . .	100.0	53.2	33.7	18.0	9.5	13.5	14.8	5.0
2–4 years . . . . .	100.0	28.8	18.0	9.6	2.2	*0.9	...	60.7
5–11 years . . . . .	100.0	67.7	44.0	21.1	9.1	7.2	1.4	11.4
12–17 years . . . . .	100.0	64.3	42.0	20.3	12.7	12.0	4.1	3.9
18–34 years . . . . .	100.0	54.8	32.3	20.8	12.1	17.0	11.0	1.7
35–44 years . . . . .	100.0	58.2	36.7	20.1	10.1	15.6	12.5	*0.4
45–54 years . . . . .	100.0	52.6	34.0	17.2	9.3	14.7	19.0	*0.5
55–64 years . . . . .	100.0	47.4	31.7	14.6	8.9	15.8	23.5	*0.2
65 years and over . . . . .	100.0	40.0	26.6	12.6	5.8	12.3	36.1	0.6
Geographic region								
Northeast:								
All ages . . . . .	100.0	60.0	37.1	19.4	10.3	11.0	9.8	3.0
2–4 years . . . . .	100.0	34.0	19.4	12.4	3.5	*0.4	...	50.9
5–11 years . . . . .	100.0	76.3	47.9	23.3	9.4	3.4	*0.3	5.7
12–17 years . . . . .	100.0	75.8	46.8	22.7	10.5	6.5	1.3	*0.9
18–34 years . . . . .	100.0	61.5	36.0	22.2	13.1	13.4	6.0	0.8
35–44 years . . . . .	100.0	65.3	40.8	20.5	11.1	11.6	6.6	*0.5
45–54 years . . . . .	100.0	61.8	38.2	20.1	10.3	12.1	9.9	*0.3
55–64 years . . . . .	100.0	55.1	37.5	16.0	9.0	13.6	16.2	*0.3
65 years and over . . . . .	100.0	41.7	27.6	12.5	7.5	13.3	29.7	*0.3
Midwest:								
All ages . . . . .	100.0	61.5	39.8	20.1	8.3	11.2	10.7	3.5
2–4 years . . . . .	100.0	37.0	24.0	11.9	2.4	*0.7	...	51.9
5–11 years . . . . .	100.0	77.2	50.3	24.8	7.1	4.3	0.8	6.3
12–17 years . . . . .	100.0	75.9	50.9	22.7	9.8	7.5	2.4	1.2
18–34 years . . . . .	100.0	61.2	37.1	22.5	10.8	14.9	7.7	0.6
35–44 years . . . . .	100.0	67.0	43.4	22.2	8.7	11.8	7.7	*0.3
45–54 years . . . . .	100.0	61.8	41.0	19.5	7.9	12.5	13.2	*0.3
55–64 years . . . . .	100.0	55.5	37.8	16.2	7.5	11.9	20.7	*0.1
65 years and over . . . . .	100.0	44.9	31.1	12.7	5.6	13.4	31.5	*0.3
South:								
All ages . . . . .	100.0	52.2	32.5	18.2	10.3	13.8	13.6	6.0
2–4 years . . . . .	100.0	29.7	19.8	8.7	2.5	1.4	...	60.1
5–11 years . . . . .	100.0	61.7	39.3	19.7	10.3	8.2	1.6	15.0
12–17 years . . . . .	100.0	61.0	39.7	19.1	12.1	12.2	5.7	6.0
18–34 years . . . . .	100.0	52.5	30.5	20.6	12.7	17.3	11.2	2.2
35–44 years . . . . .	100.0	58.2	35.6	20.9	10.9	15.0	11.5	1.0
45–54 years . . . . .	100.0	53.2	33.7	18.2	9.8	15.2	17.0	*0.4
55–64 years . . . . .	100.0	50.3	34.2	14.9	8.4	14.9	21.5	0.5
65 years and over . . . . .	100.0	39.1	24.9	13.5	7.5	13.2	34.7	0.7
West:								
All ages . . . . .	100.0	57.8	37.3	19.2	8.6	12.2	8.9	5.3
2–4 years . . . . .	100.0	29.2	18.8	9.2	3.0	*1.2	...	53.7
5–11 years . . . . .	100.0	66.6	43.2	21.6	7.5	7.1	0.8	10.9
12–17 years . . . . .	100.0	67.3	43.4	22.4	8.7	11.3	2.7	3.4
18–34 years . . . . .	100.0	54.6	32.3	21.0	10.4	16.8	8.5	2.2
35–44 years . . . . .	100.0	63.2	41.6	20.3	9.1	11.9	8.5	0.9
45–54 years . . . . .	100.0	63.0	41.4	19.9	8.5	11.2	10.2	*0.7
55–64 years . . . . .	100.0	57.8	39.4	17.2	8.1	12.6	13.7	*0.5
65 years and over . . . . .	100.0	50.6	36.1	13.5	7.1	12.4	23.1	*0.4

<sup>1</sup>Includes unknown interval (not shown separately).

NOTE: MSA is metropolitan statistical area.

**Table 3. Number of persons 2 years of age and over, by interval since last dental visit and selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								Never	Unknown
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more			
		Total	Less than 6 months	6-11 months						
Education level <sup>1</sup>										
Number in thousands										
Less than 9 years:										
All ages, 22 years and over . . . . .	17,236	4,790	2,824	1,741	1,427	2,987	6,545	540	947	
22-34 years . . . . .	2,100	685	377	261	179	417	444	249	125	
35-44 years . . . . .	1,702	585	333	214	157	297	466	120	78	
45-54 years . . . . .	1,992	614	346	231	206	418	611	46	97	
55-64 years . . . . .	3,275	928	552	346	369	627	1,140	42	170	
65 years and over . . . . .	8,166	1,979	1,216	689	517	1,228	3,883	82	477	
9-11 years:										
All ages, 22 years and over . . . . .	18,937	7,230	4,299	2,685	1,957	3,753	4,829	207	962	
22-34 years . . . . .	5,388	2,278	1,287	912	658	1,154	915	126	256	
35-44 years . . . . .	2,699	1,099	641	432	313	623	454	46	164	
45-54 years . . . . .	2,892	1,059	583	436	351	598	743	*8	132	
55-64 years . . . . .	3,279	1,216	772	384	297	633	944	*14	176	
65 years and over . . . . .	4,680	1,579	1,017	522	338	744	1,773	*13	233	
12 years:										
All ages, 22 years and over . . . . .	62,236	34,084	21,199	11,819	6,603	9,349	8,793	364	3,045	
22-34 years . . . . .	21,459	11,341	6,605	4,370	2,641	3,793	2,311	235	1,139	
35-44 years . . . . .	13,096	7,660	4,678	2,715	1,501	1,933	1,401	57	544	
45-54 years . . . . .	9,999	5,737	3,644	1,919	982	1,363	1,367	*37	512	
55-64 years . . . . .	8,263	4,704	3,115	1,461	702	1,056	1,403	*6	392	
65 years and over . . . . .	9,420	4,643	3,158	1,354	776	1,203	2,311	*29	458	
13 years or more:										
All ages, 22 years and over . . . . .	64,957	45,558	29,725	14,664	5,798	6,808	4,104	144	2,544	
22-34 years . . . . .	24,358	16,100	9,742	5,891	2,695	3,057	1,390	91	1,024	
35-44 years . . . . .	18,142	13,224	8,670	4,185	1,613	1,754	869	*29	653	
45-54 years . . . . .	9,582	7,176	4,810	2,162	705	819	500	*9	373	
55-64 years . . . . .	6,367	4,692	3,416	1,206	385	546	483	*10	251	
65 years and over . . . . .	6,507	4,366	3,088	1,220	400	632	861	*5	242	
Family income <sup>2</sup>										
Less than \$10,000:										
All ages . . . . .	25,126	10,278	5,817	4,089	2,570	3,927	5,560	1,890	900	
2-4 years . . . . .	1,417	419	242	166	*35	*11	...	861	89	
5-11 years . . . . .	2,948	1,654	898	668	351	308	47	478	110	
12-17 years . . . . .	2,023	1,042	538	442	312	319	148	153	50	
18-34 years . . . . .	7,779	3,961	2,227	1,625	986	1,373	965	252	241	
35-44 years . . . . .	1,985	753	413	305	222	421	451	66	71	
45-54 years . . . . .	1,432	440	251	169	166	308	443	*14	61	
55-64 years . . . . .	1,931	561	321	218	180	349	746	*16	79	
65 years and over . . . . .	5,612	1,447	926	496	318	839	2,760	49	198	
65-74 years . . . . .	2,871	787	502	271	185	470	1,307	*20	102	
75 years and over . . . . .	2,741	660	425	225	133	369	1,453	*29	96	
\$10,000-\$19,999:										
All ages . . . . .	39,612	17,210	10,184	6,408	4,515	6,775	6,867	2,616	1,629	
2-4 years . . . . .	1,940	409	255	136	73	*25	...	1,255	177	
5-11 years . . . . .	4,189	2,264	1,307	874	528	432	96	704	164	
12-17 years . . . . .	3,084	1,644	914	649	471	469	176	202	122	
18-34 years . . . . .	11,682	5,249	2,999	2,046	1,580	2,503	1,608	302	441	
35-44 years . . . . .	4,232	1,843	1,056	731	605	884	692	73	135	
45-54 years . . . . .	2,895	1,182	690	440	304	577	672	*30	130	
55-64 years . . . . .	3,588	1,495	931	520	348	597	998	*15	135	
65 years and over . . . . .	8,002	3,123	2,032	1,012	606	1,287	2,625	*36	325	
65-74 years . . . . .	4,955	2,012	1,296	665	397	777	1,558	*24	188	
75 years and over . . . . .	3,047	1,111	736	347	209	510	1,067	*13	137	
\$20,000-\$34,999:										
All ages . . . . .	54,773	31,940	19,836	11,155	5,755	7,226	5,438	2,745	1,670	
2-4 years . . . . .	2,879	933	568	320	71	*36	...	1,648	191	
5-11 years . . . . .	6,281	4,445	2,819	1,484	544	348	46	696	203	
12-17 years . . . . .	4,672	3,156	2,009	1,023	564	538	156	150	106	
18-34 years . . . . .	17,415	9,997	5,900	3,790	2,175	2,959	1,579	155	550	
35-44 years . . . . .	8,441	5,203	3,100	1,979	954	1,202	831	51	200	
45-54 years . . . . .	4,836	2,634	1,596	962	539	729	791	*18	126	
55-64 years . . . . .	5,007	2,710	1,820	815	467	780	867	*12	170	
65 years and over . . . . .	5,242	2,861	2,024	782	441	634	1,169	*14	123	
65-74 years . . . . .	3,621	2,079	1,461	583	311	449	706	*8	68	
75 years and over . . . . .	1,621	782	563	199	130	186	463	*6	55	

See footnotes at end of table.

**Table 3. Number of persons 2 years of age and over, by interval since last dental visit and selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	Unknown
		Total	Less than 6 months	6-11 months					
Family income <sup>2</sup> —Con. Number in thousands									
\$35,000 or more:									
All ages . . . . .	77,990	56,937	38,329	16,853	6,226	6,641	3,812	2,195	2,180
2-4 years . . . . .	3,466	1,464	1,004	405	84	*26	...	1,635	258
5-11 years . . . . .	8,469	7,144	4,987	1,890	484	284	*30	348	180
12-17 years . . . . .	7,341	6,227	4,405	1,607	476	348	96	51	142
18-34 years . . . . .	21,220	14,675	9,106	5,112	2,285	2,486	991	92	691
35-44 years . . . . .	16,090	12,129	8,158	3,583	1,355	1,496	762	*19	328
45-54 years . . . . .	11,359	8,197	5,562	2,405	887	1,108	825	*27	315
55-64 years . . . . .	6,562	4,744	3,400	1,265	455	588	610	*16	149
65 years and over . . . . .	3,484	2,357	1,707	586	200	306	496	*8	117
65-74 years . . . . .	2,493	1,805	1,320	432	137	214	261	*3	73
75 years and over . . . . .	990	552	387	154	63	92	236	*4	44
Dental insurance coverage									
Having private dental insurance:									
All ages . . . . .	95,436	68,135	45,307	20,781	8,472	8,697	5,471	3,226	1,435
2-4 years . . . . .	4,430	1,777	1,214	487	123	*28	...	2,206	296
5-11 years . . . . .	11,186	9,090	6,182	2,599	811	433	61	663	128
12-17 years . . . . .	9,345	7,668	5,235	2,176	761	558	141	126	92
18-34 years . . . . .	27,791	19,510	12,268	6,660	3,066	3,273	1,432	138	372
35-44 years . . . . .	18,301	13,512	8,973	4,146	1,740	1,825	1,012	49	163
45-54 years . . . . .	12,045	8,581	5,674	2,654	1,009	1,232	1,040	*19	165
55-64 years . . . . .	7,949	5,320	3,867	1,330	628	879	1,007	*14	101
65 years and over . . . . .	4,389	2,677	1,895	730	334	471	778	*10	118
65-74 years . . . . .	3,153	2,015	1,413	563	261	340	477	*6	54
75 years and over . . . . .	1,235	662	482	168	74	130	301	*4	64
Without private dental insurance:									
All ages . . . . .	122,368	61,231	36,983	22,093	12,660	18,624	18,983	7,240	3,629
2-4 years . . . . .	6,022	1,676	992	613	178	77	...	3,640	451
5-11 years . . . . .	12,535	7,841	4,705	2,772	1,292	1,053	191	1,800	358
12-17 years . . . . .	9,359	5,602	3,398	1,933	1,227	1,311	505	517	197
18-34 years . . . . .	34,517	17,230	9,588	7,039	4,507	6,788	4,212	836	943
35-44 years . . . . .	15,174	8,322	4,943	3,097	1,696	2,609	2,004	193	351
45-54 years . . . . .	10,796	5,483	3,419	1,881	1,144	1,814	1,993	78	284
55-64 years . . . . .	11,824	5,765	3,725	1,886	1,038	1,860	2,766	56	339
65 years and over . . . . .	22,141	9,313	6,212	2,873	1,579	3,114	7,311	120	705
65-74 years . . . . .	13,218	6,102	4,070	1,888	987	1,877	3,836	57	358
75 years and over . . . . .	8,923	3,211	2,142	985	592	1,237	3,475	62	346
Insurance status unknown:									
All ages . . . . .	18,053	5,657	3,175	2,270	1,197	1,643	1,825	506	7,225
2-4 years . . . . .	642	110	74	*36	*6	*8	...	256	261
5-11 years . . . . .	1,509	523	315	188	92	64	*5	139	686
12-17 years . . . . .	1,301	494	294	174	115	86	*35	*17	555
18-34 years . . . . .	5,906	2,050	1,053	932	481	720	309	61	2,286
35-44 years . . . . .	2,507	798	443	316	169	192	190	*14	1,145
45-54 years . . . . .	1,843	552	310	219	102	171	206	*7	805
55-64 years . . . . .	1,657	492	286	190	102	145	234	*5	679
65 years and over . . . . .	2,690	639	400	214	131	257	846	*8	810
65-74 years . . . . .	1,457	377	254	110	77	146	408	*8	442
75 years and over . . . . .	1,232	262	146	104	54	111	438	...	368

<sup>1</sup>Persons with unknown education level not shown separately.

<sup>2</sup>Persons with unknown income not shown separately.



**Table 4. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6-11 months				
Education level <sup>2</sup>		Percent distribution						
Less than 9 years:								
All ages, 22 years and over	100.0	27.8	16.4	10.1	8.3	17.3	38.0	3.1
22-34 years	100.0	32.6	18.0	12.4	8.5	19.9	21.1	11.9
35-44 years	100.0	34.4	19.6	12.6	9.2	17.5	27.4	7.1
45-54 years	100.0	30.8	17.4	11.6	10.3	21.0	30.7	2.3
55-64 years	100.0	28.3	16.9	10.6	11.3	19.1	34.8	1.3
65 years and over	100.0	24.2	14.9	8.4	6.3	15.0	47.6	1.0
9-11 years:								
All ages, 22 years and over	100.0	38.2	22.7	14.2	10.3	19.8	25.5	1.1
22-34 years	100.0	42.3	23.9	16.9	12.2	21.4	17.0	2.3
35-44 years	100.0	40.7	23.7	16.0	11.6	23.1	16.8	1.7
45-54 years	100.0	36.6	20.2	15.1	12.1	20.7	25.7	*0.3
55-64 years	100.0	37.1	23.5	11.7	9.1	19.3	28.8	*0.4
65 years and over	100.0	33.7	21.7	11.2	7.2	15.9	37.9	*0.3
12 years:								
All ages, 22 years and over	100.0	54.8	34.1	19.0	10.6	15.0	14.1	0.6
22-34 years	100.0	52.8	30.8	20.4	12.3	17.7	10.8	1.1
35-44 years	100.0	55.5	35.7	20.7	11.5	14.8	10.7	0.4
45-54 years	100.0	57.4	36.4	19.2	9.8	13.6	13.7	*0.4
55-64 years	100.0	56.9	37.7	17.7	8.5	12.8	17.0	*0.1
65 years and over	100.0	49.3	33.5	14.4	8.2	12.8	24.5	*0.3
13 years or more:								
All ages, 22 years and over	100.0	70.1	45.8	22.6	8.9	10.5	6.3	0.2
22-34 years	100.0	66.1	40.0	24.2	11.1	12.6	5.7	0.4
35-44 years	100.0	72.9	47.8	23.1	8.9	9.7	4.8	*0.2
45-54 years	100.0	74.9	50.2	22.6	7.4	8.5	5.2	*0.1
55-64 years	100.0	73.7	53.7	18.9	6.0	8.6	7.6	*0.2
65 years and over	100.0	67.1	47.5	18.7	6.1	9.7	13.2	*0.1
Family income <sup>3</sup>		Percent distribution						
Less than \$10,000:								
All ages	100.0	40.9	23.2	16.3	10.2	15.6	22.1	7.5
2-4 years	100.0	29.6	17.1	11.7	*2.5	*0.8	...	60.8
5-11 years	100.0	56.1	30.5	22.7	11.9	10.4	1.6	16.2
12-17 years	100.0	51.5	26.6	21.8	15.4	15.8	7.3	7.6
18-34 years	100.0	50.9	28.6	20.9	12.7	17.7	12.4	3.2
35-44 years	100.0	37.9	20.8	15.4	11.2	21.2	22.7	3.3
45-54 years	100.0	30.7	17.5	11.8	11.6	21.5	30.9	*1.0
55-64 years	100.0	29.1	16.6	11.3	9.3	18.1	38.6	*0.8
65 years and over	100.0	25.8	16.5	8.8	5.7	15.0	49.2	0.9
65-74 years	100.0	27.4	17.5	9.4	6.4	16.4	45.5	*0.7
75 years and over	100.0	24.1	15.5	8.2	4.9	13.5	53.0	*1.1
\$10,000-\$19,999:								
All ages	100.0	43.4	25.7	16.2	11.4	17.1	17.3	6.6
2-4 years	100.0	21.1	13.1	7.0	3.8	*1.3	...	64.7
5-11 years	100.0	54.0	31.2	20.9	12.6	10.3	2.3	16.8
12-17 years	100.0	53.3	29.6	21.0	15.3	15.2	5.7	6.5
18-34 years	100.0	44.9	25.7	17.5	13.5	21.4	13.8	2.6
35-44 years	100.0	43.5	25.0	17.3	14.3	20.9	16.4	1.7
45-54 years	100.0	40.8	23.8	15.2	10.5	19.9	23.2	*1.0
55-64 years	100.0	41.7	25.9	14.5	9.7	16.6	27.8	*0.4
65 years and over	100.0	39.0	25.4	12.6	7.6	16.1	32.8	*0.4
65-74 years	100.0	40.6	26.2	13.4	8.0	15.7	31.4	*0.5
75 years and over	100.0	36.5	24.2	11.4	6.9	16.7	35.0	*0.4
\$20,000-\$34,999:								
All ages	100.0	58.3	36.2	20.4	10.5	13.2	9.9	5.0
2-4 years	100.0	32.4	19.7	11.1	2.5	*1.3	...	57.2
5-11 years	100.0	70.8	44.9	23.6	8.7	5.5	0.7	11.1
12-17 years	100.0	67.6	43.0	21.9	12.1	11.5	3.3	3.2
18-34 years	100.0	57.4	33.9	21.8	12.5	17.0	9.1	0.9
35-44 years	100.0	61.6	36.7	23.4	11.3	14.2	9.8	0.6
45-54 years	100.0	54.5	33.0	19.9	11.1	15.1	16.4	*0.4
55-64 years	100.0	54.1	36.3	16.3	9.3	15.6	17.3	*0.2
65 years and over	100.0	54.6	38.6	14.9	8.4	12.1	22.3	*0.3
65-74 years	100.0	57.4	40.3	16.1	8.6	12.4	19.5	*0.2
75 years and over	100.0	48.2	34.7	12.3	8.0	11.5	28.6	*0.4

See footnotes at end of table.

**Table 4. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6–11 months				
Family income <sup>3</sup> —Con.		Percent distribution						
\$35,000 or more:								
All ages	100.0	73.0	49.1	21.6	8.0	8.5	4.9	2.8
2–4 years	100.0	42.2	29.0	11.7	2.4	*0.8	...	47.2
5–11 years	100.0	84.4	58.9	22.3	5.7	3.4	*0.4	4.1
12–17 years	100.0	84.8	60.0	21.9	6.5	4.7	1.3	0.7
18–34 years	100.0	69.2	42.9	24.1	10.8	11.7	4.7	0.4
35–44 years	100.0	75.4	50.7	22.3	8.4	9.3	4.7	*0.1
45–54 years	100.0	72.2	49.0	21.2	7.8	9.8	7.3	*0.2
55–64 years	100.0	72.3	51.8	19.3	6.9	9.0	9.3	*0.2
65 years and over	100.0	67.7	49.0	16.8	5.7	8.8	14.2	*0.2
65–74 years	100.0	72.4	52.9	17.3	5.5	8.6	10.5	*0.1
75 years and over	100.0	55.8	39.1	15.6	6.4	9.3	23.8	*0.4
Dental insurance coverage <sup>4</sup>								
Having private dental insurance:								
All ages	100.0	71.4	47.5	21.8	8.9	9.1	5.7	3.4
2–4 years	100.0	40.1	27.4	11.0	2.8	*0.6	...	49.8
5–11 years	100.0	81.3	55.3	23.2	7.3	3.9	0.5	5.9
12–17 years	100.0	82.1	56.0	23.3	8.1	6.0	1.5	1.3
18–34 years	100.0	70.2	44.1	24.0	11.0	11.8	5.2	0.5
35–44 years	100.0	73.8	49.0	22.7	9.5	10.0	5.5	0.3
45–54 years	100.0	71.2	47.1	22.0	8.4	10.2	8.6	*0.2
55–64 years	100.0	66.9	48.6	16.7	7.9	11.1	12.7	*0.2
65 years and over	100.0	61.0	43.2	16.6	7.6	10.7	17.7	*0.2
65–74 years	100.0	63.9	44.8	17.9	8.3	10.8	15.1	*0.2
75 years and over	100.0	53.6	39.0	13.6	6.0	10.5	24.4	*0.3
Without private dental insurance:								
All ages	100.0	50.0	30.2	18.1	10.3	15.2	15.5	5.9
2–4 years	100.0	27.8	16.5	10.2	3.0	1.3	...	60.4
5–11 years	100.0	62.6	37.5	22.1	10.3	8.4	1.5	14.4
12–17 years	100.0	59.9	36.3	20.7	13.1	14.0	5.4	5.5
18–34 years	100.0	49.9	27.8	20.4	13.1	19.7	12.2	2.4
35–44 years	100.0	54.8	32.6	20.4	11.2	17.2	13.2	1.3
45–54 years	100.0	50.8	31.7	17.4	10.6	16.8	18.5	0.7
55–64 years	100.0	48.8	31.5	16.0	8.8	15.7	23.4	0.5
65 years and over	100.0	42.1	28.1	13.0	7.1	14.1	33.0	0.5
65–74 years	100.0	46.2	30.8	14.3	7.5	14.2	29.0	0.4
75 years and over	100.0	36.0	24.0	11.0	6.6	13.9	38.9	0.7

<sup>1</sup>Includes unknown interval (not shown separately).

<sup>2</sup>Persons with unknown education level not shown separately.

<sup>3</sup>Persons with unknown income not shown separately.

<sup>4</sup>Persons with unknown insurance coverage not shown separately.

**Table 5. Number of persons 2 years of age and over, by interval since last dental visit and selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit									
	All intervals	Less than 1 year				1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	Unknown
		Total	Less than 6 months	6-11 months						
Assessed health status <sup>1</sup>										
Number in thousands										
Excellent or very good:										
All ages	157,817	97,611	62,094	32,436	14,859	17,380	12,288	8,016	7,663	
2-4 years	8,998	3,010	1,934	947	261	93	...	4,832	802	
5-11 years	20,069	14,268	9,261	4,487	1,684	1,116	185	1,899	917	
12-17 years	15,531	11,083	7,308	3,369	1,517	1,364	466	457	646	
18-34 years	51,035	30,330	17,966	11,443	5,952	7,649	4,028	586	2,489	
35-44 years	25,055	16,703	10,683	5,506	2,426	2,920	1,808	141	1,057	
45-54 years	15,078	9,835	6,364	3,183	1,299	1,686	1,510	47	702	
55-64 years	10,568	6,521	4,505	1,864	899	1,171	1,442	*23	512	
65 years and over	11,482	5,862	4,073	1,638	821	1,381	2,850	*30	538	
Good:										
All ages	53,467	27,537	17,200	9,380	5,259	7,580	7,723	2,374	2,994	
2-4 years	1,702	443	274	163	*36	*16	...	1,045	161	
5-11 years	4,345	2,688	1,650	909	432	355	59	601	209	
12-17 years	3,651	2,199	1,321	760	489	463	154	179	167	
18-34 years	13,659	6,788	3,951	2,571	1,682	2,473	1,494	356	865	
35-44 years	7,968	4,508	2,793	1,578	855	1,163	949	70	424	
45-54 years	6,445	3,463	2,217	1,119	613	986	983	*31	368	
55-64 years	6,419	3,417	2,344	975	493	919	1,245	*32	313	
65 years and over	9,278	4,031	2,651	1,306	659	1,205	2,838	59	486	
Fair or poor:										
All ages	23,229	9,241	5,785	3,109	2,076	3,906	6,182	503	1,321	
2-4 years	302	87	58	*19	*10	*2	...	186	*18	
5-11 years	550	320	175	110	59	61	*11	83	*16	
12-17 years	605	329	205	104	67	112	58	*20	*19	
18-34 years	3,243	1,555	933	562	389	626	423	83	168	
35-44 years	2,831	1,361	843	460	309	537	437	40	146	
45-54 years	3,071	1,295	810	442	333	533	740	*25	145	
55-64 years	4,335	1,604	1,007	554	363	784	1,307	*20	256	
65 years and over	8,293	2,690	1,754	857	546	1,251	3,206	46	554	
Limitation of activity										
Unable to carry on usual activity:										
All ages	10,013	3,994	2,466	1,361	962	1,644	2,558	166	688	
2-4 years	77	*30	*24	*6	...	*1	...	*36	*9	
5-11 years	119	78	46	*18	*10	*7	*3	*19	*2	
12-17 years	118	71	47	*12	*9	*24	*5	...	*9	
18-34 years	1,362	631	369	223	182	224	195	49	82	
35-44 years	1,334	642	380	233	149	255	195	*9	83	
45-54 years	1,475	626	389	217	162	265	301	*20	103	
55-64 years	2,575	974	627	325	232	450	736	*18	166	
65 years and over	2,952	943	584	328	219	417	1,124	*15	233	
Limited in amount or kind of major activity:										
All ages	13,192	6,557	4,115	2,283	1,170	1,840	2,673	319	633	
2-4 years	153	43	*26	*10	*12	*1	...	81	*15	
5-11 years	1,062	699	405	276	96	91	*10	133	*33	
12-17 years	805	516	294	199	81	106	42	*30	*30	
18-34 years	2,063	1,080	655	399	254	369	245	*15	101	
35-44 years	1,836	1,025	620	389	207	301	190	*23	90	
45-54 years	1,563	803	527	262	123	222	336	*10	69	
55-64 years	2,001	1,021	683	307	160	273	466	*2	79	
65 years and over	3,708	1,369	904	442	237	478	1,385	*23	216	
Limited, but not in major activity:										
All ages	10,885	5,645	3,755	1,756	894	1,522	2,214	140	470	
2-4 years	78	*25	*17	*6	...	...	...	45	*8	
5-11 years	355	288	174	100	*23	*12	*3	*24	*5	
12-17 years	511	398	300	89	39	46	*11	*10	*5	
18-34 years	1,579	939	587	329	165	269	135	*13	59	
35-44 years	1,244	764	518	234	113	177	119	*17	54	
45-54 years	1,188	643	406	211	133	187	165	*3	57	
55-64 years	1,412	753	518	217	103	202	307	*6	41	
65 years and over	4,519	1,835	1,235	569	318	630	1,474	*21	241	
Not limited in activity:										
All ages	201,768	118,827	75,130	39,744	19,303	23,958	18,833	10,348	10,498	
2-4 years	10,787	3,464	2,212	1,113	295	111	...	5,940	977	
5-11 years	23,694	16,389	10,577	5,166	2,067	1,440	242	2,425	1,131	
12-17 years	18,571	12,779	8,286	3,984	1,973	1,778	621	619	800	
18-34 years	63,209	36,140	21,298	13,680	7,453	9,920	5,379	959	3,359	
35-44 years	31,569	20,201	12,842	6,702	3,136	3,891	2,702	206	1,432	
45-54 years	20,458	12,543	8,081	4,064	1,837	2,544	2,437	72	1,026	
55-64 years	15,441	8,829	6,050	2,557	1,273	1,959	2,499	49	833	
65 years and over	18,039	8,482	5,785	2,478	1,269	2,316	4,953	78	941	

See footnotes at end of table.

**Table 5. Number of persons 2 years of age and over, by interval since last dental visit and selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit								Unknown
	All intervals	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never	
		Total	Less than 6 months	6-11 months					
Dentition status <sup>2</sup>									
Number in thousands									
Dentate:									
35 years and over . . . . .	90,311	59,278	38,890	18,705	8,752	11,531	8,845	509	1,396
35-44 years . . . . .	33,895	22,477	14,269	7,494	3,529	4,408	2,762	252	467
45-54 years . . . . .	21,368	14,230	9,169	4,622	2,066	2,683	1,966	90	332
55-64 years . . . . .	16,672	10,974	7,542	3,169	1,527	2,097	1,715	69	292
65 years and over . . . . .	18,377	11,597	7,909	3,421	1,631	2,344	2,402	98	304
65-74 years . . . . .	12,276	7,879	5,381	2,324	1,095	1,577	1,505	54	166
75 years and over . . . . .	6,101	3,718	2,528	1,097	536	767	898	45	138
Edentulous:									
35 years and over . . . . .	17,439	2,175	1,257	831	918	3,035	10,544	64	704
35-44 years . . . . .	932	155	90	65	76	217	444	*4	*37
45-54 years . . . . .	2,480	385	234	132	189	534	1,274	*14	85
55-64 years . . . . .	4,072	603	335	238	240	787	2,293	*6	142
65 years and over . . . . .	9,955	1,032	598	396	413	1,497	6,533	39	440
65-74 years . . . . .	5,061	615	356	237	229	786	3,217	*17	197
75 years and over . . . . .	4,893	417	242	159	184	711	3,316	*22	243

<sup>1</sup>Persons with unknown health status not shown separately.

<sup>2</sup>Persons of unknown dentition status not shown separately.

**Table 6. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals <sup>1</sup>	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6-11 months				
Assessed health status <sup>2</sup>		Percent distribution						
<b>Excellent or very good:</b>								
All ages . . . . .	100.0	61.9	39.3	20.6	9.4	11.0	7.8	5.1
2-4 years . . . . .	100.0	33.5	21.5	10.5	2.9	1.0	...	53.7
5-11 years . . . . .	100.0	71.1	46.1	22.4	8.4	5.6	0.9	9.5
12-17 years . . . . .	100.0	71.4	47.1	21.7	9.8	8.8	3.0	2.9
18-34 years . . . . .	100.0	59.4	35.2	22.4	11.7	15.0	7.9	1.1
35-44 years . . . . .	100.0	66.7	42.6	22.0	9.7	11.7	7.2	0.6
45-54 years . . . . .	100.0	65.2	42.2	21.1	8.6	11.2	10.0	0.3
55-64 years . . . . .	100.0	61.7	42.6	17.6	8.5	11.1	13.6	*0.2
65 years and over . . . . .	100.0	51.1	35.5	14.3	7.2	12.0	24.8	*0.3
<b>Good:</b>								
All ages . . . . .	100.0	51.5	32.2	17.5	9.8	14.2	14.4	4.4
2-4 years . . . . .	100.0	26.0	16.1	9.6	*2.1	*0.9	...	61.4
5-11 years . . . . .	100.0	61.9	38.0	20.9	9.9	8.2	1.4	13.8
12-17 years . . . . .	100.0	60.2	36.2	20.8	13.4	12.7	4.2	4.9
18-34 years . . . . .	100.0	49.7	28.9	18.8	12.3	18.1	10.9	2.6
35-44 years . . . . .	100.0	56.6	35.1	19.8	10.7	14.6	11.9	0.9
45-54 years . . . . .	100.0	53.7	34.4	17.4	9.5	15.3	15.3	*0.5
55-64 years . . . . .	100.0	53.2	36.5	15.2	7.7	14.3	19.4	*0.5
65 years and over . . . . .	100.0	43.4	28.6	14.1	7.1	13.0	30.6	0.6
<b>Fair or poor:</b>								
All ages . . . . .	100.0	39.8	24.9	13.4	8.9	16.8	26.6	2.2
2-4 years . . . . .	100.0	28.8	19.2	*6.3	*3.3	*0.7	...	61.6
5-11 years . . . . .	100.0	58.2	31.8	20.0	10.7	11.1	*2.0	15.1
12-17 years . . . . .	100.0	54.4	33.9	17.2	11.1	18.5	9.6	*3.3
18-34 years . . . . .	100.0	47.9	28.8	17.3	12.0	19.3	13.0	2.6
35-44 years . . . . .	100.0	48.1	29.8	16.2	10.9	19.0	15.4	1.4
45-54 years . . . . .	100.0	42.2	26.4	14.4	10.8	17.4	24.1	*0.8
55-64 years . . . . .	100.0	37.0	23.2	12.8	8.4	18.1	30.1	*0.5
65 years and over . . . . .	100.0	32.4	21.2	10.3	6.6	15.1	38.7	0.6
<b>Limitation of activity</b>								
<b>Unable to carry on usual activity:</b>								
All ages . . . . .	100.0	39.9	24.6	13.6	9.6	16.4	25.5	1.7
2-4 years . . . . .	100.0	*39.0	*31.2	*7.8	-	*1.3	...	*46.8
5-11 years . . . . .	100.0	65.5	38.7	*15.1	*8.4	*5.9	*2.5	*16.0
12-17 years . . . . .	100.0	60.2	39.8	*10.2	*7.6	*20.3	*4.2	0.0
18-34 years . . . . .	100.0	46.3	27.1	16.4	13.4	16.4	14.3	3.6
35-44 years . . . . .	100.0	48.1	28.5	17.5	11.2	19.1	14.6	*0.7
45-54 years . . . . .	100.0	42.4	26.4	14.7	11.0	18.0	20.4	*1.4
55-64 years . . . . .	100.0	37.8	24.3	12.6	9.0	17.5	28.6	*0.7
65 years and over . . . . .	100.0	31.9	19.8	11.1	7.4	14.1	38.1	*0.5
<b>Limited in amount or kind of major activity:</b>								
All ages . . . . .	100.0	49.7	31.2	17.3	8.9	13.9	20.3	2.4
2-4 years . . . . .	100.0	28.1	*17.0	*6.5	*7.8	*0.7	...	52.9
5-11 years . . . . .	100.0	65.8	38.1	26.0	9.0	8.6	*0.9	12.5
12-17 years . . . . .	100.0	64.1	36.5	24.7	10.1	13.2	5.2	*3.7
18-34 years . . . . .	100.0	52.4	31.7	19.3	12.3	17.9	11.9	*0.7
35-44 years . . . . .	100.0	55.8	33.8	21.2	11.3	16.4	10.3	*1.3
45-54 years . . . . .	100.0	51.4	33.7	16.8	7.9	14.2	21.5	*0.6
55-64 years . . . . .	100.0	51.0	34.1	15.3	8.0	13.6	23.3	*0.1
65 years and over . . . . .	100.0	36.9	24.4	11.9	6.4	12.9	37.4	*0.6
<b>Limited, but not in major activity:</b>								
All ages . . . . .	100.0	51.9	34.5	16.1	8.2	14.0	20.3	1.3
2-4 years . . . . .	100.0	*32.1	*21.8	*7.7	-	-	...	57.7
5-11 years . . . . .	100.0	81.1	49.0	28.2	*6.5	*3.4	*0.8	*6.8
12-17 years . . . . .	100.0	77.9	58.7	17.4	7.6	9.0	*2.2	*2.0
18-34 years . . . . .	100.0	59.5	37.2	20.8	10.4	17.0	8.5	*0.8
35-44 years . . . . .	100.0	61.4	41.6	18.8	9.1	14.2	9.6	*1.4
45-54 years . . . . .	100.0	54.1	34.2	17.8	11.2	15.7	13.9	*0.3
55-64 years . . . . .	100.0	53.3	36.7	15.4	7.3	14.3	21.7	*0.4
65 years and over . . . . .	100.0	40.6	27.3	12.6	7.0	13.9	32.6	*0.5
<b>Not limited in activity:</b>								
All ages . . . . .	100.0	58.9	37.2	19.7	9.6	11.9	9.3	5.1
2-4 years . . . . .	100.0	32.1	20.5	10.3	2.7	1.0	...	55.1
5-11 years . . . . .	100.0	69.2	44.6	21.8	8.7	6.1	1.0	10.2
12-17 years . . . . .	100.0	68.8	44.6	21.5	10.6	9.6	3.3	3.3
18-34 years . . . . .	100.0	57.2	33.7	21.6	11.8	15.7	8.5	1.5
35-44 years . . . . .	100.0	64.0	40.7	21.2	9.9	12.3	8.6	0.7
45-54 years . . . . .	100.0	61.3	39.5	19.9	9.0	12.4	11.9	0.4
55-64 years . . . . .	100.0	57.2	39.2	16.6	8.2	12.7	16.2	0.3
65 years and over . . . . .	100.0	47.0	32.1	13.7	7.0	12.8	27.5	0.4

See footnote at end of table.

**Table 6. Percent distribution of persons 2 years of age and over by interval since last dental visit, according to selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last dental visit							
	All intervals <sup>1</sup>	Less than 1 year			1 year to less than 2 years	2 years to less than 5 years	5 years or more	Never
		Total	Less than 6 months	6-11 months				
Dentition status <sup>3</sup>		Percent distribution						
Dentate:								
35 years and over . . . . .	100.0	65.6	43.1	20.7	9.7	12.8	9.8	0.6
35-44 years . . . . .	100.0	66.3	42.1	22.1	10.4	13.0	8.1	0.7
45-54 years . . . . .	100.0	66.6	42.9	21.6	9.7	12.6	9.2	0.4
55-64 years . . . . .	100.0	65.8	45.2	19.0	9.2	12.6	10.3	0.4
65 years and over . . . . .	100.0	63.1	43.0	18.6	8.9	12.8	13.1	0.5
65-74 years . . . . .	100.0	64.2	43.8	18.9	8.9	12.8	12.3	0.4
75 years and over . . . . .	100.0	60.9	41.4	18.0	8.8	12.6	14.7	0.7
Edentulous:								
35 years and over . . . . .	100.0	12.5	7.2	4.8	5.3	17.4	60.5	0.4
35-44 years . . . . .	100.0	16.6	9.7	7.0	8.2	23.3	47.6	*0.4
45-54 years . . . . .	100.0	15.5	9.4	5.3	7.6	21.5	51.4	*0.6
55-64 years . . . . .	100.0	14.8	8.2	5.8	5.9	19.3	56.3	*0.1
65 years and over . . . . .	100.0	10.4	6.0	4.0	4.1	15.0	65.6	0.4
65-74 years . . . . .	100.0	12.2	7.0	4.7	4.5	15.5	63.6	*0.3
75 years and over . . . . .	100.0	8.5	4.9	3.2	3.8	14.5	67.8	*0.4

<sup>1</sup>Includes unknown interval (not shown separately).

<sup>2</sup>Persons with unknown health status not shown separately.

<sup>3</sup>Persons with unknown dentition status not shown separately.

**Table 7. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits in the past year								
	Total <sup>1</sup>	None	1	2	3 or more				
					Total	3	4	5-12	13 or more
Age									
Percent distribution									
All ages . . . . .	100.0	38.9	22.6	19.4	14.6	5.3	3.5	5.0	0.8
2-4 years . . . . .	100.0	62.2	20.3	8.6	2.6	1.4	0.6	0.5	*0.0
5-17 years . . . . .	100.0	27.4	28.7	24.1	15.4	5.0	2.8	5.8	1.7
5-11 years . . . . .	100.0	27.0	30.4	25.7	12.2	5.2	2.8	3.6	0.6
12-17 years . . . . .	100.0	27.9	26.7	21.9	19.4	4.7	2.9	8.6	3.2
18-34 years . . . . .	100.0	39.1	24.4	18.4	13.4	5.3	3.1	4.4	0.6
18-24 years . . . . .	100.0	40.6	26.0	17.0	11.4	4.4	2.5	3.8	0.6
25-34 years . . . . .	100.0	38.2	23.5	19.2	14.5	5.8	3.4	4.7	0.6
35-54 years . . . . .	100.0	34.8	21.9	21.6	17.3	6.3	4.6	5.9	0.6
35-44 years . . . . .	100.0	33.4	23.0	22.5	16.9	6.3	4.3	5.7	0.6
45-54 years . . . . .	100.0	36.8	20.3	20.4	17.9	6.2	5.1	6.2	0.5
55-64 years . . . . .	100.0	42.3	18.1	17.6	17.7	6.2	4.9	6.1	0.5
65 years and over . . . . .	100.0	53.2	14.6	15.2	12.9	4.8	3.6	4.2	0.3
65-74 years . . . . .	100.0	49.2	15.7	16.9	14.5	5.3	4.0	4.8	0.4
75 years and over . . . . .	100.0	59.6	12.8	12.5	10.5	4.1	2.9	3.3	*0.2
Sex									
Male:									
All ages . . . . .	100.0	41.1	22.3	18.6	13.4	5.0	3.2	4.5	0.7
2-4 years . . . . .	100.0	62.7	19.5	8.7	2.6	1.3	0.7	*0.5	*0.0
5-11 years . . . . .	100.0	27.4	30.8	25.2	11.9	5.1	2.8	3.4	0.6
12-17 years . . . . .	100.0	29.7	27.2	21.7	17.3	3.9	2.6	7.7	3.0
18-34 years . . . . .	100.0	44.2	23.2	16.5	11.2	4.6	2.6	3.5	0.5
35-44 years . . . . .	100.0	36.7	21.7	21.3	16.1	6.5	3.8	5.3	0.5
45-54 years . . . . .	100.0	38.9	19.8	20.3	16.6	5.8	4.8	5.7	0.4
55-64 years . . . . .	100.0	43.0	18.0	17.8	16.9	6.0	4.7	5.7	0.5
65 years and over . . . . .	100.0	54.0	14.7	14.6	13.2	4.9	3.5	4.5	0.3
65-74 years . . . . .	100.0	49.8	16.0	16.2	14.7	5.3	3.7	5.2	*0.5
75 years and over . . . . .	100.0	61.8	12.2	11.5	10.5	4.0	3.2	3.2	*0.0
Female:									
All ages . . . . .	100.0	36.7	22.9	20.1	15.7	5.6	3.8	5.4	0.8
2-4 years . . . . .	100.0	61.7	21.2	8.5	2.6	1.5	*0.5	*0.6	*0.0
5-11 years . . . . .	100.0	26.7	29.9	26.4	12.6	5.4	2.8	3.8	0.6
12-17 years . . . . .	100.0	25.9	26.2	22.2	21.7	5.5	3.3	9.5	3.4
18-34 years . . . . .	100.0	34.2	25.6	20.3	15.4	5.9	3.5	5.2	0.8
35-44 years . . . . .	100.0	30.3	24.3	23.6	17.7	6.1	4.7	6.1	0.8
45-54 years . . . . .	100.0	34.8	20.8	20.4	19.2	6.5	5.3	6.7	0.6
55-64 years . . . . .	100.0	41.6	18.1	17.5	18.5	6.4	5.1	6.4	0.6
65 years and over . . . . .	100.0	52.7	14.5	15.6	12.7	4.8	3.6	4.0	0.4
65-74 years . . . . .	100.0	48.7	15.5	17.4	14.4	5.3	4.2	4.4	0.4
75 years and over . . . . .	100.0	58.3	13.2	13.1	10.5	4.1	2.7	3.4	*0.2
Race									
White:									
All ages . . . . .	100.0	37.0	22.8	20.6	15.3	5.6	3.7	5.2	0.8
2-4 years . . . . .	100.0	61.5	21.1	9.1	2.4	1.3	0.6	0.5	*0.0
5-11 years . . . . .	100.0	24.6	30.3	28.0	12.9	5.5	2.9	3.8	0.7
12-17 years . . . . .	100.0	24.7	26.7	23.5	21.2	4.8	3.0	9.5	3.8
18-34 years . . . . .	100.0	37.1	25.1	19.5	13.7	5.5	3.1	4.4	0.7
35-44 years . . . . .	100.0	31.7	23.2	23.7	17.5	6.7	4.3	5.9	0.7
45-54 years . . . . .	100.0	34.8	20.5	21.6	18.7	6.6	5.3	6.3	0.5
55-64 years . . . . .	100.0	40.3	18.2	18.9	18.5	6.4	5.2	6.4	0.6
65 years and over . . . . .	100.0	51.3	14.9	16.2	13.7	5.1	3.8	4.4	0.3
65-74 years . . . . .	100.0	47.3	15.8	18.0	15.3	5.7	4.3	4.9	0.5
75 years and over . . . . .	100.0	57.4	13.5	13.3	11.1	4.3	3.1	3.5	*0.2
Black:									
All ages . . . . .	100.0	50.9	21.6	11.8	10.2	3.9	2.6	3.4	0.3
2-4 years . . . . .	100.0	66.1	18.4	5.2	2.8	*1.8	*0.6	*0.3	0.0
5-11 years . . . . .	100.0	38.4	31.1	15.3	8.9	4.6	2.1	2.0	*0.2
12-17 years . . . . .	100.0	43.4	27.0	14.9	11.2	4.2	2.1	4.3	*0.5
18-34 years . . . . .	100.0	50.1	20.8	12.3	10.9	4.3	2.6	3.7	*0.3
35-44 years . . . . .	100.0	45.0	21.7	14.1	13.9	4.6	3.9	4.9	*0.5
45-54 years . . . . .	100.0	52.0	18.8	11.2	12.6	3.5	4.3	4.7	*0.1
55-64 years . . . . .	100.0	59.0	16.8	7.9	10.5	4.8	2.7	2.8	*0.2
65 years and over . . . . .	100.0	73.6	11.8	5.3	5.0	1.6	*1.3	2.0	*0.2
65-74 years . . . . .	100.0	68.9	15.3	6.0	5.8	*1.7	*1.6	*2.2	*0.2
75 years and over . . . . .	100.0	81.7	5.8	*4.0	*3.6	*1.4	*0.7	*1.4	*0.1

See footnote at end of table.

**Table 7. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total <sup>1</sup>	Number of visits in the past year							
		None	1	2	Total	3	4	5-12	13 or more
Race—Con.									
Percent distribution									
Other:									
All ages . . . . .	100.0	41.6	21.3	16.6	13.5	4.1	3.5	5.5	*0.4
2-4 years . . . . .	100.0	63.0	12.3	11.5	*4.7	*2.3	*0.4	*1.9	0.0
5-11 years . . . . .	100.0	32.3	28.7	20.2	11.0	*3.3	*2.1	5.7	0.0
12-17 years . . . . .	100.0	32.4	26.5	17.0	16.1	*4.0	*4.1	6.7	*1.1
18-34 years . . . . .	100.0	42.8	21.0	16.0	13.4	4.4	3.4	5.2	*0.4
35-44 years . . . . .	100.0	37.8	22.2	19.7	13.3	3.4	5.1	4.3	*0.5
45-54 years . . . . .	100.0	40.2	20.8	18.6	14.8	*4.4	*2.7	7.2	*0.5
55-64 years . . . . .	100.0	43.9	16.4	12.3	20.2	*6.2	*6.2	7.9	0.0
65 years and over . . . . .	100.0	58.6	11.9	9.7	14.8	*5.1	*3.1	*5.7	*0.9
65-74 years . . . . .	100.0	51.5	14.0	*11.4	16.4	*5.7	*2.3	*7.7	*1.3
75 years and over . . . . .	100.0	72.9	*7.7	*6.5	*11.6	*4.5	*4.5	*2.6	0.0
Hispanic origin									
Non-Hispanic:									
All ages . . . . .	100.0	37.9	22.7	20.0	14.9	5.4	3.6	5.1	0.8
2-4 years . . . . .	100.0	60.8	21.4	9.0	2.7	1.5	0.6	0.5	*0.0
5-11 years . . . . .	100.0	25.6	30.7	26.9	12.4	5.2	2.8	3.8	0.7
12-17 years . . . . .	100.0	25.8	26.9	23.1	20.4	4.8	3.0	9.0	3.5
18-34 years . . . . .	100.0	37.8	24.8	19.1	13.7	5.4	3.1	4.5	0.7
35-44 years . . . . .	100.0	32.2	23.2	23.1	17.3	6.5	4.4	5.8	0.7
45-54 years . . . . .	100.0	36.3	20.4	20.7	18.0	6.2	5.2	6.2	0.5
55-64 years . . . . .	100.0	41.7	18.1	18.1	18.0	6.3	5.0	6.1	0.5
65 years and over . . . . .	100.0	53.1	14.6	15.2	13.0	4.9	3.6	4.2	0.3
Hispanic, total:									
All ages . . . . .	100.0	48.9	21.2	13.2	11.1	4.3	2.6	3.8	0.4
2-4 years . . . . .	100.0	71.6	13.6	5.8	*2.1	*0.8	*0.4	*0.8	0.0
5-11 years . . . . .	100.0	37.4	27.9	17.0	11.1	5.8	2.6	2.6	0.0
12-17 years . . . . .	100.0	43.4	25.5	13.1	12.4	4.0	2.1	5.3	*1.0
18-34 years . . . . .	100.0	50.9	20.8	12.7	10.1	3.9	2.8	3.1	*0.4
35-44 years . . . . .	100.0	47.9	20.1	15.1	13.0	4.6	3.1	5.0	*0.3
45-54 years . . . . .	100.0	44.1	18.5	14.8	16.5	5.9	3.7	6.5	*0.4
55-64 years . . . . .	100.0	51.8	18.0	10.1	13.8	5.1	*3.2	4.8	*0.7
65 years and over . . . . .	100.0	56.7	14.8	12.6	12.3	*4.0	*2.3	5.2	*0.6
Hispanic, Mexican-American:									
All ages . . . . .	100.0	54.3	19.2	11.2	9.8	3.9	2.5	3.1	0.4
2-4 years . . . . .	100.0	76.6	12.2	*4.2	*1.6	*0.4	*0.7	*0.6	0.0
5-11 years . . . . .	100.0	42.9	25.4	14.8	10.7	5.6	2.9	2.2	0.0
12-17 years . . . . .	100.0	50.8	22.1	11.5	9.6	3.4	*1.1	4.2	*0.9
18-34 years . . . . .	100.0	56.7	18.4	10.5	8.6	3.1	2.8	2.2	*0.5
35-44 years . . . . .	100.0	52.8	17.9	12.9	12.6	5.0	2.7	4.9	0.0
45-54 years . . . . .	100.0	49.7	14.7	12.5	17.4	6.8	*2.8	7.1	*0.6
55-64 years . . . . .	100.0	52.4	20.0	9.6	12.5	*3.7	*3.5	*4.2	*1.0
65 years and over . . . . .	100.0	63.5	14.0	10.4	*8.5	*3.6	*2.4	*2.1	*0.5
Hispanic, other:									
All ages . . . . .	100.0	41.8	23.8	15.7	12.8	4.9	2.8	4.7	*0.4
2-4 years . . . . .	100.0	64.1	15.7	8.3	*2.7	*1.5	0.0	*1.2	0.0
5-11 years . . . . .	100.0	27.8	32.1	20.8	11.7	6.2	*2.1	*3.3	0.0
12-17 years . . . . .	100.0	31.4	30.9	15.5	16.7	5.1	*3.6	7.0	*1.1
18-34 years . . . . .	100.0	43.0	24.1	15.6	12.1	4.9	2.6	4.2	*0.3
35-44 years . . . . .	100.0	42.0	22.7	17.6	13.6	4.2	3.7	5.1	*0.6
45-54 years . . . . .	100.0	39.2	21.7	16.8	15.8	5.1	*4.5	5.9	*0.2
55-64 years . . . . .	100.0	51.2	15.9	10.7	15.2	*6.6	*2.9	*5.3	*0.3
65 years and over . . . . .	100.0	51.4	15.4	14.5	15.4	*4.4	*2.3	7.9	*0.8
Place of residence									
MSA, total:									
All ages . . . . .	100.0	37.2	22.7	19.9	15.1	5.5	3.7	5.2	0.8
2-4 years . . . . .	100.0	60.7	20.7	9.2	2.5	1.4	0.6	0.6	*0.0
5-11 years . . . . .	100.0	26.1	30.1	26.2	12.2	5.4	2.7	3.5	0.6
12-17 years . . . . .	100.0	26.0	27.0	22.3	20.1	4.9	3.1	8.9	3.3
18-34 years . . . . .	100.0	38.0	24.3	18.8	13.5	5.3	3.1	4.4	0.7
35-44 years . . . . .	100.0	31.8	22.9	23.2	17.5	6.5	4.4	5.9	0.7
45-54 years . . . . .	100.0	34.5	20.5	20.9	18.9	6.4	5.3	6.7	0.5
55-64 years . . . . .	100.0	39.8	18.2	18.1	19.2	6.5	5.5	6.6	0.6
65 years and over . . . . .	100.0	51.5	14.4	15.6	13.8	5.0	3.9	4.5	0.4
MSA, central city:									
All ages . . . . .	100.0	40.5	22.7	17.4	14.0	5.0	3.4	4.9	0.6
2-4 years . . . . .	100.0	61.9	19.4	7.4	2.9	1.5	*0.6	*0.9	0.0
5-11 years . . . . .	100.0	29.8	31.2	21.3	11.4	5.0	2.8	3.2	*0.4
12-17 years . . . . .	100.0	31.8	29.2	18.2	16.1	4.7	2.2	7.2	1.9
18-34 years . . . . .	100.0	40.8	24.1	17.0	12.6	4.9	2.9	4.2	0.6
35-44 years . . . . .	100.0	34.2	22.6	20.9	17.6	6.1	4.4	6.4	0.6
45-54 years . . . . .	100.0	38.9	20.7	18.1	16.9	5.4	5.0	6.1	*0.4
55-64 years . . . . .	100.0	43.9	17.9	14.7	18.1	6.3	4.9	6.4	*0.6
65 years and over . . . . .	100.0	52.3	14.2	15.7	13.3	4.7	3.8	4.3	0.5

See footnote at end of table.



**Table 7. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total <sup>1</sup>	Number of visits in the past year							
		None	1	2	Total	3 or more			
						3	4	5-12	13 or more
Place of residence—Con.									
MSA, not central city:									
All ages . . . . .	100.0	35.1	22.6	21.5	15.9	5.7	3.9	5.4	0.9
2-4 years . . . . .	100.0	60.0	21.5	10.3	2.3	1.3	*0.6	*0.4	*0.1
5-11 years . . . . .	100.0	23.7	29.5	29.3	12.8	5.7	2.6	3.7	0.7
12-17 years . . . . .	100.0	22.6	25.7	24.8	22.6	5.0	3.6	10.0	4.0
18-34 years . . . . .	100.0	36.0	24.4	20.1	14.2	5.6	3.3	4.6	0.7
35-44 years . . . . .	100.0	30.5	23.1	24.4	17.5	6.7	4.5	5.7	0.7
45-54 years . . . . .	100.0	32.1	20.4	22.4	20.1	6.9	5.5	7.1	0.5
55-64 years . . . . .	100.0	37.1	18.3	20.3	20.0	6.6	5.9	6.8	0.6
65 years and over . . . . .	100.0	51.0	14.6	15.5	14.2	5.2	4.0	4.6	0.4
Not MSA:									
All ages . . . . .	100.0	44.6	22.5	17.6	12.7	4.8	3.0	4.3	0.6
2-4 years . . . . .	100.0	67.8	19.0	6.5	2.8	*1.6	*0.7	*0.5	0.0
5-11 years . . . . .	100.0	30.3	31.1	24.1	12.2	4.7	3.0	3.9	*0.6
12-17 years . . . . .	100.0	33.8	25.8	20.7	17.1	4.1	2.5	7.5	3.0
18-34 years . . . . .	100.0	43.3	24.9	16.8	12.7	5.1	2.9	4.2	0.6
35-44 years . . . . .	100.0	39.6	23.4	19.8	14.7	5.7	3.6	4.9	0.5
45-54 years . . . . .	100.0	45.0	19.5	18.5	14.3	5.3	4.2	4.3	*0.4
55-64 years . . . . .	100.0	50.1	17.7	16.1	13.0	5.3	3.2	4.2	*0.3
65 years and over . . . . .	100.0	57.9	15.1	14.1	10.6	4.4	2.7	3.4	*0.1
Geographic region									
Northeast:									
All ages . . . . .	100.0	35.6	21.8	20.9	16.4	5.7	3.9	5.9	0.9
2-4 years . . . . .	100.0	58.4	20.6	10.4	2.2	*1.3	*0.4	*0.4	*0.1
5-11 years . . . . .	100.0	19.6	30.9	31.0	13.0	5.2	3.0	4.2	*0.7
12-17 years . . . . .	100.0	20.4	27.6	24.9	22.4	5.0	3.8	9.6	4.0
18-34 years . . . . .	100.0	34.0	24.8	20.9	14.8	6.0	3.2	5.0	0.6
35-44 years . . . . .	100.0	30.7	20.9	24.8	18.9	6.5	4.7	7.1	0.6
45-54 years . . . . .	100.0	33.4	20.0	20.2	20.7	6.6	5.7	7.7	*0.7
55-64 years . . . . .	100.0	40.8	15.9	16.9	21.4	7.2	5.3	8.0	0.9
65 years and over . . . . .	100.0	53.9	13.4	14.6	13.0	4.1	3.9	4.5	*0.4
Midwest:									
All ages . . . . .	100.0	35.0	24.6	22.3	14.1	5.3	3.4	4.7	0.7
2-4 years . . . . .	100.0	58.3	24.3	9.9	2.2	*1.1	*0.7	*0.4	0.0
5-11 years . . . . .	100.0	19.3	33.4	31.5	11.6	4.9	2.8	3.2	0.7
12-17 years . . . . .	100.0	21.3	29.3	25.5	20.1	5.4	2.4	9.0	3.3
18-34 years . . . . .	100.0	35.1	26.4	21.1	13.2	5.1	3.2	4.1	0.7
35-44 years . . . . .	100.0	29.5	24.8	25.3	16.5	6.6	4.3	5.0	0.5
45-54 years . . . . .	100.0	34.9	21.3	23.1	16.9	6.1	4.6	5.8	*0.4
55-64 years . . . . .	100.0	41.2	19.7	19.5	15.7	5.8	4.2	5.6	*0.1
65 years and over . . . . .	100.0	52.2	15.7	16.7	12.1	4.9	3.2	3.8	*0.3
South:									
All ages . . . . .	100.0	45.0	22.1	16.9	12.7	4.7	3.2	4.2	0.6
2-4 years . . . . .	100.0	66.7	18.7	7.4	2.9	1.7	*0.5	*0.6	*0.1
5-11 years . . . . .	100.0	35.8	28.2	20.4	12.3	5.4	2.6	3.7	0.5
12-17 years . . . . .	100.0	36.8	24.9	19.0	16.8	4.3	2.8	7.2	2.5
18-34 years . . . . .	100.0	44.7	23.9	16.1	11.9	4.8	2.8	3.8	0.5
35-44 years . . . . .	100.0	39.2	23.4	19.8	14.6	5.1	3.7	5.2	0.6
45-54 years . . . . .	100.0	43.5	19.7	18.4	14.4	5.0	4.7	4.3	*0.4
55-64 years . . . . .	100.0	47.1	19.1	16.0	14.6	5.1	4.3	4.7	0.5
65 years and over . . . . .	100.0	58.1	14.4	13.3	10.8	4.1	3.3	3.2	*0.2
West:									
All ages . . . . .	100.0	36.5	21.9	18.7	16.6	6.1	3.9	5.7	0.9
2-4 years . . . . .	100.0	62.7	18.4	7.6	2.8	*1.4	*0.7	*0.7	0.0
5-11 years . . . . .	100.0	27.5	30.0	23.7	12.1	5.4	2.8	3.5	*0.5
12-17 years . . . . .	100.0	27.6	26.0	20.0	20.4	4.3	3.0	9.6	3.5
18-34 years . . . . .	100.0	39.3	22.7	16.8	14.5	5.6	3.3	4.9	0.7
35-44 years . . . . .	100.0	31.5	22.4	21.3	19.2	7.7	4.6	5.9	0.9
45-54 years . . . . .	100.0	31.9	20.2	20.4	21.9	7.6	5.7	8.1	*0.6
55-64 years . . . . .	100.0	36.4	16.3	19.2	21.9	7.6	6.6	7.0	*0.7
65 years and over . . . . .	100.0	45.0	15.0	17.3	17.7	6.9	4.1	6.0	*0.5

<sup>1</sup>Includes unknown number of visits (not shown separately).

NOTE: MSA is metropolitan statistical area.

**Table 8. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits in the past year								
	Total <sup>1</sup>	None	1	2	3 or more				
					Total	3	4	5-12	13 or more
Education level <sup>2</sup>		Percent distribution							
Less than 9 years:									
All ages, 22 years and over . . . . .	100.0	69.1	13.0	7.1	7.3	2.6	1.9	2.5	*0.2
22-34 years . . . . .	100.0	63.6	16.4	8.4	7.6	2.8	2.3	2.0	*0.4
35-44 years . . . . .	100.0	62.2	17.0	8.4	8.6	2.9	2.8	2.7	*0.1
45-54 years . . . . .	100.0	66.3	14.8	7.1	8.5	4.1	2.1	2.3	*0.1
55-64 years . . . . .	100.0	69.5	13.0	6.4	8.6	3.0	2.3	3.0	*0.4
65 years and over . . . . .	100.0	72.5	10.9	6.7	6.1	2.0	1.5	2.5	*0.1
9-11 years:									
All ages, 22 years and over . . . . .	100.0	58.6	15.8	10.9	10.9	3.8	2.8	3.8	0.4
22-34 years . . . . .	100.0	54.2	19.2	10.9	11.5	4.5	2.4	4.1	*0.4
35-44 years . . . . .	100.0	55.5	18.6	9.9	12.0	4.1	2.9	4.3	*0.7
45-54 years . . . . .	100.0	60.5	15.3	10.3	10.7	3.3	3.1	4.0	*0.2
55-64 years . . . . .	100.0	59.4	13.3	12.1	11.0	4.0	3.1	3.6	*0.3
65 years and over . . . . .	100.0	63.6	12.4	11.1	9.6	3.1	2.9	3.2	*0.3
12 years:									
All ages, 22 years and over . . . . .	100.0	41.7	20.7	18.3	15.1	5.6	4.0	5.0	0.5
22-34 years . . . . .	100.0	43.2	21.7	17.0	13.5	5.3	3.4	4.3	0.5
35-44 years . . . . .	100.0	38.5	22.2	19.6	16.1	5.8	3.8	5.8	0.7
45-54 years . . . . .	100.0	38.6	21.2	20.1	15.4	5.3	4.5	5.1	0.5
55-64 years . . . . .	100.0	39.7	20.4	18.0	17.9	6.4	4.9	6.1	0.6
65 years and over . . . . .	100.0	47.7	16.3	18.0	14.5	5.6	4.2	4.5	*0.2
13 years or more:									
All ages, 22 years and over . . . . .	100.0	26.6	24.6	25.4	19.5	7.4	5.1	6.4	0.7
22-34 years . . . . .	100.0	30.4	27.8	22.8	15.0	6.0	3.6	4.7	0.8
35-44 years . . . . .	100.0	24.0	25.1	28.1	19.3	7.5	5.0	6.2	0.7
45-54 years . . . . .	100.0	21.9	22.4	26.9	25.0	8.5	7.0	8.8	0.7
55-64 years . . . . .	100.0	22.9	20.5	26.3	26.2	8.9	7.4	9.2	0.7
65 years and over . . . . .	100.0	30.3	18.7	25.3	22.3	8.8	6.0	6.8	0.8
Family income <sup>3</sup>									
Less than \$10,000:									
All ages . . . . .	100.0	57.0	19.3	11.0	9.7	3.9	2.4	3.2	0.3
2-4 years . . . . .	100.0	66.2	18.5	6.9	3.2	*1.9	*0.3	*1.0	0.0
5-11 years . . . . .	100.0	41.4	28.3	16.0	11.0	5.8	2.5	2.6	*0.1
12-17 years . . . . .	100.0	47.0	26.0	14.7	10.1	3.9	2.0	4.0	*0.2
18-34 years . . . . .	100.0	47.0	23.4	14.6	11.8	4.7	2.7	3.9	0.5
35-44 years . . . . .	100.0	60.8	18.6	8.1	10.6	3.2	3.5	3.4	*0.5
45-54 years . . . . .	100.0	67.3	13.4	7.6	9.1	3.3	*2.4	3.4	*0.1
55-64 years . . . . .	100.0	68.7	13.4	6.1	9.3	3.3	2.2	3.2	*0.6
65 years and over . . . . .	100.0	72.3	10.7	6.8	7.5	2.8	2.0	2.6	*0.1
65-74 years . . . . .	100.0	70.5	10.9	7.0	8.7	2.7	2.2	3.7	*0.1
75 years and over . . . . .	100.0	74.1	10.6	6.5	6.3	2.9	1.9	1.5	*0.1
\$10,000-\$19,999:									
All ages . . . . .	100.0	54.0	19.6	12.8	10.5	4.2	2.4	3.5	0.5
2-4 years . . . . .	100.0	73.2	13.1	5.4	*2.0	*0.9	*0.4	*0.5	*0.1
5-11 years . . . . .	100.0	43.1	29.8	15.2	8.5	4.1	2.1	2.0	*0.4
12-17 years . . . . .	100.0	44.2	25.9	14.7	11.7	3.3	2.1	4.8	1.4
18-34 years . . . . .	100.0	52.5	20.5	12.9	10.9	4.7	2.3	3.3	0.6
35-44 years . . . . .	100.0	54.0	19.3	12.5	11.4	3.7	3.0	4.3	*0.4
45-54 years . . . . .	100.0	56.5	17.6	12.1	10.8	3.7	3.0	3.8	*0.3
55-64 years . . . . .	100.0	56.7	17.2	10.8	13.3	5.4	3.4	4.3	*0.3
65 years and over . . . . .	100.0	59.1	13.9	13.8	10.9	4.4	2.4	3.8	*0.3
65-74 years . . . . .	100.0	57.7	15.1	13.9	11.1	4.5	2.5	3.8	*0.3
75 years and over . . . . .	100.0	61.4	11.9	13.7	10.5	4.1	2.3	3.9	*0.2
\$20,000-\$34,999:									
All ages . . . . .	100.0	39.8	23.6	19.1	15.2	5.6	3.7	5.2	0.7
2-4 years . . . . .	100.0	64.4	21.1	8.2	2.6	1.8	*0.4	*0.4	0.0
5-11 years . . . . .	100.0	27.0	32.1	25.7	12.4	5.3	3.0	3.6	*0.4
12-17 years . . . . .	100.0	30.7	27.4	20.8	18.8	4.5	2.6	9.0	2.6
18-34 years . . . . .	100.0	40.5	24.0	18.4	14.6	5.6	3.6	4.8	0.6
35-44 years . . . . .	100.0	36.8	24.8	19.9	16.6	6.5	4.1	5.2	0.7
45-54 years . . . . .	100.0	43.8	19.7	17.3	16.7	5.8	4.7	5.8	*0.5
55-64 years . . . . .	100.0	44.0	18.3	17.3	18.1	7.0	4.1	6.5	*0.5
65 years and over . . . . .	100.0	44.2	17.0	19.7	17.3	5.7	5.3	5.7	*0.6
65-74 years . . . . .	100.0	41.6	18.3	20.9	17.9	5.9	5.7	5.6	*0.7
75 years and over . . . . .	100.0	50.0	14.0	17.0	16.2	5.4	4.4	6.2	*0.2

See footnote at end of table.

**Table 8. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total <sup>1</sup>	Number of visits in the past year							
		None	1	2	Total	3	4	5-12	13 or more
Family income <sup>3</sup> —Con.									
Percent distribution									
\$35,000 or more:									
All ages . . . . .	100.0	25.0	25.5	27.3	19.6	6.8	4.7	6.9	1.2
2-4 years . . . . .	100.0	54.1	26.6	12.1	3.0	1.4	*1.1	*0.5	*0.1
5-11 years . . . . .	100.0	14.0	31.1	36.3	15.8	6.3	3.3	5.1	1.1
12-17 years . . . . .	100.0	13.8	28.1	28.8	27.2	6.1	3.8	11.9	5.4
18-34 years . . . . .	100.0	28.4	27.8	24.5	16.1	6.3	3.6	5.4	0.7
35-44 years . . . . .	100.0	23.0	24.1	29.7	21.1	8.0	5.2	7.1	0.8
45-54 years . . . . .	100.0	25.7	21.9	26.8	22.8	7.8	6.3	8.0	0.7
55-64 years . . . . .	100.0	25.9	20.8	25.9	24.9	7.6	7.6	8.9	0.8
65 years and over . . . . .	100.0	30.3	17.3	26.8	23.0	8.2	6.1	7.7	*0.9
65-74 years . . . . .	100.0	25.2	17.1	29.2	25.4	8.9	6.6	8.8	*1.2
75 years and over . . . . .	100.0	43.0	17.7	20.7	16.9	6.6	5.2	4.9	*0.3
Dental insurance coverage <sup>4</sup>									
Having private dental insurance:									
All ages . . . . .	100.0	28.0	24.9	26.5	19.3	6.9	4.6	6.7	1.1
2-4 years . . . . .	100.0	57.0	24.3	12.3	2.9	1.4	0.9	*0.6	*0.0
5-11 years . . . . .	100.0	18.2	31.1	34.4	14.9	6.0	3.5	4.5	0.8
12-17 years . . . . .	100.0	17.6	28.5	28.1	24.9	5.8	3.5	10.8	4.8
18-34 years . . . . .	100.0	29.2	26.3	25.5	17.8	7.0	4.0	5.9	0.9
35-44 years . . . . .	100.0	25.8	23.9	28.5	20.9	8.0	5.3	6.9	0.7
45-54 years . . . . .	100.0	28.2	21.9	25.8	22.8	7.6	6.2	8.4	0.6
55-64 years . . . . .	100.0	32.6	19.2	23.2	23.9	8.1	6.8	8.4	0.7
65 years and over . . . . .	100.0	37.8	16.7	23.8	20.2	8.4	5.1	6.1	*0.6
65-74 years . . . . .	100.0	35.3	16.9	25.1	21.6	8.7	6.1	6.1	*0.8
75 years and over . . . . .	100.0	44.1	16.2	20.3	16.5	7.4	*2.8	6.0	*0.2
Without private dental insurance:									
All ages . . . . .	100.0	48.6	21.9	15.3	12.2	4.5	3.0	4.1	0.5
2-4 years . . . . .	100.0	68.2	18.5	6.2	2.4	1.4	*0.4	*0.6	*0.0
5-11 years . . . . .	100.0	35.7	31.3	19.7	10.7	4.9	2.3	3.1	0.4
12-17 years . . . . .	100.0	39.2	26.1	17.3	15.6	4.0	2.5	7.3	1.9
18-34 years . . . . .	100.0	48.9	23.9	14.2	11.1	4.4	2.7	3.6	0.5
35-44 years . . . . .	100.0	44.1	23.2	17.1	14.1	5.0	3.4	5.0	0.6
45-54 years . . . . .	100.0	48.0	20.0	15.9	14.5	5.3	4.4	4.4	0.4
55-64 years . . . . .	100.0	50.3	18.0	15.3	14.9	5.4	4.0	5.0	0.4
65 years and over . . . . .	100.0	56.9	14.8	14.4	12.3	4.4	3.5	4.1	0.3
65-74 years . . . . .	100.0	52.9	16.2	16.0	13.5	4.7	3.7	4.8	0.4
75 years and over . . . . .	100.0	62.8	12.8	12.2	10.4	3.9	3.1	3.2	*0.2

<sup>1</sup>Includes unknown number of visits (not shown separately).  
<sup>2</sup>Persons with unknown education level not shown separately.  
<sup>3</sup>Persons with unknown income not shown separately.  
<sup>4</sup>Persons with unknown insurance coverage not shown separately.

**Table 9. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits in the past year								
	Total <sup>1</sup>	None	1	2	3 or more				
					Total	3	4	5-12	13 or more
<b>Assessed health status<sup>2</sup></b>									
<b>Excellent or very good:</b>									
All ages . . . . .	100.0	34.4	24.5	21.7	15.0	5.5	3.6	5.0	0.9
2-4 years . . . . .	100.0	61.2	21.4	8.9	2.6	1.4	0.7	0.6	*0.0
5-11 years . . . . .	100.0	25.2	30.7	27.2	12.3	5.2	2.8	3.7	0.6
12-17 years . . . . .	100.0	25.4	27.0	22.9	20.8	4.9	3.0	9.2	3.6
18-34 years . . . . .	100.0	36.7	25.5	20.1	13.2	5.3	3.1	4.2	0.6
35-44 years . . . . .	100.0	29.9	24.0	24.9	17.3	6.6	4.5	5.4	0.7
45-54 years . . . . .	100.0	30.9	22.2	23.1	19.3	7.1	5.5	6.3	0.5
55-64 years . . . . .	100.0	34.7	20.1	21.0	20.1	7.2	5.8	6.6	0.5
65 years and over . . . . .	100.0	45.8	16.9	19.2	14.4	5.5	4.1	4.3	0.5
<b>Good:</b>									
All ages . . . . .	100.0	44.4	20.4	16.2	14.2	5.2	3.5	5.1	0.5
2-4 years . . . . .	100.0	67.6	16.4	6.6	*2.1	*1.3	*0.3	*0.4	*0.1
5-11 years . . . . .	100.0	34.3	29.9	19.6	11.6	5.7	2.6	2.8	*0.4
12-17 years . . . . .	100.0	36.0	26.3	18.8	14.4	4.3	2.3	6.1	1.6
18-34 years . . . . .	100.0	45.7	21.6	13.8	13.5	5.2	2.8	4.8	0.6
35-44 years . . . . .	100.0	39.3	21.0	18.7	16.4	5.7	4.0	6.4	*0.4
45-54 years . . . . .	100.0	41.9	18.4	18.0	16.7	5.2	4.8	6.3	*0.4
55-64 years . . . . .	100.0	43.2	18.4	17.2	16.9	5.8	4.5	6.2	*0.4
65 years and over . . . . .	100.0	53.3	15.1	14.9	12.9	4.9	3.7	4.2	*0.1
<b>Fair or poor:</b>									
All ages . . . . .	100.0	56.7	14.7	11.4	13.1	4.4	3.2	4.8	0.7
2-4 years . . . . .	100.0	68.2	*11.6	*11.9	*5.3	*4.0	*0.7	*0.7	0.0
5-11 years . . . . .	100.0	40.4	24.4	19.6	13.5	*2.9	*4.2	*5.8	*0.7
12-17 years . . . . .	100.0	43.8	20.2	17.0	16.5	*2.5	*4.5	7.4	*2.1
18-34 years . . . . .	100.0	48.6	19.3	12.5	15.1	5.4	3.7	4.7	1.2
35-44 years . . . . .	100.0	48.4	19.6	12.2	15.9	5.7	3.1	6.5	*0.6
45-54 years . . . . .	100.0	54.8	15.3	12.4	14.0	4.0	3.7	5.7	*0.6
55-64 years . . . . .	100.0	59.4	12.9	10.3	13.5	4.4	3.6	4.6	*0.9
65 years and over . . . . .	100.0	63.7	10.9	10.0	11.0	3.9	2.7	4.0	*0.3
<b>Limitation of activity</b>									
<b>Unable to carry on usual activity:</b>									
All ages . . . . .	100.0	55.7	15.1	11.1	13.0	4.3	3.1	5.1	0.5
2-4 years . . . . .	100.0	*48.1	*15.6	*16.9	*6.5	*6.5	0.0	0.0	0.0
5-11 years . . . . .	100.0	32.8	*22.7	*29.4	*13.4	*4.2	*2.5	*5.9	0.0
12-17 years . . . . .	100.0	33.1	*18.6	*19.5	*21.2	*6.8	*3.4	*9.3	*1.7
18-34 years . . . . .	100.0	49.4	19.5	11.9	14.0	5.0	3.2	5.2	*0.6
35-44 years . . . . .	100.0	47.3	18.1	13.6	15.9	4.0	4.3	6.9	*0.7
45-54 years . . . . .	100.0	53.4	16.9	11.5	13.4	3.9	3.3	5.4	*0.8
55-64 years . . . . .	100.0	58.1	13.6	10.6	13.0	4.8	2.7	4.9	*0.6
65 years and over . . . . .	100.0	63.4	11.8	8.7	10.8	3.9	2.7	4.1	*0.2
<b>Limited in amount or kind of major activity:</b>									
All ages . . . . .	100.0	47.1	18.7	15.7	14.8	5.3	3.7	5.1	0.8
2-4 years . . . . .	100.0	69.9	*10.5	*7.2	*10.5	*6.5	*1.3	*2.6	0.0
5-11 years . . . . .	100.0	32.3	31.0	21.8	12.1	4.0	*3.1	4.0	*1.1
12-17 years . . . . .	100.0	32.8	28.1	22.2	13.9	*2.5	*3.9	4.8	*2.7
18-34 years . . . . .	100.0	43.8	21.8	16.1	14.0	5.9	3.3	3.8	*1.1
35-44 years . . . . .	100.0	40.2	21.7	14.7	19.1	6.6	4.4	7.4	*0.6
45-54 years . . . . .	100.0	45.6	17.1	16.3	17.4	5.2	4.9	6.8	*0.5
55-64 years . . . . .	100.0	46.4	16.3	17.4	17.1	6.6	3.8	5.7	*0.9
65 years and over . . . . .	100.0	59.9	12.1	12.1	12.0	4.5	3.2	4.0	*0.4
<b>Limited, but not in major activity:</b>									
All ages . . . . .	100.0	45.5	18.0	16.8	16.5	6.1	4.1	5.6	0.7
2-4 years . . . . .	100.0	62.8	*19.2	*11.5	*2.6	*2.6	0.0	0.0	0.0
5-11 years . . . . .	100.0	17.2	38.0	25.1	17.2	*9.0	*4.5	*3.4	*0.6
12-17 years . . . . .	100.0	21.3	22.9	25.4	28.2	*5.9	*4.5	13.7	*4.1
18-34 years . . . . .	100.0	37.9	24.4	16.2	18.3	6.8	5.4	5.1	*1.0
35-44 years . . . . .	100.0	35.5	16.8	24.0	20.3	7.7	3.4	8.2	*1.0
45-54 years . . . . .	100.0	42.8	17.7	16.8	19.3	6.0	6.8	6.3	*0.2
55-64 years . . . . .	100.0	45.2	17.4	16.3	19.1	7.2	5.0	6.2	*0.8
65 years and over . . . . .	100.0	56.3	14.3	13.6	12.3	5.0	2.9	4.1	*0.3
<b>Not limited in activity:</b>									
All ages . . . . .	100.0	37.1	23.5	20.2	14.6	5.3	3.5	5.0	0.8
2-4 years . . . . .	100.0	62.2	20.5	8.5	2.5	1.3	0.6	0.5	*0.0
5-11 years . . . . .	100.0	26.9	30.3	25.9	12.1	5.3	2.7	3.6	0.6
12-17 years . . . . .	100.0	27.8	26.8	21.8	19.4	4.8	2.8	8.6	3.2
18-34 years . . . . .	100.0	38.7	24.6	18.7	13.2	5.2	3.0	4.3	0.6
35-44 years . . . . .	100.0	32.3	23.5	23.3	16.7	6.4	4.3	5.5	0.6
45-54 years . . . . .	100.0	34.6	20.9	21.5	18.2	6.4	5.1	6.2	0.5
55-64 years . . . . .	100.0	38.8	19.1	19.0	18.5	6.3	5.4	6.3	0.5
65 years and over . . . . .	100.0	49.5	15.7	17.2	13.7	5.0	4.0	4.3	0.3

See footnote at end of table.

**Table 9. Percent distribution of persons 2 years of age and over by number of dental visits in past year, according to selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits in the past year								
	Total <sup>1</sup>	None	1	2	3 or more				
					Total	3	4	5-12	13 or more
Dentition status <sup>3</sup>					Percent distribution				
Dentate:									
35 years and over . . . . .	100.0	33.8	22.6	23.3	19.2	7.0	5.2	6.3	0.6
35-44 years . . . . .	100.0	33.2	24.2	23.8	17.8	6.7	4.5	6.0	0.7
45-54 years . . . . .	100.0	32.7	22.6	23.3	20.0	6.9	5.7	6.9	0.5
55-64 years . . . . .	100.0	33.6	21.5	22.1	21.5	7.6	6.1	7.1	0.6
65 years and over . . . . .	100.0	36.4	20.7	23.4	18.5	7.2	5.3	5.6	0.4
65-74 years . . . . .	100.0	35.4	20.6	23.8	19.2	7.3	5.5	5.9	0.5
75 years and over . . . . .	100.0	38.4	20.7	22.6	16.9	7.0	4.9	4.9	*0.2
Edentulous:									
35 years and over . . . . .	100.0	87.0	5.7	1.7	4.6	1.1	0.9	2.3	0.4
35-44 years . . . . .	100.0	82.8	7.7	*2.4	6.4	*1.2	*1.1	*3.1	*1.2
45-54 years . . . . .	100.0	84.2	7.0	2.4	5.8	1.6	*1.1	2.5	*0.6
55-64 years . . . . .	100.0	84.8	6.9	2.2	5.3	1.4	*0.9	2.7	*0.3
65 years and over . . . . .	100.0	89.1	4.7	1.3	3.9	0.9	0.7	2.0	*0.3
65-74 years . . . . .	100.0	87.4	5.4	1.7	4.5	1.0	0.8	2.4	*0.3
75 years and over . . . . .	100.0	90.8	4.0	0.9	3.3	0.8	*0.7	1.6	*0.2

<sup>1</sup>Includes unknown number of visits (not shown separately).  
<sup>2</sup>Persons with unknown health status not shown separately.  
<sup>3</sup>Persons with unknown dentition status not shown separately.

**Table 10. Number of dental visits and number of dental visits per person per year, by sex and selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Age</b>						
All ages . . . . .	491,975	221,197	270,778	2.1	1.9	2.2
2-4 years . . . . .	10,167	4,639	5,527	0.9	0.8	1.0
5-11 years . . . . .	110,774	51,938	58,836	2.4	2.2	2.7
12-17 years . . . . .	54,124	25,171	28,953	2.1	2.0	2.3
18-34 years . . . . .	56,650	26,767	29,883	2.8	2.6	3.1
35-44 years . . . . .	122,579	53,206	69,373	1.8	1.6	2.0
45-54 years . . . . .	41,749	18,079	23,670	1.6	1.5	1.8
55-64 years . . . . .	80,831	35,127	45,703	1.9	1.7	2.1
65 years and over . . . . .	137,334	60,723	76,611	2.3	2.1	2.5
2-4 years . . . . .	80,214	35,162	45,051	2.2	2.0	2.4
5-11 years . . . . .	57,120	25,561	31,560	2.3	2.1	2.5
12-17 years . . . . .	51,975	25,229	26,746	2.4	2.5	2.4
18-24 years . . . . .	59,145	25,462	33,684	2.0	2.1	2.0
25-34 years . . . . .	38,586	17,921	20,665	2.2	2.3	2.1
35-44 years . . . . .	20,559	7,541	13,018	1.8	1.8	1.8
<b>Race</b>						
<b>White:</b>						
All ages . . . . .	441,275	200,737	240,537	2.2	2.1	2.4
2-4 years . . . . .	8,676	4,178	4,498	1.0	0.9	1.0
5-11 years . . . . .	47,281	22,244	25,037	2.3	2.1	2.5
12-17 years . . . . .	50,770	24,160	26,611	3.1	2.9	3.4
18-34 years . . . . .	106,145	46,670	59,475	1.9	1.7	2.1
35-44 years . . . . .	72,677	32,618	40,060	2.4	2.1	2.6
45-54 years . . . . .	51,167	23,224	27,943	2.4	2.2	2.6
55-64 years . . . . .	47,441	22,874	24,567	2.5	2.6	2.5
65 years and over . . . . .	57,117	24,769	32,347	2.2	2.3	2.1
2-4 years . . . . .	37,286	17,476	19,811	2.3	2.4	2.2
5-11 years . . . . .	19,830	7,294	12,536	1.9	1.9	1.9
<b>Black:</b>						
All ages . . . . .	34,292	13,235	21,057	1.2	1.0	1.4
2-4 years . . . . .	*940	*409	*531	*0.6	*0.5	*0.6
5-11 years . . . . .	4,586	1,836	2,750	1.2	0.9	1.4
12-17 years . . . . .	3,931	1,927	2,003	1.3	1.2	1.3
18-34 years . . . . .	10,729	3,932	6,798	1.2	1.0	1.4
35-44 years . . . . .	5,767	1,708	4,059	1.5	1.0	1.9
45-54 years . . . . .	3,484	1,538	1,945	1.3	1.3	1.4
55-64 years . . . . .	3,389	1,439	1,950	1.6	1.5	1.7
65 years and over . . . . .	1,467	*445	*1,022	0.6	*0.4	*0.7
2-4 years . . . . .	*893	*296	*597	*0.6	*0.4	*0.7
5-11 years . . . . .	*574	*149	*425	*0.6	*0.5	*0.7
<b>Other:</b>						
All ages . . . . .	16,408	7,225	9,183	2.0	1.9	2.2
2-4 years . . . . .	*551	*52	*498	*1.2	*0.2	*2.1
5-11 years . . . . .	2,258	*1,091	1,167	2.3	*2.4	2.3
12-17 years . . . . .	1,949	*680	1,269	2.6	*1.7	3.7
18-34 years . . . . .	5,705	2,604	3,101	2.1	2.0	2.3
35-44 years . . . . .	1,770	*637	*933	1.3	*1.4	*1.3
45-54 years . . . . .	2,469	*798	1,671	2.9	*1.9	3.8
55-64 years . . . . .	1,145	*916	*229	2.2	*3.9	*0.8
65 years and over . . . . .	*562	*247	*315	*1.2	*1.3	*1.2
2-4 years . . . . .	*406	*149	*257	*1.4	*1.1	*1.5
5-11 years . . . . .	*156	*99	*57	*1.0	*1.5	*0.6
<b>Hispanic origin</b>						
<b>Non-Hispanic:</b>						
All ages . . . . .	460,944	207,187	253,757	2.1	2.0	2.3
2-4 years . . . . .	8,673	3,721	4,952	0.9	0.7	1.1
5-11 years . . . . .	47,969	22,488	25,481	2.2	2.0	2.4
12-17 years . . . . .	52,986	25,037	27,949	3.0	2.7	3.3
18-34 years . . . . .	114,386	49,970	64,417	1.9	1.7	2.1
35-44 years . . . . .	75,512	32,836	42,676	2.3	2.0	2.5
45-54 years . . . . .	54,090	24,341	29,750	2.3	2.2	2.5
55-64 years . . . . .	49,355	23,911	25,444	2.4	2.5	2.4
65 years and over . . . . .	57,972	24,883	33,089	2.1	2.1	2.0
<b>Hispanic, total:</b>						
All ages . . . . .	31,031	14,010	17,021	1.6	1.5	1.7
2-4 years . . . . .	1,493	*918	*575	1.0	*1.2	*0.8
5-11 years . . . . .	6,155	2,683	3,472	2.0	1.8	2.2
12-17 years . . . . .	3,664	1,729	1,935	1.6	1.5	1.7
18-34 years . . . . .	8,193	3,237	4,957	1.2	1.0	1.5
35-44 years . . . . .	4,702	2,327	2,376	1.8	1.8	1.7
45-54 years . . . . .	3,030	1,220	1,810	2.0	1.8	2.1
55-64 years . . . . .	2,620	1,318	1,302	2.2	2.4	2.0
65 years and over . . . . .	1,173	*578	*595	1.2	*1.4	*1.1

**Table 10. Number of dental visits and number of dental visits per person per year, by sex and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Hispanic origin—Con.</b>						
<b>Hispanic, Mexican-American:</b>						
All ages . . . . .	15,947	8,264	7,683	1.4	1.5	1.4
2-4 years . . . . .	*957	*695	*262	*1.1	*1.7	*0.6
5-11 years . . . . .	2,965	1,178	1,787	1.5	1.3	1.8
12-17 years . . . . .	2,429	*1,047	1,382	1.7	*1.5	1.8
18-34 years . . . . .	3,465	1,679	1,786	0.9	0.8	1.0
35-44 years . . . . .	2,780	1,770	*1,009	1.9	2.4	*1.4
45-54 years . . . . .	1,280	*686	*594	1.8	*2.1	*1.6
55-64 years . . . . .	1,658	*956	*702	2.8	*3.2	*2.4
65 years and over . . . . .	*414	*254	*159	*1.0	*1.3	*0.7
<b>Hispanic, other:</b>						
All ages . . . . .	15,083	5,746	9,338	1.8	1.4	2.0
2-4 years . . . . .	*536	*223	*313	*0.9	*0.7	*1.2
5-11 years . . . . .	3,191	1,506	1,685	2.9	2.8	2.9
12-17 years . . . . .	1,235	*683	*552	1.4	*1.4	*1.3
18-34 years . . . . .	4,728	1,558	3,170	1.6	1.1	2.1
35-44 years . . . . .	1,922	*556	1,366	1.6	*1.0	2.0
45-54 years . . . . .	1,749	*533	1,216	2.1	*1.6	2.5
55-64 years . . . . .	*963	*363	*600	*1.7	*1.5	*1.8
65 years and over . . . . .	*759	*324	*435	*1.5	*1.6	*1.4
<b>Place of residence</b>						
<b>MSA, total:</b>						
All ages . . . . .	402,394	183,025	219,369	2.2	2.1	2.3
2-4 years . . . . .	8,279	3,762	4,517	1.0	0.8	1.1
5-11 years . . . . .	42,751	19,639	23,112	2.2	2.0	2.4
12-17 years . . . . .	44,709	21,996	22,714	2.9	2.8	3.1
18-34 years . . . . .	102,250	44,907	57,343	1.9	1.7	2.1
35-44 years . . . . .	67,812	30,897	36,915	2.4	2.2	2.5
45-54 years . . . . .	47,886	21,591	26,294	2.5	2.3	2.6
55-64 years . . . . .	42,128	20,603	21,525	2.6	2.7	2.5
65 years and over . . . . .	46,579	19,630	26,949	2.2	2.2	2.2
<b>MSA, central city:</b>						
All ages . . . . .	140,279	61,117	79,163	2.0	1.8	2.1
2-4 years . . . . .	3,145	1,124	2,021	0.9	0.6	1.2
5-11 years . . . . .	14,129	6,591	7,538	1.9	1.8	2.0
12-17 years . . . . .	12,097	5,942	6,155	2.1	2.0	2.2
18-34 years . . . . .	38,761	17,384	21,377	1.7	1.6	1.8
35-44 years . . . . .	21,279	9,146	12,134	2.1	1.9	2.3
45-54 years . . . . .	16,524	7,402	9,122	2.4	2.3	2.5
55-64 years . . . . .	15,818	6,897	8,920	2.4	2.3	2.5
65 years and over . . . . .	18,526	6,630	11,896	2.1	1.9	2.2
<b>MSA, not central city:</b>						
All ages . . . . .	262,115	121,909	140,206	2.3	2.2	2.5
2-4 years . . . . .	5,134	2,639	2,496	1.0	1.0	1.0
5-11 years . . . . .	28,621	13,047	15,574	2.4	2.1	2.7
12-17 years . . . . .	32,612	16,053	16,559	3.4	3.3	3.6
18-34 years . . . . .	63,489	27,524	35,966	2.0	1.8	2.2
35-44 years . . . . .	46,533	21,752	24,781	2.5	2.4	2.7
45-54 years . . . . .	31,361	14,189	17,172	2.5	2.3	2.7
55-64 years . . . . .	26,310	13,705	12,605	2.7	2.9	2.4
65 years and over . . . . .	28,053	13,000	15,053	2.2	2.4	2.1
<b>Not-MSA:</b>						
All ages . . . . .	89,581	38,172	51,409	1.7	1.5	1.9
2-4 years . . . . .	1,887	*877	*1,011	0.8	*0.7	*0.9
5-11 years . . . . .	11,374	5,532	5,841	2.0	1.9	2.1
12-17 years . . . . .	11,941	4,771	7,170	2.5	2.0	3.1
18-34 years . . . . .	20,329	8,299	12,030	1.5	1.2	1.8
35-44 years . . . . .	12,402	4,265	8,137	1.7	1.1	2.2
45-54 years . . . . .	9,235	3,970	5,265	1.7	1.5	1.9
55-64 years . . . . .	9,847	4,627	5,221	1.9	1.9	2.0
65 years and over . . . . .	12,566	5,831	6,735	1.6	1.8	1.5
<b>Geographic region</b>						
<b>Northeast:</b>						
All ages . . . . .	104,948	45,301	59,646	2.2	2.0	2.4
2-4 years . . . . .	1,100	*434	*665	0.6	*0.4	*0.7
5-11 years . . . . .	10,946	4,658	6,288	2.5	2.1	3.0
12-17 years . . . . .	11,612	5,897	5,715	3.1	3.1	3.2
18-34 years . . . . .	26,348	10,648	15,700	1.9	1.6	2.3
35-44 years . . . . .	16,006	7,479	8,527	2.2	2.1	2.3
45-54 years . . . . .	11,939	5,355	6,584	2.3	2.2	2.4
55-64 years . . . . .	12,521	5,219	7,303	2.7	2.4	2.9
65 years and over . . . . .	14,475	5,611	8,864	2.1	2.0	2.2

**Table 10. Number of dental visits and number of dental visits per person per year, by sex and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Geographic region—Con.</b>						
<b>Midwest:</b>						
All ages . . . . .	123,177	58,272	64,905	2.1	2.1	2.2
2–4 years . . . . .	2,473	1,241	1,232	0.9	0.9	0.9
5–11 years . . . . .	12,987	6,038	6,949	2.1	1.9	2.3
12–17 years . . . . .	15,901	7,515	8,386	3.2	3.0	3.4
18–34 years . . . . .	33,517	16,206	17,310	2.0	2.0	2.1
35–44 years . . . . .	18,582	8,215	10,367	2.1	1.9	2.4
45–54 years . . . . .	15,540	6,995	8,546	2.5	2.3	2.7
55–64 years . . . . .	11,764	5,738	6,027	2.2	2.3	2.2
65 years and over . . . . .	12,412	6,324	6,088	1.8	2.2	1.5
<b>South:</b>						
All ages . . . . .	142,827	61,661	81,166	1.8	1.6	1.9
2–4 years . . . . .	4,412	2,139	2,273	1.1	1.1	1.2
5–11 years . . . . .	16,571	7,938	8,633	1.9	1.8	2.0
12–17 years . . . . .	15,167	7,359	7,808	2.2	2.0	2.3
18–34 years . . . . .	34,233	12,634	21,599	1.5	1.1	1.8
35–44 years . . . . .	25,757	11,519	14,238	2.2	2.0	2.3
45–54 years . . . . .	14,903	6,200	8,703	1.8	1.5	2.1
55–64 years . . . . .	16,314	8,027	8,286	2.2	2.3	2.1
65 years and over . . . . .	15,470	5,844	9,626	1.6	1.4	1.7
<b>West:</b>						
All ages . . . . .	121,023	55,963	65,060	2.4	2.3	2.5
2–4 years . . . . .	2,182	*825	1,358	0.8	*0.6	1.1
5–11 years . . . . .	13,620	6,537	7,083	2.4	2.3	2.5
12–17 years . . . . .	13,970	5,996	7,974	3.2	2.7	3.8
18–34 years . . . . .	28,481	13,717	14,763	1.9	1.9	2.0
35–44 years . . . . .	19,868	7,949	11,920	2.5	2.0	2.9
45–54 years . . . . .	14,737	7,011	7,727	2.8	2.7	2.9
55–64 years . . . . .	11,376	6,245	5,130	2.8	3.2	2.5
65 years and over . . . . .	16,788	7,683	9,105	3.1	3.3	2.9

NOTE: MSA is metropolitan statistical area.



**Table 11. Number of dental visits and number of dental visits per person per year, by sex and selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Education level<sup>1</sup></b>						
Less than 9 years:						
All ages, 22 years and over . . . . .	19,259	9,678	9,581	1.1	1.2	1.1
22-34 years . . . . .	1,653	*932	*722	0.8	*0.8	*0.7
35-44 years . . . . .	2,455	1,393	*1,062	1.4	1.6	*1.3
45-54 years . . . . .	1,688	*683	*1,005	0.8	*0.7	*1.1
55-64 years . . . . .	4,107	1,757	2,349	1.3	1.1	1.5
65 years and over . . . . .	9,356	4,913	4,443	1.1	1.4	1.0
9-11 years:						
All ages, 22 years and over . . . . .	27,697	11,703	15,994	1.5	1.4	1.5
22-34 years . . . . .	8,219	3,576	4,643	1.5	1.3	1.8
35-44 years . . . . .	3,790	*1,040	2,750	1.4	*0.8	1.9
45-54 years . . . . .	3,739	2,101	1,639	1.3	1.6	1.0
55-64 years . . . . .	4,875	2,123	2,752	1.5	1.5	1.5
65 years and over . . . . .	7,074	2,863	4,211	1.5	1.6	1.5
12 years:						
All ages, 22 years and over . . . . .	125,241	48,872	76,369	2.0	1.8	2.2
22-34 years . . . . .	35,120	14,761	20,359	1.6	1.4	1.8
35-44 years . . . . .	27,827	10,683	17,144	2.1	1.8	2.4
45-54 years . . . . .	22,677	8,724	13,953	2.3	2.0	2.5
55-64 years . . . . .	19,591	7,270	12,321	2.4	2.2	2.5
65 years and over . . . . .	20,025	7,434	12,591	2.1	2.1	2.1
13 years or more:						
All ages, 22 years and over . . . . .	172,019	82,960	89,059	2.6	2.5	2.8
22-34 years . . . . .	51,607	22,841	28,766	2.1	1.9	2.3
35-44 years . . . . .	46,037	21,942	24,095	2.5	2.3	2.8
45-54 years . . . . .	28,801	13,941	14,861	3.0	2.7	3.3
55-64 years . . . . .	23,193	14,031	9,162	3.6	3.9	3.3
65 years and over . . . . .	22,380	10,205	12,175	3.4	3.4	3.5
<b>Family income<sup>2</sup></b>						
Less than \$10,000:						
All ages . . . . .	33,194	11,779	21,415	1.3	1.2	1.4
2-4 years . . . . .	1,282	*807	*475	0.9	*1.1	*0.7
5-11 years . . . . .	4,346	2,134	2,213	1.5	1.4	1.5
12-17 years . . . . .	1,854	*784	*1,071	0.9	*0.8	*1.0
18-34 years . . . . .	11,828	4,773	7,055	1.5	1.5	1.5
35-44 years . . . . .	2,642	*715	1,926	1.3	*1.0	1.6
45-54 years . . . . .	1,217	*508	*709	0.8	*1.0	*0.8
55-64 years . . . . .	2,477	*213	2,263	1.3	*0.3	1.8
65 years and over . . . . .	7,547	1,844	5,703	1.3	1.1	1.4
65-74 years . . . . .	4,432	1,341	3,091	1.5	1.5	1.6
75 years and over . . . . .	3,115	*503	2,612	1.1	*0.7	1.3
\$10,000-\$19,999:						
All ages . . . . .	57,922	23,864	34,058	1.5	1.3	1.6
2-4 years . . . . .	1,439	*616	*823	0.7	*0.6	*0.9
5-11 years . . . . .	5,658	3,277	2,381	1.4	1.5	1.2
12-17 years . . . . .	4,724	2,275	2,450	1.5	1.4	1.7
18-34 years . . . . .	15,103	5,874	9,229	1.3	1.1	1.5
35-44 years . . . . .	6,341	2,399	3,942	1.5	1.3	1.7
45-54 years . . . . .	4,156	1,225	2,931	1.4	1.0	1.7
55-64 years . . . . .	6,577	2,077	4,499	1.8	1.5	2.1
65 years and over . . . . .	13,923	6,121	7,801	1.7	1.7	1.7
65-74 years . . . . .	7,962	3,638	4,324	1.6	1.6	1.6
75 years and over . . . . .	5,960	2,483	3,477	2.0	1.9	2.0
\$20,000-\$34,999:						
All ages . . . . .	110,973	48,972	62,000	2.0	1.8	2.3
2-4 years . . . . .	2,474	*918	1,555	0.9	*0.6	1.1
5-11 years . . . . .	12,883	5,338	7,544	2.1	1.7	2.4
12-17 years . . . . .	12,482	5,848	6,634	2.7	2.4	2.9
18-34 years . . . . .	32,127	14,161	17,966	1.8	1.6	2.1
35-44 years . . . . .	16,701	7,979	8,722	2.0	1.9	2.1
45-54 years . . . . .	8,922	3,350	5,572	1.8	1.5	2.2
55-64 years . . . . .	11,613	5,452	6,161	2.3	2.3	2.3
65 years and over . . . . .	13,772	5,926	7,846	2.6	2.3	2.9
65-74 years . . . . .	9,649	4,065	5,585	2.7	2.3	3.0
75 years and over . . . . .	4,122	1,861	2,261	2.5	2.4	2.7

See footnotes at end of table.

**Table 11. Number of dental visits and number of dental visits per person per year, by sex and selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Family Income<sup>2</sup>— Con.</b>						
<b>\$35,000 or more:</b>						
All ages . . . . .	221,949	107,294	114,655	2.8	2.7	3.0
2–4 years . . . . .	3,769	1,996	1,772	1.1	1.2	1.0
5–11 years . . . . .	25,790	12,225	13,565	3.0	2.8	3.3
12–17 years . . . . .	31,260	14,602	16,659	4.3	3.8	4.7
18–34 years . . . . .	48,516	22,274	26,242	2.3	2.1	2.5
35–44 years . . . . .	45,706	20,565	25,141	2.8	2.5	3.2
45–54 years . . . . .	33,777	16,203	17,573	3.0	2.7	3.3
55–64 years . . . . .	22,561	13,438	9,123	3.4	3.7	3.1
65 years and over . . . . .	10,570	5,991	4,578	3.0	3.4	2.6
65–74 years . . . . .	8,014	4,696	3,318	3.2	3.5	2.9
75 years and over . . . . .	2,556	1,295	1,260	2.6	3.1	2.2
<b>Dental insurance coverage<sup>3</sup></b>						
<b>Private dental insurance:</b>						
All ages . . . . .	263,849	120,704	143,145	2.8	2.6	3.0
2–4 years . . . . .	5,147	2,368	2,779	1.2	1.0	1.3
5–11 years . . . . .	30,863	13,563	17,300	2.8	2.4	3.1
12–17 years . . . . .	35,719	17,699	18,020	3.8	3.6	4.1
18–34 years . . . . .	68,637	28,996	39,641	2.5	2.2	2.7
35–44 years . . . . .	47,353	20,238	27,114	2.6	2.3	2.9
45–54 years . . . . .	35,204	16,551	18,653	2.9	2.7	3.1
55–64 years . . . . .	27,680	14,511	13,169	3.5	3.6	3.4
65 years and over . . . . .	13,247	6,779	6,468	3.0	3.2	2.8
65–74 years . . . . .	10,216	5,771	4,444	3.2	3.8	2.8
75 years and over . . . . .	3,031	*1,007	2,024	2.5	*1.8	3.0
<b>No private dental insurance:</b>						
All ages . . . . .	211,773	93,647	118,126	1.7	1.6	1.8
2–4 years . . . . .	4,815	2,126	2,689	0.8	0.7	0.9
5–11 years . . . . .	21,229	11,023	10,206	1.7	1.7	1.7
12–17 years . . . . .	18,925	8,660	10,265	2.0	1.8	2.2
18–34 years . . . . .	49,441	21,858	27,583	1.4	1.3	1.6
35–44 years . . . . .	30,827	13,997	16,830	2.0	1.9	2.2
45–54 years . . . . .	20,605	8,424	12,182	1.9	1.7	2.1
55–64 years . . . . .	22,639	9,986	12,653	1.9	1.9	1.9
65 years and over . . . . .	43,292	17,573	25,719	2.0	1.9	2.0
65–74 years . . . . .	26,956	11,312	15,645	2.0	1.9	2.1
75 years and over . . . . .	16,336	6,262	10,075	1.8	1.9	1.8

<sup>1</sup>Persons with unknown education level not shown separately.

<sup>2</sup>Persons with unknown income not shown separately.

<sup>3</sup>Persons with unknown insurance coverage not shown separately.

**Table 12. Number of dental visits and number of dental visits per person per year, by sex and selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
<b>Assessed health status<sup>1</sup></b>						
<b>Excellent or very good:</b>						
All ages . . . . .	346,542	161,377	185,165	2.2	2.0	2.4
2-4 years . . . . .	8,564	3,817	4,747	1.0	0.8	1.1
5-11 years . . . . .	44,732	20,797	23,935	2.2	2.0	2.4
12-17 years . . . . .	47,873	23,705	24,167	3.1	2.9	3.3
18-34 years . . . . .	92,954	41,439	51,515	1.8	1.6	2.1
35-44 years . . . . .	57,672	27,353	30,318	2.3	2.1	2.5
45-54 years . . . . .	39,189	17,643	21,547	2.6	2.3	2.9
55-64 years . . . . .	28,875	14,413	14,462	2.7	2.8	2.6
65 years and over . . . . .	26,683	12,209	14,474	2.3	2.5	2.2
65-74 years . . . . .	17,638	8,533	9,105	2.4	2.5	2.2
75 years and over . . . . .	9,045	3,675	5,370	2.2	2.5	2.1
<b>Good:</b>						
All ages . . . . .	102,516	43,631	58,885	1.9	1.8	2.0
2-4 years . . . . .	*1,263	*638	*625	*0.7	*0.7	*0.8
5-11 years . . . . .	7,277	3,699	3,578	1.7	1.6	1.7
12-17 years . . . . .	7,066	2,763	4,303	1.9	1.6	2.3
18-34 years . . . . .	23,843	9,107	14,736	1.7	1.6	1.9
35-44 years . . . . .	16,009	6,431	9,578	2.0	1.8	2.2
45-54 years . . . . .	12,429	5,658	6,771	1.9	2.0	1.9
55-64 years . . . . .	15,166	7,328	7,838	2.4	2.5	2.2
65 years and over . . . . .	19,462	8,007	11,456	2.1	2.2	2.1
65-74 years . . . . .	11,683	5,142	6,542	2.1	2.1	2.0
75 years and over . . . . .	7,779	2,865	4,914	2.1	2.2	2.1
<b>Fair or poor:</b>						
All ages . . . . .	40,574	15,566	25,008	1.7	1.5	1.9
2-4 years . . . . .	*228	*184	*43	*0.8	*1.1	*0.3
5-11 years . . . . .	*1,392	*516	*876	*2.5	*1.6	*3.7
12-17 years . . . . .	*1,257	*138	*1,118	*2.1	*0.6	*3.0
18-34 years . . . . .	5,565	2,577	2,987	1.7	2.0	1.5
35-44 years . . . . .	6,480	*1,324	5,155	2.3	*1.1	3.2
45-54 years . . . . .	5,439	*2,260	3,180	1.8	*1.7	1.8
55-64 years . . . . .	7,652	3,371	4,281	1.8	1.6	1.9
65 years and over . . . . .	12,562	5,195	7,368	1.5	1.5	1.5
65-74 years . . . . .	8,958	4,245	4,713	1.9	2.0	1.9
75 years and over . . . . .	3,604	*950	2,655	1.0	*0.7	1.2
<b>Limitation of activity</b>						
<b>Unable to carry on usual activity:</b>						
All ages . . . . .	17,408	9,486	7,922	1.7	1.7	1.7
2-4 years . . . . .	*194	*138	*57	*2.5	*2.7	*2.3
5-11 years . . . . .	*346	*258	*89	*2.9	*3.3	*2.2
12-17 years . . . . .	*431	*73	*358	*3.7	*1.3	*6.0
18-34 years . . . . .	2,347	*1,509	*838	1.7	*2.0	*1.4
35-44 years . . . . .	2,397	*1,427	*970	1.8	*2.0	*1.6
45-54 years . . . . .	2,323	*1,151	*1,172	1.6	*1.5	*1.7
55-64 years . . . . .	4,298	2,383	*1,915	1.7	1.6	*1.8
65 years and over . . . . .	5,070	2,548	2,522	1.7	1.7	1.7
65-74 years . . . . .	4,078	2,387	*1,691	2.2	2.2	*2.2
75 years and over . . . . .	*992	*161	*832	*0.9	*0.4	*1.2
<b>Limited in amount or kind of major activity:</b>						
All ages . . . . .	29,504	11,383	18,121	2.2	1.9	2.5
2-4 years . . . . .	*68	*25	*43	*0.4	*0.3	*0.7
5-11 years . . . . .	2,703	*1,503	*1,200	2.5	*2.2	*3.1
12-17 years . . . . .	*2,133	*809	*1,324	*2.6	*1.6	*4.4
18-34 years . . . . .	4,638	2,639	*1,999	2.2	2.5	*2.0
35-44 years . . . . .	4,224	*1,172	3,051	2.3	*1.3	3.2
45-54 years . . . . .	3,774	*1,322	2,451	2.4	*2.1	2.6
55-64 years . . . . .	4,955	*1,698	3,256	2.5	*2.1	2.7
65 years and over . . . . .	7,009	*2,214	4,795	1.9	*1.8	2.0
65-74 years . . . . .	4,980	*1,945	3,035	2.5	*2.5	2.6
75 years and over . . . . .	*2,029	*269	*1,760	*1.2	*0.6	*1.4
<b>Limited, but not in major activity:</b>						
All ages . . . . .	24,543	10,721	13,822	2.3	2.3	2.2
2-4 years . . . . .	*112	*66	*47	*1.4	*1.3	*1.7
5-11 years . . . . .	*371	*193	*178	*1.0	*0.9	*1.4
12-17 years . . . . .	*2,035	*1,009	*1,025	*4.0	*3.7	*4.4
18-34 years . . . . .	3,363	*1,571	*1,792	2.1	*2.3	*2.0
35-44 years . . . . .	3,876	*1,129	2,747	3.1	*2.1	3.9
45-54 years . . . . .	2,667	*1,517	*1,150	2.2	*3.1	*1.6
55-64 years . . . . .	4,168	*1,664	2,504	3.0	*3.2	2.8
65 years and over . . . . .	7,952	3,572	4,379	1.8	1.8	1.7
65-74 years . . . . .	4,598	*2,208	2,391	1.9	*2.1	1.8
75 years and over . . . . .	3,353	*1,365	*1,988	1.6	*1.5	*1.6

See footnote at end of table.

**Table 12. Number of dental visits and number of dental visits per person per year, by sex and selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number of visits			Number of visits per person		
	Total population	Male	Female	Total	Male	Female
Limitation of activity—Con.						
Not limited in activity:						
All ages . . . . .	420,520	189,607	230,913	2.1	1.9	2.2
2–4 years . . . . .	9,791	4,411	5,380	0.9	0.8	1.0
5–11 years . . . . .	50,704	23,217	27,486	2.1	2.0	2.3
12–17 years . . . . .	52,051	24,876	27,175	2.8	2.6	3.0
18–34 years . . . . .	112,231	47,487	64,744	1.8	1.5	2.0
35–44 years . . . . .	69,717	31,434	38,283	2.2	2.0	2.4
45–54 years . . . . .	48,356	21,571	26,786	2.4	2.1	2.6
55–64 years . . . . .	38,555	19,484	19,071	2.5	2.7	2.3
65 years and over . . . . .	39,115	17,127	21,987	2.2	2.3	2.1
65–74 years . . . . .	24,930	11,381	13,549	2.2	2.3	2.1
75 years and over . . . . .	14,184	5,747	8,438	2.2	2.3	2.1
Dentition status <sup>2</sup>						
Dentate:						
35 years and over . . . . .	236,273	105,850	130,422	2.6	2.5	2.7
35–44 years . . . . .	79,055	34,874	44,181	2.3	2.1	2.6
45–54 years . . . . .	55,758	25,144	30,614	2.6	2.4	2.8
55–64 years . . . . .	49,816	24,219	25,597	3.0	3.1	2.9
65 years and over . . . . .	51,643	21,614	30,029	2.8	2.8	2.8
65–74 years . . . . .	33,641	15,231	18,410	2.7	2.8	2.7
75 years and over . . . . .	18,002	6,383	11,619	3.0	2.8	3.0
Edentulous:						
35 years and over . . . . .	12,182	5,564	6,618	0.7	0.7	0.7
35–44 years . . . . .	*1,159	*289	*870	*1.2	*0.7	*1.7
45–54 years . . . . .	*1,362	*417	*946	*0.5	*0.4	*0.7
55–64 years . . . . .	*2,159	*1,011	*1,149	*0.5	*0.5	*0.5
65 years and over . . . . .	7,502	3,848	3,654	0.8	0.9	0.6
65–74 years . . . . .	4,945	2,690	*2,255	1.0	1.2	*0.8
75 years and over . . . . .	2,557	*1,158	*1,399	0.5	*0.6	*0.5

<sup>1</sup>Persons with unknown health status not shown separately.

<sup>2</sup>Persons with unknown dentition status not shown separately.

**Table 13. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Age							
Percent distribution							
All ages . . . . .	100.0	51.9	40.5	32.7	6.8	1.0	7.7
2-4 years . . . . .	100.0	54.3	39.9	32.8	6.6	0.6	5.8
5-17 years . . . . .	100.0	48.4	45.4	35.9	8.3	1.1	6.2
5-11 years . . . . .	100.0	49.7	44.3	35.2	8.2	1.0	6.0
12-17 years . . . . .	100.0	46.8	46.7	36.9	8.5	1.3	6.5
18-34 years . . . . .	100.0	50.6	40.7	33.6	6.2	0.9	8.7
18-24 years . . . . .	100.0	55.0	34.6	29.6	4.3	0.7	10.4
25-34 years . . . . .	100.0	48.0	44.4	36.0	7.3	1.1	7.6
35-54 years . . . . .	100.0	42.8	50.0	39.7	9.0	1.4	7.2
35-44 years . . . . .	100.0	42.2	50.9	40.0	9.4	1.4	7.0
45-54 years . . . . .	100.0	43.7	48.8	39.1	8.3	1.3	7.5
55-64 years . . . . .	100.0	55.2	37.1	29.9	6.3	0.8	7.7
65 years and over . . . . .	100.0	75.8	15.0	13.0	1.9	0.2	9.2
65-74 years . . . . .	100.0	74.1	17.7	15.2	2.3	*0.2	8.2
75 years and over . . . . .	100.0	78.3	10.8	9.5	1.2	*0.2	10.8
Sex							
Male:							
All ages . . . . .	100.0	50.9	41.4	33.4	7.0	1.0	7.7
2-4 years . . . . .	100.0	54.4	39.8	32.0	7.3	*0.6	5.8
5-11 years . . . . .	100.0	50.1	43.8	34.3	8.6	0.8	6.2
12-17 years . . . . .	100.0	46.0	47.7	37.6	8.7	1.5	6.3
18-34 years . . . . .	100.0	51.0	39.5	32.9	5.7	0.9	9.5
35-44 years . . . . .	100.0	42.2	50.7	40.1	9.2	1.3	7.2
45-54 years . . . . .	100.0	41.6	51.1	41.1	8.7	1.3	7.3
55-64 years . . . . .	100.0	52.1	40.2	32.5	6.9	0.9	7.7
65 years and over . . . . .	100.0	75.1	17.2	14.5	2.4	*0.2	7.7
65-74 years . . . . .	100.0	73.7	19.4	16.3	2.9	*0.3	6.9
75 years and over . . . . .	100.0	77.8	13.1	11.3	1.6	*0.2	9.1
Female:							
All ages . . . . .	100.0	52.8	39.6	32.0	6.6	1.0	7.6
2-4 years . . . . .	100.0	54.2	40.0	33.6	5.8	*0.6	5.8
5-11 years . . . . .	100.0	49.3	44.9	36.0	7.8	1.1	5.8
12-17 years . . . . .	100.0	47.6	45.6	36.1	8.4	1.2	6.8
18-34 years . . . . .	100.0	50.2	41.9	34.3	6.7	1.0	7.9
35-44 years . . . . .	100.0	42.2	51.0	40.0	9.6	1.4	6.8
45-54 years . . . . .	100.0	45.7	46.6	37.3	7.9	1.3	7.7
55-64 years . . . . .	100.0	57.9	34.3	27.7	5.9	0.8	7.8
65 years and over . . . . .	100.0	76.3	13.5	11.9	1.4	*0.1	10.3
65-74 years . . . . .	100.0	74.5	16.3	14.3	1.8	*0.1	9.2
75 years and over . . . . .	100.0	78.7	9.5	8.5	0.9	*0.1	11.8
Race							
White:							
All ages . . . . .	100.0	50.8	41.8	33.7	7.1	1.0	7.4
2-4 years . . . . .	100.0	51.6	42.7	34.8	7.3	0.6	5.6
5-11 years . . . . .	100.0	47.0	47.4	37.2	9.1	1.0	5.6
12-17 years . . . . .	100.0	44.7	49.3	39.0	8.9	1.4	6.0
18-34 years . . . . .	100.0	49.1	42.3	34.8	6.6	1.0	8.6
35-44 years . . . . .	100.0	41.5	52.0	40.8	9.8	1.4	6.5
45-54 years . . . . .	100.0	42.8	50.0	40.1	8.5	1.4	7.2
55-64 years . . . . .	100.0	54.4	38.3	30.8	6.6	0.9	7.3
65 years and over . . . . .	100.0	75.3	15.4	13.3	2.0	0.2	9.2
65-74 years . . . . .	100.0	73.6	18.4	15.7	2.5	*0.2	8.0
75 years and over . . . . .	100.0	78.0	10.9	9.5	1.2	*0.2	11.1
Black:							
All ages . . . . .	100.0	59.1	32.4	27.4	4.2	0.8	8.5
2-4 years . . . . .	100.0	66.1	27.8	25.0	2.4	*0.4	6.1
5-11 years . . . . .	100.0	61.4	31.5	27.3	3.5	*0.8	7.1
12-17 years . . . . .	100.0	57.1	34.9	27.7	6.1	*1.2	8.0
18-34 years . . . . .	100.0	58.9	32.7	28.1	4.0	0.6	8.5
35-44 years . . . . .	100.0	46.4	44.3	37.0	5.8	1.5	9.3
45-54 years . . . . .	100.0	51.1	39.8	32.8	6.0	*1.0	9.1
55-64 years . . . . .	100.0	62.2	26.9	22.4	4.2	*0.4	10.8
65 years and over . . . . .	100.0	79.5	11.1	10.1	*0.9	*0.1	9.4
65-74 years . . . . .	100.0	78.8	11.5	10.2	*1.2	*0.1	9.7
75 years and over . . . . .	100.0	80.8	10.5	9.9	*0.4	*0.1	8.8

**Table 13. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	With private dental insurance					With unknown coverage
		Without private dental insurance	Total	Comprehensive plan only	Single service plan only	Both plans	
Race—Con.		Percent distribution					
Other:							
All ages . . . . .	100.0	53.8	36.2	27.3	8.0	0.9	10.0
2–4 years . . . . .	100.0	61.5	30.9	22.6	*7.4	*0.9	*7.7
5–11 years . . . . .	100.0	57.6	32.7	23.4	8.5	*0.8	9.7
12–17 years . . . . .	100.0	48.7	41.0	29.0	11.0	*0.8	10.3
18–34 years . . . . .	100.0	55.1	34.6	27.3	6.3	*1.1	10.3
35–44 years . . . . .	100.0	44.6	44.0	31.0	11.6	*1.4	11.5
45–54 years . . . . .	100.0	43.8	46.2	34.7	10.8	*0.7	10.1
55–64 years . . . . .	100.0	56.1	34.7	28.7	*5.6	*0.4	9.4
65 years and over . . . . .	100.0	81.9	11.5	11.5	0.0	0.0	*6.4
65–74 years . . . . .	100.0	80.3	*12.4	*12.4	0.0	0.0	*7.4
75 years and over . . . . .	100.0	85.2	*9.7	*9.7	0.0	0.0	*5.2
Hispanic origin							
Non-Hispanic:							
All ages . . . . .	100.0	50.9	41.5	33.5	7.0	1.0	7.7
2–4 years . . . . .	100.0	52.1	42.1	34.5	6.9	0.6	5.8
5–11 years . . . . .	100.0	47.5	46.5	37.0	8.5	1.0	6.0
12–17 years . . . . .	100.0	44.7	48.8	38.6	8.8	1.4	6.5
18–34 years . . . . .	100.0	49.1	42.2	34.8	6.4	1.0	8.7
35–44 years . . . . .	100.0	41.0	52.0	40.9	9.6	1.4	7.0
45–54 years . . . . .	100.0	43.3	49.4	39.6	8.4	1.3	7.3
55–64 years . . . . .	100.0	54.7	37.6	30.2	6.5	0.9	7.7
65 years and over . . . . .	100.0	75.7	15.0	13.0	1.9	0.2	9.3
65–74 years . . . . .	100.0	74.2	17.6	15.1	2.3	*0.2	8.2
75 years and over . . . . .	100.0	78.1	10.9	9.6	1.2	*0.1	11.0
Hispanic, total:							
All ages . . . . .	100.0	63.0	29.7	23.7	5.3	0.7	7.3
2–4 years . . . . .	100.0	68.5	26.1	21.5	4.3	*0.3	5.3
5–11 years . . . . .	100.0	65.8	28.5	21.8	6.1	*0.6	5.7
12–17 years . . . . .	100.0	62.8	30.8	23.3	6.5	*1.1	6.3
18–34 years . . . . .	100.0	64.0	27.6	22.2	4.8	0.6	8.4
35–44 years . . . . .	100.0	57.0	36.6	28.8	6.8	*1.0	6.4
45–54 years . . . . .	100.0	50.0	40.3	32.6	6.5	*1.2	9.7
55–64 years . . . . .	100.0	63.4	28.3	24.5	3.6	*0.2	8.4
65 years and over . . . . .	100.0	76.6	15.6	13.9	*1.3	*0.4	7.8
65–74 years . . . . .	100.0	72.3	19.0	17.8	*1.3	0.0	8.5
75 years and over . . . . .	100.0	84.5	*9.1	*6.7	*1.2	*1.2	*6.4
Hispanic, Mexican-American:							
All ages . . . . .	100.0	66.3	26.3	20.6	4.9	0.9	7.3
2–4 years . . . . .	100.0	73.5	20.8	16.5	*3.7	*0.6	5.8
5–11 years . . . . .	100.0	67.5	27.0	20.4	5.9	*0.7	5.4
12–17 years . . . . .	100.0	66.0	28.0	22.3	4.1	*1.7	6.1
18–34 years . . . . .	100.0	67.2	24.3	19.0	4.8	*0.5	8.5
35–44 years . . . . .	100.0	59.7	33.8	27.0	5.3	*1.5	6.4
45–54 years . . . . .	100.0	57.6	32.9	24.8	6.9	*1.1	9.5
55–64 years . . . . .	100.0	66.2	24.9	20.4	*4.4	*0.3	8.8
65 years and over . . . . .	100.0	77.5	13.0	10.7	*1.4	*0.9	9.5
65–74 years . . . . .	100.0	72.2	16.2	14.7	*1.5	0.0	*11.7
75 years and over . . . . .	100.0	86.0	*7.6	*3.8	*1.3	*2.5	*5.7
Hispanic, other:							
All ages . . . . .	100.0	58.6	34.1	27.7	5.9	0.5	7.3
2–4 years . . . . .	100.0	61.0	34.2	29.0	*5.2	0.0	*4.7
5–11 years . . . . .	100.0	62.8	30.9	24.3	6.4	*0.3	6.3
12–17 years . . . . .	100.0	57.8	35.6	24.9	10.4	*0.2	6.7
18–34 years . . . . .	100.0	59.7	32.1	26.5	4.7	*0.8	8.2
35–44 years . . . . .	100.0	53.9	39.8	31.0	8.6	*0.3	6.2
45–54 years . . . . .	100.0	43.4	46.7	39.3	6.2	*1.3	9.8
55–64 years . . . . .	100.0	60.5	31.6	28.8	*2.8	0.0	7.9
65 years and over . . . . .	100.0	76.1	17.8	16.6	*1.2	0.0	*6.4
65–74 years . . . . .	100.0	72.5	21.4	20.3	*1.2	0.0	*6.1
75 years and over . . . . .	100.0	83.2	*10.4	*9.2	*1.2	0.0	*6.4
Place of residence							
MSA, total:							
All ages . . . . .	100.0	49.2	42.9	34.0	7.7	1.1	8.0
2–4 years . . . . .	100.0	52.9	41.3	33.1	7.4	0.7	5.8
5–11 years . . . . .	100.0	47.7	46.1	35.5	9.5	1.1	6.3
12–17 years . . . . .	100.0	43.7	49.4	38.0	9.8	1.6	6.9
18–34 years . . . . .	100.0	48.6	42.4	34.4	6.9	1.1	8.9
35–44 years . . . . .	100.0	39.5	53.0	41.0	10.5	1.6	7.4
45–54 years . . . . .	100.0	40.3	52.2	41.5	9.2	1.5	7.5
55–64 years . . . . .	100.0	51.9	40.1	32.2	7.0	0.9	7.9
65 years and over . . . . .	100.0	73.2	17.1	14.8	2.2	0.2	9.6
65–74 years . . . . .	100.0	71.4	20.0	17.0	2.7	*0.2	8.6
75 years and over . . . . .	100.0	76.1	12.5	11.1	1.2	*0.2	11.3

**Table 13. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Place of residence—Con.							
Percent distribution							
MSA, central city:							
All ages . . . . .	100.0	55.0	36.8	29.3	6.5	0.9	8.2
2–4 years . . . . .	100.0	59.6	33.8	27.0	5.9	*0.9	6.6
5–11 years . . . . .	100.0	56.2	37.1	28.5	7.8	0.8	6.7
12–17 years . . . . .	100.0	52.8	39.9	30.1	8.3	1.5	7.3
18–34 years . . . . .	100.0	54.3	36.9	30.0	6.0	0.9	8.8
35–44 years . . . . .	100.0	44.5	47.6	37.3	9.0	1.3	7.9
45–54 years . . . . .	100.0	46.2	46.1	35.9	8.9	1.4	7.7
55–64 years . . . . .	100.0	55.8	35.6	29.2	6.0	*0.5	8.5
65 years and over . . . . .	100.0	74.1	16.3	14.5	1.6	*0.2	9.7
65–74 years . . . . .	100.0	71.4	19.6	17.5	1.9	*0.2	8.9
75 years and over . . . . .	100.0	77.7	11.5	10.2	1.1	*0.2	10.8
MSA, not central city:							
All ages . . . . .	100.0	45.5	46.8	37.0	8.5	1.2	7.8
2–4 years . . . . .	100.0	48.6	46.1	37.1	8.4	*0.6	5.3
5–11 years . . . . .	100.0	42.4	51.7	39.8	10.6	1.3	6.0
12–17 years . . . . .	100.0	38.3	55.0	42.8	10.6	1.6	6.7
18–34 years . . . . .	100.0	44.6	46.4	37.5	7.6	1.2	9.0
35–44 years . . . . .	100.0	36.8	56.0	43.0	11.3	1.7	7.2
45–54 years . . . . .	100.0	37.0	55.5	44.6	9.4	1.6	7.5
55–64 years . . . . .	100.0	49.4	43.1	34.1	7.7	1.2	7.6
65 years and over . . . . .	100.0	72.7	17.8	15.0	2.6	*0.2	9.6
65–74 years . . . . .	100.0	71.4	20.2	16.7	3.3	*0.2	8.3
75 years and over . . . . .	100.0	74.9	13.4	11.9	1.3	*0.2	11.7
Not MSA:							
All ages . . . . .	100.0	61.4	32.0	27.9	3.7	0.5	6.6
2–4 years . . . . .	100.0	59.2	35.1	31.5	3.6	*0.1	5.6
5–11 years . . . . .	100.0	56.5	38.4	34.2	3.8	*0.4	5.1
12–17 years . . . . .	100.0	56.6	38.2	33.1	4.5	*0.6	5.2
18–34 years . . . . .	100.0	58.5	34.0	30.4	3.2	0.4	7.5
35–44 years . . . . .	100.0	52.2	42.6	36.5	5.3	0.8	5.2
45–54 years . . . . .	100.0	56.3	36.5	30.8	5.1	*0.6	7.2
55–64 years . . . . .	100.0	65.6	27.4	22.7	4.1	*0.5	7.0
65 years and over . . . . .	100.0	82.7	9.2	8.1	1.0	*0.1	8.1
65–74 years . . . . .	100.0	81.9	11.1	10.0	1.0	*0.1	7.0
75 years and over . . . . .	100.0	84.0	6.5	5.4	*1.0	*0.1	9.6
Geographic region							
Northeast:							
All ages . . . . .	100.0	50.3	41.7	34.0	7.0	0.7	8.0
2–4 years . . . . .	100.0	51.4	43.1	34.3	8.1	*0.6	5.5
5–11 years . . . . .	100.0	44.5	48.5	38.0	9.6	*0.9	7.0
12–17 years . . . . .	100.0	43.0	49.4	39.2	9.4	*0.7	7.6
18–34 years . . . . .	100.0	48.4	42.9	35.2	6.8	0.9	8.7
35–44 years . . . . .	100.0	40.0	52.5	41.7	9.8	1.0	7.5
45–54 years . . . . .	100.0	41.1	51.4	43.4	7.1	0.9	7.5
55–64 years . . . . .	100.0	53.0	39.8	32.8	6.5	*0.6	7.2
65 years and over . . . . .	100.0	76.8	13.5	12.0	1.4	*0.1	9.6
65–74 years . . . . .	100.0	74.0	16.8	14.8	1.9	*0.1	9.2
75 years and over . . . . .	100.0	81.1	8.6	7.8	*0.8	*0.0	10.3
Midwest:							
All ages . . . . .	100.0	50.0	42.9	35.1	6.5	1.2	7.2
2–4 years . . . . .	100.0	49.8	44.5	36.9	6.9	*0.7	5.7
5–11 years . . . . .	100.0	47.0	47.8	38.6	8.0	1.3	5.2
12–17 years . . . . .	100.0	43.6	51.0	41.5	7.4	2.1	5.4
18–34 years . . . . .	100.0	48.8	43.0	36.0	5.9	1.1	8.2
35–44 years . . . . .	100.0	40.2	53.6	43.1	8.9	1.6	6.2
45–54 years . . . . .	100.0	43.0	50.3	40.3	8.1	1.9	6.7
55–64 years . . . . .	100.0	53.2	39.1	31.5	6.3	1.2	7.7
65 years and over . . . . .	100.0	76.2	14.1	12.1	1.8	*0.2	9.7
65–74 years . . . . .	100.0	74.9	17.5	15.2	2.2	*0.1	7.6
75 years and over . . . . .	100.0	78.2	8.9	7.4	*1.2	*0.2	13.0
South:							
All ages . . . . .	100.0	56.4	36.1	30.6	4.8	0.7	7.6
2–4 years . . . . .	100.0	60.1	34.9	30.7	3.8	*0.5	5.0
5–11 years . . . . .	100.0	56.2	38.4	31.8	6.1	0.5	5.4
12–17 years . . . . .	100.0	52.7	41.2	33.2	7.0	0.9	6.2
18–34 years . . . . .	100.0	54.6	37.0	31.9	4.4	0.7	8.5
35–44 years . . . . .	100.0	46.8	46.2	38.1	6.9	1.2	7.0
45–54 years . . . . .	100.0	49.8	42.2	35.5	5.9	0.7	8.0
55–64 years . . . . .	100.0	60.4	31.7	27.3	3.9	0.5	7.9
65 years and over . . . . .	100.0	75.7	14.8	13.9	0.8	*0.1	9.5
65–74 years . . . . .	100.0	74.4	16.8	15.7	1.0	*0.2	8.8
75 years and over . . . . .	100.0	77.7	11.7	11.1	*0.6	0.0	10.6

**Table 13. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Place of residence—Con.			Percent distribution				
West:							
All ages . . . . .	100.0	48.4	43.6	32.0	10.2	1.3	8.0
2–4 years . . . . .	100.0	52.5	40.3	30.4	9.3	*0.6	7.2
5–11 years . . . . .	100.0	46.4	46.5	34.4	10.6	1.5	7.1
12–17 years . . . . .	100.0	44.1	48.4	35.3	11.5	1.7	7.5
18–34 years . . . . .	100.0	48.4	42.2	32.0	9.0	1.2	9.4
35–44 years . . . . .	100.0	39.4	53.3	38.1	13.5	1.7	7.3
45–54 years . . . . .	100.0	37.8	54.7	39.2	13.5	2.0	7.5
55–64 years . . . . .	100.0	50.5	41.5	29.6	10.7	1.1	8.0
65 years and over . . . . .	100.0	74.1	18.4	13.7	4.4	*0.4	7.5
65–74 years . . . . .	100.0	72.8	20.7	14.9	5.4	*0.3	6.5
75 years and over . . . . .	100.0	76.1	14.9	11.6	2.7	*0.6	9.0

NOTE: MSA is metropolitan statistical area.



**Table 14. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Education level <sup>1</sup>							
Percent distribution							
Less than 9 years:							
All 22 years old and over . . . . .	100.0	77.8	14.1	12.4	1.4	0.3	8.2
22-34 years . . . . .	100.0	81.4	12.9	11.2	*1.6	*0.1	5.7
35-44 years . . . . .	100.0	73.3	19.9	16.5	2.7	*0.6	6.9
45-54 years . . . . .	100.0	69.2	23.2	19.9	2.5	*0.8	7.6
55-64 years . . . . .	100.0	72.7	20.0	17.6	2.3	*0.2	7.3
65 years and over . . . . .	100.0	81.9	8.5	7.8	0.6	*0.1	9.6
9-11 years:							
All 22 years old and over . . . . .	100.0	67.8	24.3	21.0	3.0	0.3	7.9
22-34 years . . . . .	100.0	70.2	22.7	20.0	2.4	*0.3	7.0
35-44 years . . . . .	100.0	59.6	33.1	28.8	4.0	*0.4	7.3
45-54 years . . . . .	100.0	56.2	36.4	31.3	4.6	*0.5	7.4
55-64 years . . . . .	100.0	65.2	28.0	23.4	4.2	*0.5	6.8
65 years and over . . . . .	100.0	78.7	11.0	9.5	1.5	*0.0	10.3
12 years:							
All 22 years old and over . . . . .	100.0	52.6	39.6	32.5	6.1	0.9	7.8
22-34 years . . . . .	100.0	52.4	39.1	32.4	5.8	1.0	8.5
35-44 years . . . . .	100.0	44.3	49.3	40.1	8.0	1.2	6.4
45-54 years . . . . .	100.0	43.3	49.0	40.0	7.9	1.1	7.7
55-64 years . . . . .	100.0	52.3	39.7	32.0	6.8	0.9	8.0
65 years and over . . . . .	100.0	74.9	16.9	14.9	1.8	*0.2	8.2
13 years or more:							
All 22 years old and over . . . . .	100.0	41.6	51.4	40.3	9.6	1.4	7.0
22-34 years . . . . .	100.0	40.5	51.6	41.5	8.9	1.2	7.9
35-44 years . . . . .	100.0	35.4	58.3	44.4	12.1	1.8	6.3
45-54 years . . . . .	100.0	35.4	58.5	45.3	11.2	2.0	6.0
55-64 years . . . . .	100.0	45.3	48.0	37.7	9.0	1.3	6.7
65 years and over . . . . .	100.0	68.7	24.1	19.7	3.9	*0.4	7.3
Family income <sup>2</sup>							
Less than \$10,000:							
All ages . . . . .	100.0	83.9	10.2	9.3	0.8	*0.1	5.9
2-4 years . . . . .	100.0	91.2	5.9	5.4	*0.6	-	2.9
5-11 years . . . . .	100.0	89.3	7.8	7.1	*0.7	-	2.8
12-17 years . . . . .	100.0	87.0	9.2	8.2	*0.6	*0.4	3.7
18-34 years . . . . .	100.0	75.2	17.7	16.2	1.3	*0.2	7.1
35-44 years . . . . .	100.0	91.1	6.6	5.9	*0.6	*0.1	2.2
45-54 years . . . . .	100.0	89.7	7.5	6.3	*0.8	*0.3	2.9
55-64 years . . . . .	100.0	88.3	6.8	6.0	*0.8	-	4.9
65 years and over . . . . .	100.0	84.5	5.7	5.5	*0.2	*0.0	9.8
65-74 years . . . . .	100.0	84.1	6.7	6.6	*0.1	-	9.2
75 years and over . . . . .	100.0	84.8	4.7	4.4	*0.3	*0.1	10.4
\$10,000-\$19,999:							
All ages . . . . .	100.0	70.4	23.0	19.8	3.0	0.2	6.6
2-4 years . . . . .	100.0	72.2	21.5	18.5	2.9	*0.1	6.2
5-11 years . . . . .	100.0	68.4	25.8	21.9	3.7	*0.2	5.8
12-17 years . . . . .	100.0	65.9	27.8	23.5	4.1	*0.3	6.3
18-34 years . . . . .	100.0	67.5	25.8	22.3	3.3	*0.3	6.7
35-44 years . . . . .	100.0	66.3	27.3	23.4	3.8	*0.2	6.4
45-54 years . . . . .	100.0	68.2	25.4	21.2	3.8	*0.3	6.5
55-64 years . . . . .	100.0	70.3	23.1	20.0	3.0	*0.1	6.6
65 years and over . . . . .	100.0	79.9	12.7	11.6	1.0	*0.1	7.3
65-74 years . . . . .	100.0	79.1	14.0	12.9	1.0	*0.1	7.0
75 years and over . . . . .	100.0	81.3	10.7	9.6	*0.9	*0.2	8.0
\$20,000-\$34,999:							
All ages . . . . .	100.0	49.1	45.5	37.3	7.5	0.8	5.4
2-4 years . . . . .	100.0	49.1	46.5	38.7	7.2	*0.7	4.3
5-11 years . . . . .	100.0	45.0	50.9	40.9	9.3	0.8	4.1
12-17 years . . . . .	100.0	45.3	50.5	41.0	8.4	1.1	4.2
18-34 years . . . . .	100.0	47.7	46.3	38.0	7.4	0.9	6.0
35-44 years . . . . .	100.0	43.1	52.3	42.6	8.9	0.8	4.6
45-54 years . . . . .	100.0	44.0	50.3	41.9	7.8	*0.6	5.7
55-64 years . . . . .	100.0	53.7	40.0	32.7	6.7	*0.6	6.4
65 years and over . . . . .	100.0	72.3	21.5	17.9	3.4	*0.2	6.2
65-74 years . . . . .	100.0	70.3	24.4	20.0	4.1	*0.3	5.3
75 years and over . . . . .	100.0	76.8	15.1	13.1	*1.8	*0.1	8.1

See footnotes at end of table.

**Table 14. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Family Income <sup>2</sup> —Con.							
Percent distribution							
\$35,000 or more:							
All ages . . . . .	100.0	33.8	60.8	46.8	12.0	2.0	5.4
2-4 years . . . . .	100.0	33.4	62.5	49.6	11.8	*1.1	4.1
5-11 years . . . . .	100.0	31.1	64.6	48.9	13.6	2.0	4.3
12-17 years . . . . .	100.0	28.5	67.6	50.9	14.4	2.4	3.9
18-34 years . . . . .	100.0	34.8	57.8	45.7	10.2	1.9	7.3
35-44 years . . . . .	100.0	28.9	66.4	50.3	13.8	2.3	4.7
45-54 years . . . . .	100.0	30.7	64.4	49.5	12.5	2.3	4.9
55-64 years . . . . .	100.0	39.0	55.7	42.4	11.3	1.9	5.3
65 years and over . . . . .	100.0	67.9	26.3	21.0	4.8	*0.6	5.8
65-74 years . . . . .	100.0	65.3	29.3	23.4	5.2	*0.7	5.5
75 years and over . . . . .	100.0	74.3	18.9	14.8	*3.6	*0.4	6.8
Poverty Index <sup>3</sup>							
Below poverty threshold:							
All ages . . . . .	100.0	83.8	11.0	9.8	1.1	*0.1	5.2
2-4 years . . . . .	100.0	88.6	7.0	6.1	*0.9	—	4.3
5-11 years . . . . .	100.0	86.4	10.0	8.4	1.6	—	3.6
12-17 years . . . . .	100.0	84.6	11.6	9.9	1.4	*0.3	3.8
18-34 years . . . . .	100.0	76.9	16.2	14.7	1.3	*0.1	7.0
35-44 years . . . . .	100.0	87.5	9.4	8.2	*1.1	*0.1	3.1
45-54 years . . . . .	100.0	89.3	7.6	7.0	*0.4	*0.2	3.2
55-64 years . . . . .	100.0	89.5	6.1	5.4	*0.7	—	4.4
65 years and over . . . . .	100.0	87.8	4.4	4.3	*0.1	—	7.8
65-74 years . . . . .	100.0	86.6	5.5	5.5	—	—	8.0
75 years and over . . . . .	100.0	89.0	3.3	3.1	*0.2	—	7.7
At or above poverty threshold:							
All ages . . . . .	100.0	46.6	46.8	37.6	8.1	1.2	6.5
2-4 years . . . . .	100.0	44.8	50.4	41.2	8.4	0.8	4.8
5-11 years . . . . .	100.0	40.6	54.2	42.7	10.3	1.2	5.2
12-17 years . . . . .	100.0	38.9	55.7	43.6	10.5	1.6	5.4
18-34 years . . . . .	100.0	46.0	46.6	38.1	7.4	1.1	7.5
35-44 years . . . . .	100.0	37.9	56.2	44.1	10.5	1.6	5.9
45-54 years . . . . .	100.0	40.1	53.7	42.8	9.3	1.5	6.2
55-64 years . . . . .	100.0	51.6	41.7	33.4	7.3	1.0	6.7
65 years and over . . . . .	100.0	75.0	17.3	14.8	2.3	0.2	7.8
65-74 years . . . . .	100.0	73.2	19.9	17.0	2.7	*0.2	6.9
75 years and over . . . . .	100.0	78.0	12.6	11.0	1.5	*0.2	9.3

<sup>1</sup>Persons with unknown education level not shown separately.

<sup>2</sup>Persons with unknown income not shown separately.

<sup>3</sup>Persons with unknown poverty status not shown separately.

**Table 15. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Assessed health status <sup>1</sup>			Percent distribution				
<b>Excellent or very good:</b>							
All ages . . . . .	100.0	47.0	45.5	36.6	7.8	1.1	7.4
2-4 years . . . . .	100.0	51.4	42.8	35.2	7.0	0.6	5.7
5-11 years . . . . .	100.0	46.7	47.3	37.4	8.8	1.1	6.0
12-17 years . . . . .	100.0	43.8	49.9	39.0	9.4	1.4	6.4
18-34 years . . . . .	100.0	47.3	43.9	36.3	6.6	1.0	8.8
35-44 years . . . . .	100.0	38.3	54.8	42.9	10.3	1.6	6.9
45-54 years . . . . .	100.0	39.2	53.8	42.9	9.4	1.4	7.0
55-64 years . . . . .	100.0	49.9	42.7	33.8	7.8	1.2	7.5
65 years and over . . . . .	100.0	74.2	17.2	14.5	2.4	*0.3	8.6
65-74 years . . . . .	100.0	72.3	20.0	16.8	2.9	*0.3	7.7
75 years and over . . . . .	100.0	77.7	12.1	10.3	1.5	*0.2	10.3
<b>Good:</b>							
All ages . . . . .	100.0	58.0	34.1	27.9	5.5	0.7	7.9
2-4 years . . . . .	100.0	66.2	28.3	22.8	5.1	*0.4	5.5
5-11 years . . . . .	100.0	61.4	32.6	26.6	5.5	*0.5	6.0
12-17 years . . . . .	100.0	56.3	36.9	30.1	5.6	1.2	6.9
18-34 years . . . . .	100.0	58.4	33.4	27.6	4.9	0.8	8.2
35-44 years . . . . .	100.0	47.3	45.5	36.5	8.3	0.8	7.2
45-54 years . . . . .	100.0	45.6	45.9	37.2	7.7	1.1	8.5
55-64 years . . . . .	100.0	54.6	37.0	30.1	6.3	*0.6	8.4
65 years and over . . . . .	100.0	75.2	15.6	13.7	1.8	*0.1	9.2
65-74 years . . . . .	100.0	73.3	18.4	16.2	2.1	*0.1	8.2
75 years and over . . . . .	100.0	78.1	11.2	9.8	1.4	*0.1	10.7
<b>Fair or poor:</b>							
All ages . . . . .	100.0	70.9	21.4	17.7	3.2	0.5	7.7
2-4 years . . . . .	100.0	70.2	24.8	22.2	*3.0	0.0	*5.0
5-11 years . . . . .	100.0	67.1	28.4	21.6	*6.4	*0.4	*4.5
12-17 years . . . . .	100.0	69.3	24.8	21.5	*2.6	*0.8	*6.0
18-34 years . . . . .	100.0	69.7	23.3	17.9	5.0	*0.4	7.0
35-44 years . . . . .	100.0	61.9	31.8	25.6	5.1	*1.1	6.4
45-54 years . . . . .	100.0	62.5	31.3	25.3	4.6	1.4	6.3
55-64 years . . . . .	100.0	69.0	24.0	20.5	3.1	*0.4	7.0
65 years and over . . . . .	100.0	78.8	11.3	10.1	1.2	*0.0	9.8
65-74 years . . . . .	100.0	78.4	13.1	11.5	1.6	0.0	8.5
75 years and over . . . . .	100.0	79.4	9.0	8.4	*0.6	*0.1	11.6
<b>Limitation of activity</b>							
<b>Unable to carry on usual activity:</b>							
All ages . . . . .	100.0	73.1	20.0	16.8	2.8	0.4	6.9
2-4 years . . . . .	100.0	57.1	*33.8	*27.3	*5.2	*2.6	*7.8
5-11 years . . . . .	100.0	61.3	*29.4	*26.1	*3.4	0.0	*8.4
12-17 years . . . . .	100.0	55.9	37.3	*28.8	*9.3	0.0	*6.8
18-34 years . . . . .	100.0	74.9	19.5	15.8	3.3	*0.3	5.7
35-44 years . . . . .	100.0	69.1	24.9	20.5	3.7	*0.7	5.9
45-54 years . . . . .	100.0	67.8	27.5	22.7	4.1	*0.7	4.7
55-64 years . . . . .	100.0	72.7	21.3	18.4	2.4	*0.4	6.0
65 years and over . . . . .	100.0	78.5	11.8	10.3	1.4	*0.1	9.7
65-74 years . . . . .	100.0	77.5	14.2	12.4	*1.7	0.0	8.4
75 years and over . . . . .	100.0	80.3	7.8	6.8	*0.8	*0.2	12.0
<b>Limited in amount or kind of major activity:</b>							
All ages . . . . .	100.0	63.2	29.1	23.1	5.2	0.9	7.7
2-4 years . . . . .	100.0	71.2	26.1	*22.2	*3.9	0.0	*2.6
5-11 years . . . . .	100.0	57.2	36.9	28.7	7.3	*0.8	5.9
12-17 years . . . . .	100.0	57.4	38.5	28.8	7.6	*2.1	*4.1
18-34 years . . . . .	100.0	58.3	32.2	26.9	4.3	*1.0	9.5
35-44 years . . . . .	100.0	52.1	41.9	32.0	8.3	*1.6	6.0
45-54 years . . . . .	100.0	52.1	41.0	30.1	9.7	*1.2	6.9
55-64 years . . . . .	100.0	63.0	30.0	24.3	4.9	*0.8	6.9
65 years and over . . . . .	100.0	79.0	11.3	10.1	1.1	*0.1	9.7
65-74 years . . . . .	100.0	75.7	15.4	13.8	*1.6	*0.1	8.8
75 years and over . . . . .	100.0	82.6	6.6	6.0	*0.6	0.0	10.8
<b>Limited, but not in major activity:</b>							
All ages . . . . .	100.0	62.2	31.2	24.9	5.8	0.6	6.6
2-4 years . . . . .	100.0	*48.7	*46.2	*29.5	*16.7	0.0	*5.1
5-11 years . . . . .	100.0	48.7	46.5	34.1	11.3	*1.1	*4.8
12-17 years . . . . .	100.0	48.9	48.3	37.6	10.2	*0.8	*2.5
18-34 years . . . . .	100.0	54.0	39.0	31.3	6.7	*1.0	7.0
35-44 years . . . . .	100.0	43.8	50.0	38.1	11.4	*0.6	6.1
45-54 years . . . . .	100.0	49.7	46.4	36.0	9.3	*1.1	4.0
55-64 years . . . . .	100.0	56.4	38.3	31.7	6.2	*0.5	5.3
65 years and over . . . . .	100.0	78.1	13.7	11.6	1.8	*0.2	8.3
65-74 years . . . . .	100.0	77.5	15.6	13.1	2.2	*0.2	6.8
75 years and over . . . . .	100.0	78.7	11.4	10.0	*1.3	*0.2	9.8

See footnote at end of table.

**Table 15. Percent distribution of persons 2 years of age and over by private dental insurance status, according to selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Without private dental insurance	With private dental insurance				With unknown coverage
			Total	Comprehensive plan only	Single service plan only	Both plans	
Limitation of activity—Con.							
Percent distribution							
Not limited in activity:							
All ages . . . . .	100.0	49.5	42.7	34.5	7.2	1.0	7.7
2–4 years . . . . .	100.0	54.1	40.1	33.0	6.6	0.6	5.8
5–11 years . . . . .	100.0	49.3	44.7	35.5	8.2	1.0	6.0
12–17 years . . . . .	100.0	46.2	47.1	37.2	8.5	1.3	6.7
18–34 years . . . . .	100.0	49.7	41.5	34.3	6.3	1.0	8.7
35–44 years . . . . .	100.0	40.4	52.5	41.4	9.7	1.4	7.1
45–54 years . . . . .	100.0	41.0	51.1	41.2	8.5	1.4	7.9
55–64 years . . . . .	100.0	51.1	40.5	32.4	7.2	0.9	8.3
65 years and over . . . . .	100.0	74.1	16.7	14.3	2.1	*0.2	9.3
65–74 years . . . . .	100.0	72.6	19.1	16.3	2.5	*0.2	8.3
75 years and over . . . . .	100.0	76.7	12.3	10.8	1.3	*0.2	10.9
Dentition status <sup>2</sup>							
Dentate:							
35 years and over . . . . .	100.0	52.1	43.3	34.5	7.7	1.1	4.6
35–44 years . . . . .	100.0	43.0	52.9	41.5	9.9	1.5	4.1
45–54 years . . . . .	100.0	43.9	51.8	41.3	9.0	1.5	4.3
55–64 years . . . . .	100.0	54.6	40.6	32.5	7.2	0.9	4.8
65 years and over . . . . .	100.0	75.9	18.2	15.4	2.6	0.2	5.9
65–74 years . . . . .	100.0	74.1	20.5	17.3	2.9	*0.3	5.3
75 years and over . . . . .	100.0	79.5	13.6	11.6	1.9	*0.2	6.9
Edentulous:							
35 years and over . . . . .	100.0	72.5	20.0	17.6	2.1	0.3	7.5
35–44 years . . . . .	100.0	57.7	38.1	34.0	*3.6	*0.4	4.2
45–54 years . . . . .	100.0	55.1	38.3	33.1	4.6	*0.6	6.6
55–64 years . . . . .	100.0	65.7	28.6	24.3	3.8	*0.5	5.7
65 years and over . . . . .	100.0	80.9	10.3	9.5	0.7	*0.1	8.8
65–74 years . . . . .	100.0	79.9	12.3	11.3	1.0	0.0	7.8
75 years and over . . . . .	100.0	82.0	8.2	7.6	*0.4	*0.1	9.8

<sup>1</sup>Persons with unknown health status not shown separately.  
<sup>2</sup>Persons with unknown dentition status not shown separately.

**Table 16. Percent of persons by reasons reported for no dental visit in past year, according to selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All with no visits in past year	Fear	Cost	Access problem	No dental problem	No teeth	Not important	Other reason
Age								
Percent distribution								
All ages . . . . .	100.0	4.3	13.7	1.7	46.8	14.3	2.3	8.7
2-17 years . . . . .	100.0	1.3	15.0	1.5	56.8	0.2	1.9	11.9
18-34 years . . . . .	100.0	5.9	19.1	2.4	52.4	0.7	3.2	9.5
35-64 years . . . . .	100.0	5.8	12.8	1.5	43.3	17.8	2.2	8.4
65 years and over . . . . .	100.0	2.2	4.1	1.1	31.2	49.7	1.1	3.9
Sex								
Male:								
All ages . . . . .	100.0	4.0	13.0	1.5	49.1	12.1	2.6	9.3
2-17 years . . . . .	100.0	1.2	14.9	1.3	56.2	*0.2	2.0	12.1
18-34 years . . . . .	100.0	5.5	17.5	2.0	54.8	0.6	3.4	9.7
35-64 years . . . . .	100.0	5.4	11.2	1.5	45.4	16.1	2.8	9.5
65 years and over . . . . .	100.0	1.7	4.0	1.0	33.6	48.6	1.3	3.5
Female:								
All ages . . . . .	100.0	4.6	14.3	1.8	44.4	16.6	1.9	8.1
2-17 years . . . . .	100.0	1.5	15.2	1.6	57.4	*0.2	1.8	11.6
18-34 years . . . . .	100.0	6.5	21.0	2.9	49.5	0.8	3.0	9.3
35-64 years . . . . .	100.0	6.2	14.4	1.5	41.1	19.5	1.6	7.3
65 years and over . . . . .	100.0	2.5	4.2	1.2	29.5	50.6	0.9	4.1
Race								
White:								
All ages . . . . .	100.0	4.4	14.3	1.8	44.3	15.7	2.4	9.4
2-17 years . . . . .	100.0	1.3	16.4	1.7	54.0	0.2	2.0	13.3
18-34 years . . . . .	100.0	6.2	20.7	2.6	49.6	0.7	3.4	10.6
35-64 years . . . . .	100.0	5.8	13.0	1.6	41.3	19.0	2.4	9.1
65 years and over . . . . .	100.0	2.1	3.7	1.1	30.5	51.2	1.1	3.9
Black:								
All ages . . . . .	100.0	4.0	11.4	1.0	58.5	8.8	1.5	5.1
2-17 years . . . . .	100.0	1.3	10.7	*0.7	68.3	*0.2	1.2	6.6
18-34 years . . . . .	100.0	4.9	13.3	1.5	63.8	*0.7	2.5	4.6
35-64 years . . . . .	100.0	6.0	11.7	0.9	52.8	13.0	1.1	4.9
65 years and over . . . . .	100.0	3.0	7.0	*1.0	36.6	39.2	*0.9	3.4
Other:								
All ages . . . . .	100.0	3.7	10.8	1.6	52.1	6.1	2.2	9.2
2-17 years . . . . .	100.0	*1.7	11.4	*0.3	49.8	*0.0	*2.4	12.6
18-34 years . . . . .	100.0	4.6	11.7	*2.5	59.4	*0.3	*2.2	8.8
35-64 years . . . . .	100.0	4.6	10.8	*1.9	51.0	8.2	*2.6	7.7
65 years and over . . . . .	100.0	*2.8	*4.2	*0.7	31.4	44.9	*0.7	*5.9
Hispanic origin								
Non-Hispanic:								
All ages . . . . .	100.0	4.3	13.0	1.7	45.7	15.6	2.2	9.1
2-17 years . . . . .	100.0	1.3	14.4	1.3	56.2	0.2	1.9	12.8
18-34 years . . . . .	100.0	6.0	18.9	2.5	51.6	0.7	3.2	10.1
35-64 years . . . . .	100.0	5.8	12.0	1.5	42.5	18.8	2.2	8.7
65 years and over . . . . .	100.0	2.1	4.0	1.1	30.9	50.4	1.1	3.9
Hispanic, total:								
All ages . . . . .	100.0	4.0	19.1	1.8	56.1	3.5	2.6	5.9
2-17 years . . . . .	100.0	1.6	18.4	2.4	59.5	*0.1	2.2	7.3
18-34 years . . . . .	100.0	5.2	20.1	1.5	57.9	*0.2	3.3	5.6
35-64 years . . . . .	100.0	5.3	20.7	1.6	52.2	6.5	2.3	5.2
65 years and over . . . . .	100.0	*4.6	8.2	*1.4	40.7	31.9	*1.6	*3.4
Hispanic, Mexican-American:								
All ages . . . . .	100.0	3.6	20.7	1.7	56.2	2.4	2.3	5.3
2-17 years . . . . .	100.0	*1.4	19.4	2.6	60.7	*0.1	2.2	5.5
18-34 years . . . . .	100.0	4.7	21.0	*0.9	57.5	*0.1	2.8	4.8
35-64 years . . . . .	100.0	5.2	24.3	*1.4	50.1	4.5	*1.7	6.4
65 years and over . . . . .	100.0	*4.3	*11.1	*1.4	38.7	30.5	*1.8	*1.8
Hispanic, other:								
All ages . . . . .	100.0	4.7	16.3	2.0	55.9	5.3	3.1	7.0
2-17 years . . . . .	100.0	*1.8	16.3	*1.9	56.9	*0.2	*2.0	11.3
18-34 years . . . . .	100.0	6.2	18.5	*2.4	58.7	*0.4	4.4	7.0
35-64 years . . . . .	100.0	5.5	16.3	*1.8	54.9	8.9	*3.1	3.8
65 years and over . . . . .	100.0	*4.9	*5.7	*1.4	42.8	33.2	*1.4	*4.9
Place of residence								
MSA, total:								
All ages . . . . .	100.0	4.4	13.4	1.8	46.6	12.8	2.4	9.0
2-17 years . . . . .	100.0	1.3	14.1	1.4	55.7	0.3	2.0	12.1
18-34 years . . . . .	100.0	5.7	18.5	2.6	51.6	0.5	3.3	9.6
35-64 years . . . . .	100.0	6.1	12.6	1.6	43.1	16.0	2.4	8.7
65 years and over . . . . .	100.0	2.3	4.2	1.1	31.4	47.6	1.2	4.0

See footnotes at end of table.

**Table 16. Percent of persons by reasons reported for no dental visit in past year, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All with no visits in past year	Fear	Cost	Access problem	No dental problem	No teeth	Not important	Other reason
Place of residence—Con.		Percent distribution						
MSA, central city:								
All ages	100.0	4.4	14.0	1.7	48.0	11.9	2.6	7.8
2-17 years	100.0	1.6	14.6	1.4	56.5	*0.2	2.0	10.0
18-34 years	100.0	5.3	17.9	2.5	54.2	0.4	3.6	8.4
35-64 years	100.0	6.4	14.1	1.3	43.9	14.8	2.5	7.3
65 years and over	100.0	2.5	4.7	1.3	31.5	46.3	1.7	4.2
MSA, not central city:								
All ages	100.0	4.3	13.0	1.8	45.5	13.5	2.3	9.9
2-17 years	100.0	1.2	13.7	1.4	55.1	*0.4	2.0	13.7
18-34 years	100.0	6.0	19.0	2.6	49.5	0.6	3.1	10.6
35-64 years	100.0	5.8	11.6	1.7	42.6	16.8	2.4	9.6
65 years and over	100.0	2.1	3.9	1.0	31.3	48.5	0.8	4.0
Not MSA:								
All ages	100.0	4.1	14.4	1.4	47.7	18.8	1.7	8.0
2-17 years	100.0	1.3	18.0	1.6	60.0	*0.1	1.5	11.2
18-34 years	100.0	6.9	21.1	1.7	55.4	1.2	2.7	9.1
35-64 years	100.0	4.9	13.1	1.2	43.8	23.1	1.6	7.7
65 years and over	100.0	2.0	3.9	1.0	30.7	55.2	0.9	3.5
Family income <sup>1</sup>								
Less than \$10,000:								
All ages	100.0	3.8	19.7	1.7	42.8	22.5	1.4	6.4
2-17 years	100.0	*1.1	19.4	2.6	60.0	*0.3	1.9	9.6
18-34 years	100.0	5.7	28.8	2.4	51.7	*0.9	1.9	7.2
35-64 years	100.0	6.3	25.2	*1.1	35.5	25.1	1.4	5.4
65 years and over	100.0	2.0	6.6	*0.9	27.4	57.4	*0.7	3.9
\$10,000-\$19,999:								
All ages	100.0	4.0	18.8	1.5	47.0	17.4	1.7	6.5
2-17 years	100.0	1.4	21.9	1.4	58.8	*0.1	1.3	7.9
18-34 years	100.0	6.1	27.8	1.8	53.2	*0.5	2.4	7.9
35-64 years	100.0	4.7	19.2	1.5	43.6	21.7	1.6	5.7
65 years and over	100.0	3.0	3.4	1.2	31.4	51.9	1.3	4.3
\$20,000-\$34,999:								
All ages	100.0	4.8	13.7	1.7	51.3	11.5	2.3	11.1
2-17 years	100.0	1.6	14.4	0.9	59.7	*0.1	1.7	13.8
18-34 years	100.0	6.4	18.1	2.8	54.7	0.8	3.3	12.3
35-64 years	100.0	6.4	12.5	1.4	46.2	18.5	2.0	10.2
65 years and over	100.0	1.8	2.4	*1.3	38.5	47.7	*1.5	4.7
\$35,000 or more:								
All ages	100.0	5.9	6.8	2.6	52.3	8.1	4.1	14.1
2-17 years	100.0	1.1	5.8	2.0	56.8	*0.6	3.1	20.2
18-34 years	100.0	7.0	9.2	3.6	55.4	*0.6	5.4	13.4
35-64 years	100.0	7.8	6.0	2.3	49.7	13.2	4.0	12.9
65 years and over	100.0	*2.8	3.8	*1.6	37.9	41.6	*2.0	4.4
Dental insurance coverage								
Having dental insurance:								
All ages	100.0	6.2	7.2	2.5	53.2	10.1	3.4	15.2
2-17 years	100.0	1.2	7.8	1.2	61.4	*0.3	2.4	18.8
18-34 years	100.0	8.5	9.5	4.1	55.5	0.8	5.1	16.3
35-64 years	100.0	8.0	6.0	2.2	48.8	17.4	3.1	13.7
65 years and over	100.0	2.5	*1.6	*1.1	39.3	44.7	*1.0	5.7
Without dental insurance:								
All ages	100.0	4.0	18.5	1.5	48.7	17.2	2.0	7.0
2-17 years	100.0	1.6	20.5	1.7	60.1	*0.2	1.9	9.9
18-34 years	100.0	5.5	26.7	1.9	56.3	0.7	2.7	7.6
35-64 years	100.0	5.4	18.9	1.3	45.1	19.9	2.1	6.8
65 years and over	100.0	2.3	4.9	1.2	31.9	52.5	1.2	3.9
Insurance status unknown:								
All ages	100.0	1.6	3.9	0.7	23.8	9.3	0.8	2.9
2-17 years	100.0	*0.6	4.7	*1.0	25.7	*0.1	*0.6	3.6
18-34 years	100.0	2.3	5.1	*0.9	28.2	*0.3	1.1	3.5
35-64 years	100.0	1.5	3.4	*0.3	20.8	9.2	*0.7	2.0
65 years and over	100.0	*1.4	*1.6	*0.6	19.8	36.8	*0.6	2.6
Limitation of activity								
Unable to carry on usual activity:								
All ages	100.0	4.4	15.4	1.7	33.2	31.9	1.1	6.2
2-17 years	100.0	*6.0	*27.6	*0.0	36.6	*0.0	*1.5	*20.1
18-34 years	100.0	7.4	25.3	*1.9	47.1	*1.9	*1.9	6.1
35-64 years	100.0	5.4	18.3	*1.2	34.5	28.9	*1.1	6.6
65 years and over	100.0	*1.7	6.6	2.4	26.0	49.9	*0.7	4.6

See footnotes at end of table.

**Table 16. Percent of persons by reasons reported for no dental visit in past year, according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>All with no visits in past year</i>	<i>Fear</i>	<i>Cost</i>	<i>Access problem</i>	<i>No dental problem</i>	<i>No teeth</i>	<i>Not important</i>	<i>Other reason</i>
Limitation of activity—Con.		Percent distribution						
Limited in amount or kind of major activity:								
All ages . . . . .	100.0	4.4	15.2	1.9	34.5	29.7	1.7	7.5
2–17 years . . . . .	100.0	*1.7	18.9	*2.5	58.0	*0.3	*2.0	9.1
18–34 years . . . . .	100.0	6.9	30.2	*3.9	44.3	*0.8	*1.8	10.4
35–64 years . . . . .	100.0	6.1	17.6	1.7	31.2	27.1	2.2	9.3
65 years and over . . . . .	100.0	2.4	5.1	*1.2	26.3	54.3	*1.1	3.9
Limited, but not in major activity:								
All ages . . . . .	100.0	4.4	12.4	0.9	34.3	35.8	1.5	6.3
2–17 years . . . . .	100.0	*1.7	28.0	*2.2	53.0	*0.0	*1.7	*10.8
18–34 years . . . . .	100.0	8.0	29.2	*1.9	50.5	*1.4	*1.7	10.3
35–64 years . . . . .	100.0	6.3	17.5	*0.8	35.3	24.0	*2.0	8.0
65 years and over . . . . .	100.0	2.6	3.9	*0.6	28.2	54.4	*1.2	3.9
Not limited in activity:								
All ages . . . . .	100.0	4.3	13.5	1.7	49.6	10.4	2.4	9.2
2–17 years . . . . .	100.0	1.3	14.7	1.4	56.9	0.2	1.9	11.9
18–34 years . . . . .	100.0	5.8	18.2	2.4	52.9	0.6	3.3	9.6
35–64 years . . . . .	100.0	5.8	11.3	1.5	46.1	15.1	2.4	8.6
65 years and over . . . . .	100.0	2.1	3.4	0.9	34.3	47.3	1.2	3.7

<sup>1</sup>Persons with unknown income not shown separately.

NOTE: MSA is metropolitan statistical area.

**Table 17. Number of total population, number of dental visits per child per year, and percent of children 2-17 years of age with selected preventive dental practices, by selected characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Children who—							
	Total population	Visits per child	Had a dental visit in past year	Never had a dental visit	Use fluoride supplement	Use fluoride mouthrinse at home	Are in fluoride program at school	Have received dental sealants
			Number in thousands	Number	Percent			
<b>Age</b>								
All ages . . . . .	56,329	2.1	61.7	16.6	9.7	8.6	10.9	10.9
2-4 years . . . . .	11,094	.9	32.1	55.0	16.4	3.7	2.0	1.1
5-8 years . . . . .	14,606	1.9	66.9	14.2	13.5	8.9	16.4	10.1
9-11 years . . . . .	10,624	2.4	72.3	4.9	9.1	10.5	19.0	18.2
12-14 years . . . . .	9,857	3.2	70.2	4.0	4.7	10.4	11.1	15.2
15-17 years . . . . .	10,148	2.4	67.5	2.6	2.6	9.5	4.0	10.9
<b>Sex</b>								
<b>Male:</b>								
All ages . . . . .	28,845	1.9	60.6	17.0	9.8	8.3	11.0	10.5
2-4 years . . . . .	5,700	.8	31.4	56.1	16.8	3.9	1.7	1.1
5-8 years . . . . .	7,493	1.7	66.5	14.4	13.5	9.0	16.5	9.4
9-11 years . . . . .	5,366	2.3	71.8	5.0	9.2	10.6	19.4	17.0
12-14 years . . . . .	5,103	3.1	68.7	4.0	4.8	9.7	11.2	15.8
15-17 years . . . . .	5,184	2.1	64.9	3.0	2.4	8.7	4.1	10.5
<b>Female:</b>								
All ages . . . . .	27,483	2.3	62.9	16.2	9.7	8.8	10.8	11.3
2-4 years . . . . .	5,394	1.0	32.9	53.8	16.0	3.4	2.3	1.1
5-8 years . . . . .	7,113	2.1	67.4	14.1	13.6	8.8	16.4	10.9
9-11 years . . . . .	5,258	2.5	72.8	4.8	9.1	10.4	18.6	19.4
12-14 years . . . . .	4,754	3.4	71.6	4.0	4.5	11.3	11.0	14.6
15-17 years . . . . .	4,964	2.7	70.3	2.2	2.9	10.5	3.8	11.4
<b>Race</b>								
<b>White:</b>								
All ages . . . . .	45,362	2.3	64.4	16.0	10.6	8.8	10.1	12.4
2-4 years . . . . .	8,922	.9	33.2	54.7	17.9	3.5	1.6	1.0
5-8 years . . . . .	11,808	2.0	69.2	13.6	14.8	9.0	15.3	11.4
9-11 years . . . . .	8,497	2.7	75.9	4.1	9.9	11.1	18.1	21.0
12-14 years . . . . .	8,021	3.6	73.2	3.4	4.9	11.0	10.2	17.5
15-17 years . . . . .	8,114	2.6	70.9	2.0	2.7	9.8	3.4	12.3
<b>Black:</b>								
All ages . . . . .	8,780	1.0	49.9	19.1	5.4	7.8	15.3	4.2
2-4 years . . . . .	1,702	.5	27.0	57.6	8.6	4.9	3.9	*1.0
5-8 years . . . . .	2,215	1.2	56.0	17.0	8.0	9.6	23.2	4.2
9-11 years . . . . .	1,739	.9	57.2	7.9	4.9	8.1	24.3	6.0
12-14 years . . . . .	1,514	1.3	55.4	6.7	2.7	8.1	15.9	4.7
15-17 years . . . . .	1,609	1.1	52.5	5.2	*1.4	8.2	6.5	5.2
<b>Other:</b>								
All ages . . . . .	2,187	2.1	54.3	19.4	10.0	6.2	10.2	6.5
2-4 years . . . . .	470	1.1	29.4	52.3	16.2	*2.3	*3.2	*2.3
5-8 years . . . . .	583	2.8	62.1	16.5	9.6	*5.1	13.9	6.7
9-11 years . . . . .	388	1.5	60.1	10.1	10.6	*9.0	16.5	10.3
12-14 years . . . . .	321	2.7	63.2	*8.7	*7.8	*6.9	*11.8	*9.0
15-17 years . . . . .	425	2.5	59.5	*3.3	*4.9	*8.9	*5.9	*5.4
<b>Hispanic origin</b>								
<b>Non-Hispanic:</b>								
All ages . . . . .	49,481	2.2	63.7	15.2	10.0	9.0	11.0	11.7
2-4 years . . . . .	9,610	.9	33.6	53.4	17.2	3.9	2.0	1.2
5-8 years . . . . .	12,777	1.9	68.7	12.5	13.9	9.3	16.9	10.9
9-11 years . . . . .	9,416	2.5	73.6	4.1	9.4	11.1	19.1	19.4
12-14 years . . . . .	8,662	3.4	72.6	2.8	4.6	10.9	11.2	16.2
15-17 years . . . . .	9,015	2.5	69.5	2.0	2.5	9.8	3.8	11.7
<b>Hispanic, total:</b>								
All ages . . . . .	6,848	1.6	47.9	26.8	8.1	5.7	10.1	5.1
2-4 years . . . . .	1,484	1.0	22.4	65.2	11.1	*2.3	*2.1	*0.5
5-8 years . . . . .	1,829	2.0	54.3	26.7	10.9	6.1	13.5	4.5
9-11 years . . . . .	1,207	1.9	61.7	11.4	7.0	5.9	18.6	8.5
12-14 years . . . . .	1,195	2.0	52.7	12.9	4.9	7.4	10.6	8.4
15-17 years . . . . .	1,133	1.0	51.2	7.5	3.7	7.5	5.5	4.7
<b>Hispanic, Mexican-American:</b>								
All ages . . . . .	4,255	1.4	42.3	31.7	7.1	4.2	10.7	4.1
2-4 years . . . . .	890	1.0	18.2	71.7	8.4	*1.3	*3.0	*0.4
5-8 years . . . . .	1,157	1.6	48.1	32.6	9.9	4.6	14.3	4.5
9-11 years . . . . .	765	1.3	57.4	15.6	6.8	*3.9	20.3	6.8
12-14 years . . . . .	763	2.0	45.1	18.5	*4.6	5.8	9.8	6.4
15-17 years . . . . .	679	1.3	43.7	11.0	*3.5	6.2	*5.2	*2.8

See footnote at end of table.



**Table 17. Number of total population, number of dental visits per child per year, and percent of children 2–17 years of age with selected preventive dental practices, by selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Visits per child	Children who—					Have received dental sealants
			Had a dental visit in past year	Never had a dental visit	Use fluoride supplement	Use fluoride mouthrinse at home	Are in fluoride mouthrinse program at school	
Hispanic origin—Con.	Number in thousands	Number	Percent					
Hispanic, other:								
All ages . . . . .	2,593	1.9	57.2	18.6	9.7	8.1	9.1	6.6
2–4 years . . . . .	593	0.9	29.0	55.5	15.2	*3.7	*0.8	*0.7
5–8 years . . . . .	671	2.8	65.0	16.7	12.7	8.6	12.1	*4.8
9–11 years . . . . .	443	2.8	69.1	*4.3	*7.7	9.3	15.8	11.5
12–14 years . . . . .	432	2.2	66.2	*2.8	*5.6	10.2	11.8	11.8
15–17 years . . . . .	454	0.6	62.6	*2.2	*4.0	9.5	*6.2	*7.5
Family income <sup>1</sup>								
Under \$10,000:								
All ages . . . . .	6,387	1.1	48.8	23.4	5.5	6.1	16.9	4.3
2–4 years . . . . .	1,417	0.9	29.6	60.8	8.2	*2.5	3.9	*0.9
5–8 years . . . . .	1,791	1.6	55.2	20.5	7.6	6.6	23.2	3.9
9–11 years . . . . .	1,157	1.1	57.5	9.6	4.7	7.3	28.3	7.4
12–14 years . . . . .	1,047	0.8	55.1	8.2	*2.8	7.0	19.1	5.0
15–17 years . . . . .	976	1.0	47.6	6.9	*1.4	8.3	8.5	5.8
\$10,000–\$19,999:								
All ages . . . . .	9,212	1.2	46.9	23.5	7.7	7.9	13.1	5.9
2–4 years . . . . .	1,940	0.7	21.1	64.7	11.5	5.1	3.1	*0.8
5–8 years . . . . .	2,394	1.2	51.3	23.4	10.8	8.2	17.5	5.1
9–11 years . . . . .	1,794	1.4	57.8	8.0	7.5	8.5	24.2	10.4
12–14 years . . . . .	1,564	1.7	54.1	7.8	3.6	9.7	13.6	8.5
15–17 years . . . . .	1,520	1.3	52.6	5.3	*2.2	8.2	5.7	5.8
\$20,000–\$34,999:								
All ages . . . . .	13,832	2.0	61.7	18.0	10.7	9.8	11.5	9.9
2–4 years . . . . .	2,879	0.8	32.4	57.2	17.9	4.8	1.8	*0.9
5–8 years . . . . .	3,794	1.9	67.6	14.4	14.0	11.3	18.7	10.9
9–11 years . . . . .	2,486	2.2	75.7	6.0	10.3	11.8	19.4	15.8
12–14 years . . . . .	2,348	2.9	68.3	4.2	4.5	11.1	10.4	13.8
15–17 years . . . . .	2,323	2.3	66.9	2.2	2.9	9.9	4.8	9.2
\$35,000 or more:								
All ages . . . . .	19,275	3.1	77.0	10.5	12.6	9.5	7.2	17.6
2–4 years . . . . .	3,466	1.0	42.2	47.2	23.9	2.8	*0.6	1.6
5–8 years . . . . .	4,753	2.4	82.7	6.3	18.0	9.3	11.4	15.7
9–11 years . . . . .	3,716	3.8	85.5	1.3	11.4	12.5	12.9	29.2
12–14 years . . . . .	3,493	5.2	86.6	*0.9	5.9	11.7	7.3	24.3
15–17 years . . . . .	3,847	3.3	83.2	*0.5	3.2	11.0	2.2	17.2

<sup>1</sup>Includes unknown income (not shown separately).

**Table 18. Percent distribution of dentate, partially dentate, and edentulous population according to selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population <sup>1</sup>	Dentate population				Edentulous population
		Total	With upper and lower arches	With lower arch only	With upper arch only	
Age						
Percent distribution						
All ages . . . . .	100.0	89.4	85.6	3.5	0.2	7.5
Under 45 years . . . . .	100.0	96.1	95.4	0.8	*0.0	0.7
45-54 years . . . . .	100.0	86.6	79.0	7.3	0.2	10.0
55-64 years . . . . .	100.0	77.8	67.4	9.9	0.6	19.0
65-74 years . . . . .	100.0	68.9	56.9	11.2	0.8	28.4
75 years and over . . . . .	100.0	53.6	42.5	9.9	1.1	43.0
75-84 years . . . . .	100.0	55.8	44.5	10.2	1.1	40.7
85 years and over . . . . .	100.0	44.1	34.3	8.6	*1.3	52.5
Sex						
Male:						
All ages . . . . .	100.0	90.2	86.9	3.2	0.2	6.7
Under 45 years . . . . .	100.0	96.2	95.4	0.7	*0.0	0.6
45-54 years . . . . .	100.0	87.1	80.0	6.9	*0.2	9.7
55-64 years . . . . .	100.0	78.3	68.4	9.3	0.6	18.4
65-74 years . . . . .	100.0	69.3	57.6	11.0	0.7	28.3
75 years and over . . . . .	100.0	53.9	43.2	9.5	1.3	43.2
Female:						
All ages . . . . .	100.0	88.6	84.5	3.8	0.2	8.3
Under 45 years . . . . .	100.0	96.1	95.3	0.8	*0.0	0.9
45-54 years . . . . .	100.0	86.0	78.1	7.7	*0.3	10.4
55-64 years . . . . .	100.0	77.3	66.4	10.4	0.5	19.5
65-74 years . . . . .	100.0	68.5	56.3	11.4	0.8	28.5
75 years and over . . . . .	100.0	53.3	42.2	10.2	1.0	42.8
Race						
White:						
All ages . . . . .	100.0	89.1	85.2	3.7	0.2	7.9
Under 45 years . . . . .	100.0	96.3	95.4	0.8	*0.0	0.8
45-54 years . . . . .	100.0	86.3	78.6	7.5	0.2	10.4
55-64 years . . . . .	100.0	78.0	67.5	10.0	0.5	19.0
65-74 years . . . . .	100.0	68.9	56.9	11.3	0.7	28.4
75 years and over . . . . .	100.0	54.6	43.5	10.1	1.0	41.9
Black:						
All ages . . . . .	100.0	90.5	87.6	2.6	0.3	6.0
Under 45 years . . . . .	100.0	95.9	95.4	0.5	*0.0	0.6
45-54 years . . . . .	100.0	87.4	79.4	7.3	*0.7	8.6
55-64 years . . . . .	100.0	75.7	65.5	8.9	*1.2	20.4
65-74 years . . . . .	100.0	68.0	55.4	11.7	*0.8	29.1
75 years and over . . . . .	100.0	43.4	33.8	7.5	*2.1	53.0
Other:						
All ages . . . . .	100.0	91.3	89.7	1.5	*0.1	3.8
Under 45 years . . . . .	100.0	94.6	94.2	*0.4	*0.0	*0.4
45-54 years . . . . .	100.0	90.2	87.8	*2.4	*0.0	6.0
55-64 years . . . . .	100.0	80.5	72.1	7.7	*0.8	14.5
65-74 years . . . . .	100.0	69.6	61.9	*6.4	*1.3	25.1
75 years and over . . . . .	100.0	43.9	31.6	*10.3	*2.6	53.5
Hispanic origin						
Non-Hispanic:						
All ages . . . . .	100.0	88.9	85.0	3.7	0.2	7.9
Under 45 years . . . . .	100.0	96.1	95.3	0.8	*0.0	0.8
45-54 years . . . . .	100.0	86.3	78.5	7.6	0.2	10.3
55-64 years . . . . .	100.0	77.5	66.9	10.1	0.6	19.3
65-74 years . . . . .	100.0	68.7	56.7	11.3	0.8	28.5
75 years and over . . . . .	100.0	53.3	42.3	9.9	1.0	43.2
Hispanic, total:						
All ages . . . . .	100.0	93.9	92.5	1.2	*0.1	2.8
Under 45 years . . . . .	100.0	96.5	96.3	*0.2	*0.0	*0.2
45-54 years . . . . .	100.0	89.9	86.3	3.1	*0.5	5.9
55-64 years . . . . .	100.0	82.4	76.1	6.1	*0.2	14.1
65-74 years . . . . .	100.0	73.2	62.0	10.1	*1.0	24.9
75 years and over . . . . .	100.0	62.1	49.1	*9.4	*3.6	36.1
Hispanic, Mexican-American:						
All ages . . . . .	100.0	94.8	94.2	0.6	*0.1	2.0
Under 45 years . . . . .	100.0	96.6	96.5	*0.1	*0.0	*0.1
45-54 years . . . . .	100.0	92.1	90.4	*1.7	*0.0	*4.5
55-64 years . . . . .	100.0	85.0	81.6	*3.4	*0.0	11.6
65-74 years . . . . .	100.0	76.3	69.2	*6.4	*0.8	22.6
75 years and over . . . . .	100.0	65.0	55.4	*3.2	*6.4	33.8

See footnotes at end of table.

**Table 18. Percent distribution of dentate, partially dentate, and edentulous population according to selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population <sup>1</sup>	Dentate population			Edentulous population	
		Total	With upper and lower arches	With lower arch only		With upper arch only
Age						
Percent distribution						
Hispanic, other:						
All ages . . . . .	100.0	92.6	90.3	2.1	*0.2	3.8
Under 45 years . . . . .	100.0	96.3	95.9	*0.3	*0.0	*0.3
45-54 years . . . . .	100.0	87.8	82.5	*4.4	*0.8	7.0
55-64 years . . . . .	100.0	79.7	70.3	9.0	*0.3	16.6
65-74 years . . . . .	100.0	70.7	56.5	13.0	*1.2	26.7
75 years and over . . . . .	100.0	59.5	43.4	*15.0	*1.2	38.2
Family income <sup>2</sup>						
Less than \$10,000:						
All ages . . . . .	100.0	82.3	77.2	4.6	0.4	16.2
Under 45 years . . . . .	100.0	97.4	96.4	0.9	*0.0	1.2
45-54 years . . . . .	100.0	77.1	64.8	11.3	*0.9	21.2
55-64 years . . . . .	100.0	62.0	49.7	11.1	*1.2	36.0
65-74 years . . . . .	100.0	52.0	38.4	12.5	*1.1	46.1
75 years and over . . . . .	100.0	42.2	30.7	10.3	*1.2	56.3
\$10,000-\$34,999:						
All ages . . . . .	100.0	90.1	85.8	4.1	0.2	8.4
Under 45 years . . . . .	100.0	97.5	96.6	0.9	*0.0	0.9
45-54 years . . . . .	100.0	84.7	75.1	9.4	*0.2	13.7
55-64 years . . . . .	100.0	75.9	63.5	11.7	0.7	22.7
65-74 years . . . . .	100.0	70.1	57.1	12.3	0.7	28.8
75 years and over . . . . .	100.0	57.9	46.2	10.8	0.9	40.4
\$35,000 or more:						
All ages . . . . .	100.0	95.7	93.4	2.3	0.1	2.8
Under 45 years . . . . .	100.0	98.2	97.6	0.6	*0.0	0.4
45-54 years . . . . .	100.0	92.1	86.5	5.4	*0.2	6.1
55-64 years . . . . .	100.0	88.3	80.0	8.0	*0.3	10.3
65-74 years . . . . .	100.0	86.3	78.0	7.9	*0.3	12.0
75 years and over . . . . .	100.0	68.8	56.9	11.3	*0.6	30.3
Poverty index <sup>3</sup>						
Below poverty threshold:						
All ages . . . . .	100.0	89.3	86.3	2.7	0.3	9.4
Under 45 years . . . . .	100.0	97.6	96.8	0.7	*0.0	1.2
45-54 years . . . . .	100.0	79.4	67.7	10.3	*1.3	19.3
55-64 years . . . . .	100.0	62.4	49.7	11.4	*1.3	35.5
65-74 years . . . . .	100.0	54.1	42.6	10.5	*0.9	44.7
75 years and over . . . . .	100.0	38.4	28.7	8.4	*1.3	60.2
At or above poverty threshold:						
All ages . . . . .	100.0	91.1	87.4	3.5	0.2	6.8
Under 45 years . . . . .	100.0	97.2	96.4	0.8	*0.0	0.7
45-54 years . . . . .	100.0	88.5	81.1	7.2	0.2	9.3
55-64 years . . . . .	100.0	80.3	69.9	9.9	0.5	17.7
65-74 years . . . . .	100.0	71.3	59.1	11.5	0.7	27.1
75 years and over . . . . .	100.0	57.7	46.2	10.6	0.9	40.4

<sup>1</sup>Includes unknown dentition (not shown separately).

<sup>2</sup>Persons with unknown income not shown separately.

<sup>3</sup>Persons with unknown poverty status not shown separately.

**Table 19. Dental visits per person per year and percent with dental visits in past year, by selected characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level <sup>1</sup>					
	Less than 12 years	12 years	13 years or more	Less than 12 years	12 years	13 years or more
Family income <sup>2</sup>						
Dental visits per person per year						
Percent with visit in past year						
All incomes:						
All ages, 22 years and over . . . . .	1.3	2.0	2.6	33.2	54.8	70.1
22-34 years . . . . .	1.3	1.6	2.1	39.6	52.8	66.1
35-44 years . . . . .	1.4	2.1	2.5	38.3	58.5	72.9
45-54 years . . . . .	1.1	2.3	3.0	34.2	57.4	74.9
55-64 years . . . . .	1.4	2.4	3.6	32.7	56.9	73.7
65 years and over . . . . .	1.3	2.1	3.4	27.7	49.3	67.1
Less than \$15,000:						
All ages, 22 years and over . . . . .	1.2	1.5	1.7	27.7	40.1	51.2
22-34 years . . . . .	1.5	1.1	1.7	38.7	41.6	54.6
35-44 years . . . . .	0.9	1.6	2.0	28.6	40.6	51.4
45-54 years . . . . .	*0.6	1.5	*2.0	26.0	37.5	48.9
55-64 years . . . . .	1.2	1.9	*1.2	26.0	43.0	51.1
65 years and over . . . . .	1.2	1.8	1.7	23.4	37.4	43.8
\$15,000-\$34,999:						
All ages, 22 years and over . . . . .	1.4	1.9	2.2	37.3	54.2	64.0
22-34 years . . . . .	1.1	1.7	1.9	41.5	52.7	61.4
35-44 years . . . . .	1.7	1.9	1.9	41.3	56.7	66.0
45-54 years . . . . .	1.1	1.7	2.3	34.0	53.4	64.8
55-64 years . . . . .	1.7	2.1	3.4	36.3	54.8	66.6
65 years and over . . . . .	1.6	2.4	3.3	34.2	54.6	66.9
\$15,000-\$24,999:						
All ages, 22 years and over . . . . .	1.5	1.7	1.9	34.7	50.6	59.2
22-34 years . . . . .	0.9	1.5	1.4	35.8	48.7	55.7
35-44 years . . . . .	*1.2	1.3	1.7	38.8	52.6	61.8
45-54 years . . . . .	1.3	1.3	2.1	30.3	48.9	58.7
55-64 years . . . . .	1.8	1.9	3.2	33.5	50.4	61.0
65 years and over . . . . .	1.8	2.5	2.9	34.6	53.7	64.7
\$25,000-\$34,999:						
All ages, 22 years and over . . . . .	1.4	2.1	2.5	42.4	58.1	67.8
22-34 years . . . . .	1.5	1.8	2.3	51.0	56.8	66.1
35-44 years . . . . .	2.6	2.4	2.0	45.0	60.3	68.9
45-54 years . . . . .	*0.8	2.0	2.5	39.3	57.4	68.4
55-64 years . . . . .	1.4	2.4	3.6	40.9	60.4	70.7
65 years and over . . . . .	*0.9	2.3	4.0	32.9	56.5	70.2
\$35,000 or more:						
All ages, 22 years and over . . . . .	1.6	2.6	3.1	48.9	66.2	78.0
22-34 years . . . . .	1.5	2.1	2.5	50.2	64.0	73.7
35-44 years . . . . .	2.5	2.7	2.9	58.3	68.9	79.4
45-54 years . . . . .	1.6	3.0	3.2	47.7	65.6	80.9
55-64 years . . . . .	1.8	2.8	4.3	48.1	68.0	81.0
65 years and over . . . . .	*0.8	2.3	4.3	39.5	64.0	80.3
Race						
White, all incomes:						
All ages, 22 years and over . . . . .	1.4	2.1	2.8	34.2	56.4	71.9
22-34 years . . . . .	1.4	1.7	2.2	40.2	54.8	68.2
35-44 years . . . . .	1.5	2.3	2.6	39.0	60.3	74.3
45-54 years . . . . .	1.2	2.4	3.0	35.5	59.1	76.5
55-64 years . . . . .	1.3	2.5	3.8	34.1	57.7	75.4
65 years and over . . . . .	1.4	2.2	3.6	29.0	50.6	68.3
White, with income less than \$15,000:						
All ages, 22 years and over . . . . .	1.3	1.6	1.8	28.0	41.6	52.8
22-34 years . . . . .	1.7	1.2	1.7	38.2	43.1	56.8
35-44 years . . . . .	*0.8	1.8	2.0	28.2	42.6	51.6
45-54 years . . . . .	*0.7	1.6	*2.4	27.7	40.5	52.6
55-64 years . . . . .	1.1	2.0	*1.5	26.7	44.5	54.3
65 years and over . . . . .	1.4	1.9	1.8	24.4	38.8	45.4
White, with income \$15,000-\$34,999:						
All ages, 22 years and over . . . . .	1.5	1.9	2.3	37.9	55.1	65.6
22-34 years . . . . .	1.2	1.7	1.9	41.8	53.9	63.4
35-44 years . . . . .	1.8	2.0	2.0	41.4	57.6	67.0
45-54 years . . . . .	1.2	1.7	2.3	34.3	54.5	66.2
55-64 years . . . . .	1.6	2.2	3.6	37.3	55.1	69.2
65 years and over . . . . .	1.7	2.4	3.5	35.2	55.5	67.6
White, with income \$15,000-\$24,999:						
All ages, 22 years and over . . . . .	1.6	1.7	2.1	35.5	51.6	61.6
22-34 years . . . . .	1.0	1.6	1.6	36.9	49.8	59.0
35-44 years . . . . .	*1.3	1.4	1.9	39.2	53.5	62.9
45-54 years . . . . .	1.7	1.3	*1.9	30.1	50.6	60.9
55-64 years . . . . .	1.8	2.0	3.3	34.8	50.7	64.2
65 years and over . . . . .	1.9	2.4	3.1	35.5	54.6	65.3

See footnotes at end of table.

**Table 19. Dental visits per person per year and percent with dental visits in past year, by selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level <sup>1</sup>					
	Less than 12 years	12 years	13 years or more	Less than 12 years	12 years	13 years or more
Family income <sup>2</sup>	Dental visits per person per year			Percent with visit in past year		
White, with income \$25,000–\$34,999:						
All ages, 22 years and over . . . . .	1.4	2.2	2.5	42.5	58.8	68.8
22–34 years . . . . .	1.6	1.8	2.2	50.2	57.9	66.9
35–44 years . . . . .	2.5	2.6	2.1	44.3	61.1	69.6
45–54 years . . . . .	*0.6	2.1	2.5	39.9	57.8	69.5
55–64 years . . . . .	*1.3	2.5	3.8	41.5	60.3	72.8
65 years and over . . . . .	*0.9	2.4	4.2	34.6	57.2	71.3
White, with income \$35,000 or more:						
All ages, 22 years and over . . . . .	1.6	2.6	3.1	50.0	66.9	79.0
22–34 years . . . . .	1.6	2.1	2.6	53.8	64.7	74.8
35–44 years . . . . .	2.4	2.9	3.0	58.8	69.4	80.2
45–54 years . . . . .	1.6	3.0	3.3	46.8	66.4	82.0
55–64 years . . . . .	1.7	2.8	4.4	50.4	68.1	81.6
65 years and over . . . . .	*0.7	2.4	4.4	39.5	65.8	81.4
Black, all incomes:						
All ages, 22 years and over . . . . .	1.0	1.2	1.7	28.2	43.2	55.9
22–34 years . . . . .	*0.9	1.2	1.5	37.5	42.1	53.5
35–44 years . . . . .	*1.3	1.1	2.1	34.0	48.8	62.3
45–54 years . . . . .	*0.8	1.2	2.3	28.9	44.2	61.4
55–64 years . . . . .	1.7	*1.7	*1.1	27.1	46.6	48.6
65 years and over . . . . .	*0.4	*0.8	*1.1	19.4	25.5	39.4
Black, with income less than \$15,000:						
All ages, 22 years and over . . . . .	0.9	0.8	*1.2	26.1	34.1	39.6
22–34 years . . . . .	*0.8	*0.6	*1.0	40.3	38.4	40.5
35–44 years . . . . .	*1.6	*1.0	*2.8	28.2	34.4	49.4
45–54 years . . . . .	*0.5	*1.2	*0.5	20.8	27.9	*32.8
55–64 years . . . . .	*1.6	*1.2	0.0	24.2	*30.4	*28.3
65 years and over . . . . .	*0.3	*0.4	0.0	19.4	21.8	*26.8
Black, with income \$15,000–\$34,999:						
All ages, 22 years and over . . . . .	1.1	1.3	1.6	34.1	47.1	53.1
22–34 years . . . . .	*0.7	1.6	1.8	40.3	44.4	51.8
35–44 years . . . . .	*1.3	*0.9	*1.5	39.4	53.0	59.2
45–54 years . . . . .	*0.6	*1.1	*1.6	33.5	45.7	55.8
55–64 years . . . . .	*1.9	*1.3	*0.9	32.7	53.2	39.7
65 years and over . . . . .	*0.7	*1.8	*0.2	24.4	34.8	*46.3
Black, with income \$15,000–\$24,999:						
All ages, 22 years and over . . . . .	*0.7	1.1	*0.7	29.8	43.8	47.4
22–34 years . . . . .	*0.2	*1.4	*0.7	31.5	42.7	45.7
35–44 years . . . . .	*0.4	*0.8	*0.6	33.1	50.4	52.7
45–54 years . . . . .	0.0	*0.7	*1.5	31.3	37.2	53.1
55–64 years . . . . .	*1.9	*0.9	*0.6	30.1	47.6	*32.7
65 years and over . . . . .	*0.8	*1.7	*0.3	24.5	*31.5	*49.2
Black, with income \$25,000–\$34,999:						
All ages, 22 years and over . . . . .	*1.8	1.7	2.4	43.9	52.1	58.6
22–34 years . . . . .	*1.4	*2.0	3.0	53.5	47.2	58.1
35–44 years . . . . .	*3.6	*1.0	*2.1	*57.6	56.6	64.1
45–54 years . . . . .	*1.8	*1.6	*1.6	*38.2	54.9	57.4
55–64 years . . . . .	*1.8	*2.1	*1.3	38.8	65.0	*46.2
65 years and over . . . . .	*0.6	*1.8	0.0	*21.1	*41.3	*36.4
Black, with income \$35,000 or more:						
All ages, 22 years and over . . . . .	*1.7	2.1	1.9	39.2	58.1	67.2
22–34 years . . . . .	*0.7	*2.7	*1.3	*19.1	58.9	64.3
35–44 years . . . . .	*1.5	*1.9	2.7	*51.8	61.7	71.9
45–54 years . . . . .	*1.5	*1.1	*2.0	61.2	55.3	68.5
55–64 years . . . . .	*3.9	*4.1	*0.6	*25.3	64.3	64.3
65 years and over . . . . .	0.0	0.0	*3.4	*33.3	*27.9	*53.1
Other races, all incomes:						
All ages, 22 years and over . . . . .	*1.0	1.8	2.1	31.7	47.6	61.5
22–34 years . . . . .	*0.7	*2.0	1.8	35.1	47.7	56.3
35–44 years . . . . .	*1.1	*1.5	*1.4	41.1	46.4	63.3
45–54 years . . . . .	*1.1	*2.9	3.4	32.4	45.4	67.6
55–64 years . . . . .	*1.2	0.0	*5.0	26.8	54.2	72.0
65 years and over . . . . .	*1.2	*2.3	*0.5	24.5	46.0	63.0
Other races, with income less than \$15,000:						
All ages, 22 years and over . . . . .	*0.8	*1.7	*1.7	28.5	40.5	58.3
22–34 years . . . . .	*1.2	*2.2	*2.2	38.8	38.4	62.1
35–44 years . . . . .	0.0	*1.9	0.0	*35.9	*41.5	*60.0
45–54 years . . . . .	*1.3	*1.1	0.0	*34.4	*42.1	*40.0
55–64 years . . . . .	*0.3	0.0	0.0	*22.1	*52.6	*60.0
65 years and over . . . . .	*1.1	0.0	0.0	*13.7	*37.5	*10.0

See footnote at end of table.

**Table 19. Dental visits per person per year and percent with dental visits in past year, by selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level <sup>1</sup>					
	Less than 12 years	12 years	13 years or more	Less than 12 years	12 years	13 years or more
Family Income <sup>2</sup>	Dental visits per person per year			Percent with visit in past year		
Other races, with income \$15,000–\$34,999:						
All ages, 22 years and over . . . . .	*1.2	*1.8	*1.4	33.5	45.9	55.1
22–34 years . . . . .	*0.6	*1.4	*0.7	*39.3	48.9	64.4
35–44 years . . . . .	*0.8	*2.7	*0.5	*45.2	*40.2	64.9
45–54 years . . . . .	0.0	*1.6	*4.2	*26.2	*44.1	58.5
55–64 years . . . . .	*3.9	0.0	*3.8	*23.1	*46.5	*58.5
65 years and over . . . . .	*1.2	*5.3	*1.1	*28.7	*50.0	*70.2
Other races, with income \$15,000–\$24,999:						
All ages, 22 years and over . . . . .	*1.4	*2.3	*1.1	33.0	45.4	45.4
22–34 years . . . . .	*1.1	*1.2	0.0	*22.4	46.4	34.1
35–44 years . . . . .	*1.1	*3.4	*0.9	*51.2	*40.0	65.1
45–54 years . . . . .	0.0	*2.6	*6.0	*30.8	*43.2	*37.5
55–64 years . . . . .	*2.9	0.0	*5.6	*16.7	*51.9	*50.0
65 years and over . . . . .	*1.6	*9.9	0.0	*38.5	*53.3	*78.9
Other races, with income \$25,000–\$34,999:						
All ages, 22 years and over . . . . .	*0.8	*1.1	*1.7	*34.2	46.2	67.2
22–34 years . . . . .	0.0	*1.7	*1.9	*60.0	52.7	67.4
35–44 years . . . . .	0.0	*1.6	0.0	*30.0	*37.5	64.6
45–54 years . . . . .	0.0	0.0	*3.2	*25.0	*45.5	69.7
55–64 years . . . . .	*6.0	0.0	*2.2	*37.5	*37.5	*71.4
65 years and over . . . . .	0.0	0.0	*1.9	0.0	*46.2	*64.3
Other races, with income \$35,000 or more:						
All ages, 22 years and over . . . . .	*1.8	3.0	2.7	44.6	58.4	71.5
22–34 years . . . . .	0.0	*3.8	2.6	*26.1	53.1	66.4
35–44 years . . . . .	*5.6	*1.3	*1.6	*57.1	69.0	71.5
45–54 years . . . . .	0.0	*5.0	*3.4	*35.3	53.0	73.7
55–64 years . . . . .	0.0	0.0	*6.8	*50.0	*68.9	87.5
65 years and over . . . . .	*3.2	*2.3	0.0	*48.4	*47.6	*79.2
Sex						
Male, all incomes:						
All ages, 22 years and over . . . . .	1.3	1.8	2.5	30.9	50.2	67.5
22–34 years . . . . .	1.2	1.4	1.9	33.8	46.2	61.9
35–44 years . . . . .	1.1	1.8	2.3	34.7	53.7	69.5
45–54 years . . . . .	1.2	2.0	2.7	30.8	55.1	72.1
55–64 years . . . . .	1.3	2.2	3.9	31.4	53.5	73.1
65 years and over . . . . .	1.4	2.1	3.4	27.0	47.4	68.4
Male, with income less than \$15,000:						
All ages, 22 years and over . . . . .	1.0	1.1	1.5	23.6	33.4	48.5
22–34 years . . . . .	1.6	0.9	1.5	31.3	32.3	51.5
35–44 years . . . . .	*0.6	*0.9	*1.6	24.6	33.6	47.9
45–54 years . . . . .	*0.7	*1.3	*1.6	20.0	32.1	43.4
55–64 years . . . . .	*0.4	*1.1	*1.4	23.0	37.6	49.7
65 years and over . . . . .	1.1	1.7	*1.2	20.3	34.2	40.4
Male, with income \$15,000–\$34,999:						
All ages, 22 years and over . . . . .	1.5	1.6	2.0	34.2	49.7	58.8
22–34 years . . . . .	0.9	1.4	1.7	35.2	47.3	56.4
35–44 years . . . . .	1.7	1.8	1.8	36.0	52.1	60.6
45–54 years . . . . .	*1.0	1.5	1.5	30.6	50.6	58.3
55–64 years . . . . .	1.8	1.7	3.5	36.1	51.1	62.3
65 years and over . . . . .	1.9	2.2	2.9	33.0	51.1	62.1
Male, with income \$15,000–\$24,999:						
All ages, 22 years and over . . . . .	1.6	1.3	1.7	32.1	45.3	54.2
22–34 years . . . . .	*0.6	1.2	1.1	30.3	43.3	50.5
35–44 years . . . . .	*1.8	1.1	1.6	34.2	47.0	57.7
45–54 years . . . . .	*1.2	*0.6	*1.3	27.8	45.4	52.3
55–64 years . . . . .	2.2	*1.2	*2.8	32.7	45.5	58.0
65 years and over . . . . .	2.2	2.1	3.2	34.2	47.9	59.4
Male, with income \$25,000–\$34,999:						
All ages, 22 years and over . . . . .	1.1	2.0	2.2	38.1	54.1	62.3
22–34 years . . . . .	*1.4	1.6	2.2	43.4	51.4	61.2
35–44 years . . . . .	*1.5	2.4	1.9	38.6	56.0	62.5
45–54 years . . . . .	*0.7	2.1	*1.6	34.5	54.4	61.8
55–64 years . . . . .	*1.3	2.4	4.0	41.1	57.2	65.0
65 years and over . . . . .	*0.6	2.4	2.7	29.3	56.8	65.8

See footnote at end of table.

**Table 19. Dental visits per person per year and percent with dental visits in past year, by selected characteristics: United States, 1989--Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level <sup>1</sup>					
	Less than 12 years	12 years	13 years or more	Less than 12 years	12 years	13 years or more
Family income <sup>2</sup>	Dental visits per person per year			Percent with visit in past year		
Male, with income \$35,000 or more:						
All ages, 22 years and over . . . . .	1.6	2.3	3.0	47.3	61.0	75.4
22-34 years . . . . .	*1.6	2.0	2.3	47.2	55.8	69.4
35-44 years . . . . .	*1.3	2.2	2.7	54.3	64.6	76.5
45-54 years . . . . .	*1.7	2.5	3.0	44.8	63.3	78.2
55-64 years . . . . .	*1.9	2.8	4.5	45.0	63.1	79.6
65 years and over . . . . .	*1.2	*2.2	4.5	47.6	62.0	82.8
Female, all incomes:						
All ages, 22 years and over . . . . .	1.3	2.2	2.8	35.3	58.3	72.9
22-34 years . . . . .	1.5	1.8	2.3	45.8	59.1	70.1
35-44 years . . . . .	1.7	2.4	2.8	41.6	62.3	76.6
45-54 years . . . . .	1.0	2.5	3.3	37.5	59.2	78.1
55-64 years . . . . .	1.5	2.5	3.3	33.9	59.2	74.4
65 years and over . . . . .	1.2	2.1	3.5	28.2	50.4	66.0
Female, with income less than \$15,000:						
All ages, 22 years and over . . . . .	1.3	1.7	1.9	30.4	43.8	53.2
22-34 years . . . . .	1.4	1.2	1.8	44.4	48.3	57.3
35-44 years . . . . .	*1.2	2.0	2.4	31.7	44.9	53.9
45-54 years . . . . .	*0.6	*1.6	*2.3	30.0	40.4	52.2
55-64 years . . . . .	1.6	2.3	*1.1	27.9	45.4	52.4
65 years and over . . . . .	1.3	1.8	1.9	25.3	38.8	45.6
Female, with income \$15,000-\$34,999:						
All ages, 22 years and over . . . . .	1.4	2.1	2.5	40.9	58.0	68.9
22-34 years . . . . .	1.4	1.9	2.0	50.0	58.0	66.2
35-44 years . . . . .	1.8	2.0	2.0	47.1	60.9	71.5
45-54 years . . . . .	*1.2	1.8	3.1	37.8	55.4	70.1
55-64 years . . . . .	1.5	2.3	3.3	36.5	57.2	70.4
65 years and over . . . . .	1.3	2.6	3.7	35.5	57.4	71.0
Female, with income \$15,000-\$24,999:						
All ages, 22 years and over . . . . .	1.3	2.0	2.1	37.5	54.8	63.7
22-34 years . . . . .	*1.3	1.9	1.7	43.4	54.0	60.7
35-44 years . . . . .	*0.5	1.5	1.7	43.7	57.0	65.6
45-54 years . . . . .	*1.4	1.7	*2.8	32.9	51.1	64.0
55-64 years . . . . .	*1.4	2.3	3.5	34.3	53.2	63.4
65 years and over . . . . .	1.4	2.8	2.8	35.1	58.2	68.7
Female, with income \$25,000-\$34,999:						
All ages, 22 years and over . . . . .	1.8	2.2	2.7	47.8	61.9	73.4
22-34 years . . . . .	*1.7	2.0	2.4	61.2	62.3	71.0
35-44 years . . . . .	*3.8	2.4	2.1	52.4	64.7	75.9
45-54 years . . . . .	*0.9	2.0	3.2	45.5	60.2	74.0
55-64 years . . . . .	*1.7	2.4	3.1	40.8	62.7	76.2
65 years and over . . . . .	*1.1	2.2	5.4	36.9	56.0	75.2
Female, with income \$35,000 or more:						
All ages, 22 years and over . . . . .	1.7	2.8	3.2	50.7	70.6	81.1
22-34 years . . . . .	*1.3	2.3	2.8	54.8	72.3	77.9
35-44 years . . . . .	3.7	3.1	3.1	62.3	72.0	82.8
45-54 years . . . . .	*1.5	3.3	3.5	51.1	67.5	84.5
55-64 years . . . . .	*1.8	2.7	3.9	52.0	72.4	83.3
65 years and over . . . . .	*0.4	2.3	3.9	33.2	65.5	76.9

<sup>1</sup>Excludes unknown education level.

<sup>2</sup>Persons with unknown income not shown separately.

**Table 20. Selected dental variables, by private dental health insurance status and selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population <sup>1</sup>	Rate of dental visits per person per year	Dental visit in previous year		
			1 or more visits	3 or more visits	Edentulous persons
<b>Age</b>					
			Percent		
All ages:					
Having insurance . . . . .	95,436	2.7	71.4	19.3	3.7
Without insurance . . . . .	122,368	1.7	50.0	12.2	10.5
2-4 years:					
Having insurance . . . . .	4,430	1.1	40.1	2.9	-
Without insurance . . . . .	6,022	0.8	27.8	2.4	-
5-17 years:					
Having insurance . . . . .	20,531	3.2	81.6	19.4	-
Without insurance . . . . .	21,894	1.8	61.4	12.8	-
18-34 years:					
Having insurance . . . . .	27,791	2.4	70.2	17.8	0.3
Without insurance . . . . .	34,517	1.4	49.9	11.1	0.5
35-54 years:					
Having insurance . . . . .	30,346	2.7	72.8	21.7	4.3
Without insurance . . . . .	25,971	1.9	53.2	14.2	7.3
55-64 years:					
Having insurance . . . . .	7,949	3.4	66.9	23.9	14.7
Without insurance . . . . .	11,824	1.9	48.8	14.9	22.6
65 years or more:					
Having insurance . . . . .	4,389	3.0	61.0	20.2	23.3
Without insurance . . . . .	22,141	1.9	42.1	12.3	36.4
<b>Sex</b>					
Male:					
All ages:					
Having insurance . . . . .	47,216	2.5	68.6	17.9	3.8
Without insurance . . . . .	58,106	1.6	47.6	11.0	9.2
2-4 years:					
Having insurance . . . . .	2,271	1.0	39.0	3.3	-
Without insurance . . . . .	3,101	0.6	27.2	2.1	-
5-17 years:					
Having insurance . . . . .	10,536	2.9	80.7	18.2	-
Without insurance . . . . .	11,173	1.7	60.1	11.9	-
18-34 years:					
Having insurance . . . . .	13,221	2.1	65.5	15.5	*0.1
Without insurance . . . . .	17,057	1.2	44.4	9.0	0.5
35-54 years:					
Having insurance . . . . .	15,033	2.4	69.7	20.4	4.3
Without insurance . . . . .	12,395	1.8	50.2	13.2	6.5
55-64 years:					
Having insurance . . . . .	4,066	3.5	64.3	22.2	15.1
Without insurance . . . . .	5,261	1.9	48.6	14.2	22.0
65 years or more:					
Having insurance . . . . .	2,091	3.2	60.2	21.2	23.9
Without insurance . . . . .	9,119	1.9	40.9	11.9	35.9
Female:					
All ages:					
Having insurance . . . . .	48,219	2.9	74.1	20.7	3.7
Without insurance . . . . .	64,262	1.8	52.3	13.3	11.7
2-4 years:					
Having insurance . . . . .	2,160	1.2	41.3	2.6	-
Without insurance . . . . .	2,921	0.9	28.4	2.8	-
5-17 years:					
Having insurance . . . . .	9,995	3.5	82.6	20.8	-
Without insurance . . . . .	10,721	1.9	62.7	13.8	-
18-34 years:					
Having insurance . . . . .	14,570	2.7	74.5	19.9	0.4
Without insurance . . . . .	17,460	1.5	55.3	13.2	0.6
35-54 years:					
Having insurance . . . . .	15,313	2.9	75.8	22.9	4.3
Without insurance . . . . .	13,576	2.1	55.8	15.2	8.1
55-64 years:					
Having insurance . . . . .	3,883	3.3	69.7	25.8	14.3
Without insurance . . . . .	6,563	1.9	48.9	15.4	23.1
65 years or more:					
Having insurance . . . . .	2,298	2.8	61.7	19.2	22.8
Without insurance . . . . .	13,021	1.9	42.9	12.5	36.7

See footnote at end of table.



**Table 20. Selected dental variables, by private dental health insurance status and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population <sup>1</sup>	Rate of dental visits per person per year	Dental visit in previous year		
			1 or more visits	3 or more visits	Edentulous persons
Race					
White:					
All ages:					
Having insurance . . . . .	83,222	2.8	72.6	19.7	3.9
Without insurance . . . . .	101,096	1.8	52.1	13.0	11.1
2-4 years:					
Having insurance . . . . .	3,812	1.2	40.9	2.9	—
Without insurance . . . . .	4,608	0.8	28.6	2.1	—
5-17 years:					
Having insurance . . . . .	17,569	3.4	83.2	20.3	—
Without insurance . . . . .	16,763	2.0	64.4	13.9	—
18-34 years:					
Having insurance . . . . .	23,964	2.5	71.5	17.8	0.3
Without insurance . . . . .	27,821	1.5	52.1	11.7	0.6
35-54 years:					
Having insurance . . . . .	26,615	2.7	73.9	22.0	4.3
Without insurance . . . . .	21,876	2.1	55.5	15.0	7.6
55-64 years:					
Having insurance . . . . .	7,197	3.5	68.4	24.5	14.9
Without insurance . . . . .	10,211	2.0	50.9	15.6	22.5
65 years or more:					
Having insurance . . . . .	4,064	3.2	62.7	20.9	23.1
Without insurance . . . . .	19,817	2.1	44.2	13.0	36.0
Black:					
All ages:					
Having insurance . . . . .	9,309	1.7	61.0	15.8	3.2
Without insurance . . . . .	16,957	0.9	38.6	8.0	7.7
2-4 years:					
Having insurance . . . . .	473	0.9	35.9	*4.2	—
Without insurance . . . . .	1,125	0.3	24.7	*2.5	—
5-17 years:					
Having insurance . . . . .	2,338	1.6	70.0	13.8	—
Without insurance . . . . .	4,207	1.0	51.2	8.6	—
18-34 years:					
Having insurance . . . . .	2,900	1.7	61.0	16.4	*0.3
Without insurance . . . . .	5,223	0.9	39.0	8.5	*0.2
35-54 years:					
Having insurance . . . . .	2,753	2.0	62.9	19.9	4.8
Without insurance . . . . .	3,128	1.1	38.8	9.6	6.0
55-64 years:					
Having insurance . . . . .	572	2.3	47.7	15.2	14.5
Without insurance . . . . .	1,322	1.3	33.2	9.1	24.2
65 years or more:					
Having insurance . . . . .	272	0.9	34.2	*6.3	27.6
Without insurance . . . . .	1,951	0.5	21.7	4.8	40.2
Family income					
Under \$10,000:					
All ages:					
Having insurance . . . . .	2,568	2.1	65.2	16.0	7.7
Without insurance . . . . .	21,078	1.2	38.7	9.3	16.8
2-4 years:					
Having insurance . . . . .	84	1.6	*31.0	*7.1	—
Without insurance . . . . .	1,292	0.8	30.3	3.0	—
5-17 years:					
Having insurance . . . . .	418	1.8	69.4	14.4	—
Without insurance . . . . .	4,394	1.2	52.8	10.4	—
18-34 years:					
Having insurance . . . . .	1,377	2.5	76.0	18.2	—
Without insurance . . . . .	5,853	1.3	45.6	10.9	1.2
35-54 years:					
Having insurance . . . . .	239	2.0	45.2	*16.3	*15.1
Without insurance . . . . .	3,092	1.0	34.5	9.8	12.4
55-64 years:					
Having insurance . . . . .	131	1.8	63.4	*20.6	32.8
Without insurance . . . . .	1,706	1.2	26.8	8.7	37.0
65 years or more:					
Having insurance . . . . .	321	0.9	37.7	*8.4	37.4
Without insurance . . . . .	4,740	1.4	26.4	7.9	51.8

See footnote at end of table.

**Table 20. Selected dental variables, by private dental health insurance status and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population <sup>1</sup>	Rate of dental visits per person per year	Dental visit in previous year		Edentulous persons
			1 or more visits	3 or more visits	
Family income—Con.					
	Number in thousands		Percent		
<b>\$10,000–\$19,999:</b>					
All ages:					
Having insurance . . . . .	9,105	2.1	55.0	15.1	7.3
Without insurance . . . . .	27,883	1.3	41.2	9.5	13.0
2–4 years:					
Having insurance . . . . .	418	.9	29.2	*2.4	—
Without insurance . . . . .	1,401	.7	19.8	*2.0	—
5–17 years:					
Having insurance . . . . .	1,936	1.7	63.5	13.6	—
Without insurance . . . . .	4,898	1.3	51.7	8.8	—
18–34 years:					
Having insurance . . . . .	3,013	1.9	56.1	15.4	*0.3
Without insurance . . . . .	7,887	1.1	42.3	9.8	0.5
35–54 years:					
Having insurance . . . . .	1,891	2.0	54.0	17.0	9.4
Without insurance . . . . .	4,777	1.3	39.4	9.7	9.7
55–64 years:					
Having insurance . . . . .	828	3.3	55.0	17.0	19.9
Without insurance . . . . .	2,524	1.3	38.3	12.4	29.6
65 years or more:					
Having insurance . . . . .	1,019	3.1	48.4	17.1	31.1
Without insurance . . . . .	6,395	1.5	39.1	10.2	37.1
<b>\$20,000–\$34,999:</b>					
All ages:					
Having insurance . . . . .	24,933	2.3	66.3	17.8	4.0
Without insurance . . . . .	26,907	1.8	53.1	13.6	7.8
2–4 years:					
Having insurance . . . . .	1,340	1.0	35.5	*2.2	—
Without insurance . . . . .	1,414	.7	30.5	3.1	—
5–17 years:					
Having insurance . . . . .	5,558	3.0	77.8	16.6	—
Without insurance . . . . .	4,942	1.6	62.6	13.9	—
18–34 years:					
Having insurance . . . . .	8,056	2.1	64.9	18.4	*0.4
Without insurance . . . . .	8,312	1.5	52.4	11.9	0.5
35–54 years:					
Having insurance . . . . .	6,849	2.2	66.9	19.0	5.6
Without insurance . . . . .	5,762	1.7	51.9	15.3	7.1
55–64 years:					
Having insurance . . . . .	2,001	2.6	57.5	22.0	18.5
Without insurance . . . . .	2,688	2.2	54.2	16.1	20.1
65 years or more:					
Having insurance . . . . .	1,128	3.1	67.6	21.9	19.1
Without insurance . . . . .	3,789	2.6	52.0	16.4	29.3
<b>\$35,000 and over:</b>					
All ages:					
Having insurance . . . . .	47,441	3.1	77.9	21.8	2.3
Without insurance . . . . .	26,339	2.5	67.9	17.3	3.8
2–4 years:					
Having insurance . . . . .	2,167	1.1	46.0	3.3	—
Without insurance . . . . .	1,158	.9	34.9	*2.0	—
5–17 years:					
Having insurance . . . . .	10,436	3.7	87.9	23.0	—
Without insurance . . . . .	4,728	3.3	80.6	18.5	—
18–34 years:					
Having insurance . . . . .	12,269	2.8	76.3	18.9	*0.3
Without insurance . . . . .	7,394	1.7	61.9	13.3	*0.1
35–54 years:					
Having insurance . . . . .	17,999	3.0	77.7	23.8	3.1
Without insurance . . . . .	8,134	2.8	70.1	19.1	3.6
55–64 years:					
Having insurance . . . . .	3,652	4.1	75.8	27.5	10.3
Without insurance . . . . .	2,562	2.6	70.4	22.6	10.3
65 years or more:					
Having insurance . . . . .	917	3.3	74.9	26.0	12.6
Without insurance . . . . .	2,364	3.0	67.0	22.8	18.7

<sup>1</sup>Total includes persons of other races or unknown income (not shown separately). Persons with unknown insurance coverage are excluded.

**Table 21. Number of persons, by sex and selected demographic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total population	Male	Female
Age			
Number in thousands			
All ages . . . . .	235,858	114,102	121,755
2-4 years . . . . .	11,094	5,700	5,394
5-17 years . . . . .	45,235	23,145	22,089
5-11 years . . . . .	25,230	12,859	12,371
12-17 years . . . . .	20,005	10,287	9,718
18-34 years . . . . .	68,214	33,455	34,759
18-24 years . . . . .	25,401	12,396	13,005
25-34 years . . . . .	42,814	21,059	21,754
35-54 years . . . . .	60,667	29,555	31,111
35-44 years . . . . .	35,982	17,589	18,393
45-54 years . . . . .	24,685	11,967	12,718
55-64 years . . . . .	21,429	10,103	11,326
65 years and over . . . . .	29,219	12,143	17,076
65-74 years . . . . .	17,828	7,935	9,893
75 years and over . . . . .	11,391	4,208	7,183
Race			
White:			
All ages . . . . .	199,124	96,872	102,252
2-4 years . . . . .	8,922	4,599	4,322
5-11 years . . . . .	20,304	10,398	9,907
12-17 years . . . . .	16,136	8,305	7,831
18-34 years . . . . .	56,664	28,066	28,598
35-44 years . . . . .	30,765	15,237	15,528
45-54 years . . . . .	21,236	10,400	10,837
55-64 years . . . . .	18,785	8,909	9,877
65 years and over . . . . .	26,312	10,958	15,353
65-74 years . . . . .	15,984	7,145	8,839
75 years and over . . . . .	10,328	3,814	6,514
Black:			
All ages . . . . .	28,712	13,341	15,370
2-4 years . . . . .	1,702	864	838
5-11 years . . . . .	3,954	2,006	1,948
12-17 years . . . . .	3,123	1,581	1,542
18-34 years . . . . .	8,873	4,057	4,816
35-44 years . . . . .	3,894	1,737	2,157
45-54 years . . . . .	2,588	1,147	1,440
55-64 years . . . . .	2,125	959	1,165
65 years and over . . . . .	2,453	989	1,464
65-74 years . . . . .	1,545	661	884
75 years and over . . . . .	908	329	580
Other:			
All ages . . . . .	8,021	3,889	4,132
2-4 years . . . . .	470	236	234
5-11 years . . . . .	971	455	516
12-17 years . . . . .	747	401	346
18-34 years . . . . .	2,677	1,332	1,345
35-44 years . . . . .	1,324	615	708
45-54 years . . . . .	860	419	441
55-64 years . . . . .	519	235	284
65 years and over . . . . .	454	195	258
65-74 years . . . . .	299	130	169
75 years and over . . . . .	155	66	89
Hispanic origin			
Non-Hispanic:			
All ages . . . . .	215,936	104,457	111,479
2-4 years . . . . .	9,610	4,963	4,647
5-11 years . . . . .	22,194	11,380	10,814
12-17 years . . . . .	17,677	9,120	8,557
18-34 years . . . . .	61,460	30,064	31,396
35-44 years . . . . .	33,307	16,325	16,982
45-54 years . . . . .	23,154	11,297	11,858
55-64 years . . . . .	20,255	9,566	10,690
65 years and over . . . . .	28,278	11,741	16,537
Hispanic, total:			
All ages . . . . .	19,921	9,645	10,276
2-4 years . . . . .	1,484	737	747
5-11 years . . . . .	3,036	1,479	1,557
12-17 years . . . . .	2,328	1,166	1,162
18-34 years . . . . .	6,754	3,391	3,363
35-44 years . . . . .	2,675	1,263	1,411
45-54 years . . . . .	1,530	670	860
55-64 years . . . . .	1,174	538	636
65 years and over . . . . .	941	402	539

**Table 21 Number of persons, by sex and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
Hispanic origin—Con.			
Number in thousands			
Hispanic, Mexican-American:			
All ages . . . . .	11,317	5,632	5,685
2-4 years . . . . .	890	414	476
5-11 years . . . . .	1,922	941	981
12-17 years . . . . .	1,442	693	749
18-34 years . . . . .	3,881	2,029	1,853
35-44 years . . . . .	1,460	725	735
45-54 years . . . . .	706	332	374
55-64 years . . . . .	594	296	297
65 years and over . . . . .	422	202	220
Hispanic, other:			
All ages . . . . .	8,604	4,013	4,591
2-4 years . . . . .	593	323	271
5-11 years . . . . .	1,114	537	577
12-17 years . . . . .	886	473	413
18-34 years . . . . .	2,873	1,362	1,510
35-44 years . . . . .	1,215	539	676
45-54 years . . . . .	825	338	487
55-64 years . . . . .	580	241	339
65 years and over . . . . .	518	200	319
Place of residence			
MSA, total:			
All ages . . . . .	183,721	88,739	94,982
2-4 years . . . . .	8,700	4,457	4,243
5-11 years . . . . .	19,491	9,941	9,550
12-17 years . . . . .	15,258	7,853	7,406
18-34 years . . . . .	54,658	26,753	27,905
35-44 years . . . . .	28,539	13,864	14,675
45-54 years . . . . .	19,347	9,339	10,008
55-64 years . . . . .	16,340	7,673	8,666
65 years and over . . . . .	21,388	8,859	12,529
MSA, central city:			
All ages . . . . .	71,810	33,903	37,907
2-4 years . . . . .	3,431	1,734	1,698
5-11 years . . . . .	7,465	3,716	3,749
12-17 years . . . . .	5,713	2,927	2,786
18-34 years . . . . .	22,769	11,047	11,722
35-44 years . . . . .	10,216	4,855	5,361
45-54 years . . . . .	6,900	3,179	3,721
55-64 years . . . . .	6,469	2,958	3,511
65 years and over . . . . .	8,848	3,486	5,361
MSA, not central city:			
All ages . . . . .	111,911	54,836	57,075
2-4 years . . . . .	5,269	2,723	2,545
5-11 years . . . . .	12,026	6,225	5,801
12-17 years . . . . .	9,546	4,925	4,620
18-34 years . . . . .	31,889	15,706	16,184
35-44 years . . . . .	18,324	9,009	9,315
45-54 years . . . . .	12,447	6,160	6,287
55-64 years . . . . .	9,871	4,715	5,156
65 years and over . . . . .	12,540	5,372	7,168
Not MSA:			
All ages . . . . .	52,137	25,364	26,773
2-4 years . . . . .	2,394	1,243	1,151
5-11 years . . . . .	5,739	2,918	2,821
12-17 years . . . . .	4,747	2,434	2,313
18-34 years . . . . .	13,556	6,702	6,854
35-44 years . . . . .	7,443	3,725	3,718
45-54 years . . . . .	5,338	2,627	2,710
55-64 years . . . . .	5,090	2,430	2,660
65 years and over . . . . .	7,831	3,284	4,547
Geographic region			
Northeast:			
All ages . . . . .	47,549	22,869	24,681
2-4 years . . . . .	1,904	1,010	894
5-11 years . . . . .	4,345	2,261	2,085
12-17 years . . . . .	3,702	1,921	1,781
18-34 years . . . . .	13,594	6,753	6,841
35-44 years . . . . .	7,292	3,523	3,769
45-54 years . . . . .	5,099	2,396	2,704
55-64 years . . . . .	4,696	2,204	2,492
65 years and over . . . . .	6,918	2,802	4,115

**Table 21. Number of persons, by sex and selected demographic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
Geographic region—Con.			
Number in thousands			
Midwest:			
All ages . . . . .	57,761	28,126	29,635
2-4 years . . . . .	2,745	1,397	1,348
5-11 years . . . . .	6,249	3,202	3,047
12-17 years . . . . .	5,011	2,519	2,492
18-34 years . . . . .	16,619	8,222	8,397
35-44 years . . . . .	8,798	4,392	4,406
45-54 years . . . . .	6,174	2,982	3,192
55-64 years . . . . .	5,249	2,489	2,760
65 years and over . . . . .	6,917	2,924	3,993
South:			
All ages . . . . .	80,457	38,678	41,779
2-4 years . . . . .	3,873	1,964	1,908
5-11 years . . . . .	8,863	4,503	4,360
12-17 years . . . . .	6,989	3,652	3,337
18-34 years . . . . .	23,274	11,205	12,070
35-44 years . . . . .	11,930	5,783	6,147
45-54 years . . . . .	8,125	4,004	4,121
55-64 years . . . . .	7,481	3,467	4,014
65 years and over . . . . .	9,923	4,100	5,823
West:			
All ages . . . . .	50,090	24,430	25,660
2-4 years . . . . .	2,572	1,329	1,244
5-11 years . . . . .	5,772	2,893	2,879
12-17 years . . . . .	4,304	2,195	2,108
18-34 years . . . . .	14,727	7,276	7,451
35-44 years . . . . .	7,963	3,891	4,072
45-54 years . . . . .	5,287	2,586	2,701
55-64 years . . . . .	4,003	1,943	2,060
65 years and over . . . . .	5,461	2,317	3,144

NOTE: MSA is metropolitan statistical area.

**Table 22. Number of persons, by sex and selected socioeconomic characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
<b>Educational level</b>			
Number in thousands			
<b>Less than 9 years:</b>			
All ages, 22 years and over . . . . .	17,236	8,311	8,925
22-34 years . . . . .	2,100	1,122	978
35-44 years . . . . .	1,702	869	833
45-54 years . . . . .	1,992	1,045	947
55-64 years . . . . .	3,275	1,661	1,614
65 years and over . . . . .	8,166	3,614	4,552
<b>9-11 years:</b>			
All ages, 22 years and over . . . . .	18,937	8,573	10,364
22-34 years . . . . .	5,388	2,763	2,624
35-44 years . . . . .	2,699	1,277	1,422
45-54 years . . . . .	2,892	1,319	1,573
55-64 years . . . . .	3,279	1,430	1,849
65 years and over . . . . .	4,680	1,784	2,896
<b>12 years:</b>			
All ages, 22 years and over . . . . .	62,236	27,480	34,756
22-34 years . . . . .	21,459	10,445	11,015
35-44 years . . . . .	13,096	5,810	7,286
45-54 years . . . . .	9,999	4,380	5,618
55-64 years . . . . .	8,263	3,289	4,974
65 years and over . . . . .	9,420	3,557	5,864
<b>13 years or more:</b>			
All ages, 22 years and over . . . . .	64,957	33,082	31,875
22-34 years . . . . .	24,358	11,922	12,436
35-44 years . . . . .	18,142	9,468	8,674
45-54 years . . . . .	9,582	5,107	4,476
55-64 years . . . . .	6,367	3,579	2,788
65 years and over . . . . .	6,507	3,006	3,501
<b>Family income</b>			
<b>Less than \$10,000:</b>			
All ages . . . . .	25,126	9,891	15,235
2-4 years . . . . .	1,417	727	690
5-11 years . . . . .	2,948	1,488	1,459
12-17 years . . . . .	2,023	938	1,085
18-34 years . . . . .	7,779	3,174	4,605
35-44 years . . . . .	1,985	751	1,234
45-54 years . . . . .	1,432	512	919
55-64 years . . . . .	1,931	689	1,242
65 years and over . . . . .	5,612	1,612	4,001
65-74 years . . . . .	2,871	891	1,980
75 years and over . . . . .	2,741	720	2,021
<b>\$10,000-\$19,999:</b>			
All ages . . . . .	39,612	18,396	21,216
2-4 years . . . . .	1,940	997	943
5-11 years . . . . .	4,189	2,158	2,031
12-17 years . . . . .	3,084	1,606	1,478
18-34 years . . . . .	11,682	5,593	6,089
35-44 years . . . . .	4,232	1,869	2,364
45-54 years . . . . .	2,895	1,217	1,677
55-64 years . . . . .	3,588	1,423	2,166
65 years and over . . . . .	8,002	3,534	4,468
65-74 years . . . . .	4,955	2,258	2,697
75 years and over . . . . .	3,047	1,276	1,771
<b>\$20,000-\$34,999:</b>			
All ages . . . . .	54,773	27,383	27,391
2-4 years . . . . .	2,879	1,485	1,394
5-11 years . . . . .	6,281	3,193	3,088
12-17 years . . . . .	4,672	2,422	2,250
18-34 years . . . . .	17,415	8,776	8,639
35-44 years . . . . .	8,441	4,296	4,145
45-54 years . . . . .	4,836	2,309	2,527
55-64 years . . . . .	5,007	2,339	2,668
65 years and over . . . . .	5,242	2,562	2,680
65-74 years . . . . .	3,621	1,774	1,847
75 years and over . . . . .	1,621	788	833
<b>\$35,000 or more:</b>			
All ages . . . . .	77,990	40,184	37,807
2-4 years . . . . .	3,466	1,735	1,731
5-11 years . . . . .	8,469	4,319	4,150
12-17 years . . . . .	7,341	3,826	3,515
18-34 years . . . . .	21,220	10,763	10,457
35-44 years . . . . .	16,090	8,126	7,965
45-54 years . . . . .	11,359	6,000	5,359
55-64 years . . . . .	6,562	3,660	2,902
65 years and over . . . . .	3,484	1,754	1,729
65-74 years . . . . .	2,493	1,335	1,158
75 years and over . . . . .	990	419	571

**Table 22. Number of persons, by sex and selected socioeconomic characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
Dental insurance coverage			
Number in thousands			
Having private dental insurance:			
All ages . . . . .	95,436	47,216	48,219
2-4 years . . . . .	4,430	2,271	2,160
5-11 years . . . . .	11,186	5,627	5,559
12-17 years . . . . .	9,345	4,909	4,436
18-34 years . . . . .	27,791	13,221	14,570
35-44 years . . . . .	18,301	8,916	9,384
45-54 years . . . . .	12,045	6,117	5,929
55-64 years . . . . .	7,949	4,066	3,883
65 years and over . . . . .	4,389	2,091	2,298
65-74 years . . . . .	3,153	1,538	1,615
75 years and over . . . . .	1,235	552	683
Without private dental insurance:			
All ages . . . . .	122,368	58,106	64,262
2-4 years . . . . .	6,022	3,101	2,921
5-11 years . . . . .	12,535	6,439	6,096
12-17 years . . . . .	9,359	4,734	4,625
18-34 years . . . . .	34,517	17,057	17,460
35-44 years . . . . .	15,174	7,415	7,760
45-54 years . . . . .	10,796	4,980	5,816
55-64 years . . . . .	11,824	5,261	6,563
65 years and over . . . . .	22,141	9,119	13,021
65-74 years . . . . .	13,218	5,847	7,371
75 years and over . . . . .	8,923	3,273	5,650
Insurance status unknown:			
All ages . . . . .	18,053	8,780	9,273
2-4 years . . . . .	642	328	314
5-11 years . . . . .	1,509	793	716
12-17 years . . . . .	1,301	644	657
18-34 years . . . . .	5,906	3,177	2,729
35-44 years . . . . .	2,507	1,258	1,249
45-54 years . . . . .	1,843	870	973
55-64 years . . . . .	1,657	777	880
65 years and over . . . . .	2,690	933	1,757
65-74 years . . . . .	1,457	550	907
75 years and over . . . . .	1,232	383	850

**Table 23. Number of persons, by sex and selected health characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
<b>Assessed health status</b>			
Number in thousands			
<b>Excellent or very good:</b>			
All ages . . . . .	157,817	79,631	78,186
2-4 years . . . . .	8,998	4,602	4,396
5-11 years . . . . .	20,069	10,160	9,909
12-17 years . . . . .	15,531	8,190	7,341
18-34 years . . . . .	51,035	26,244	24,791
35-44 years . . . . .	25,055	12,758	12,298
45-54 years . . . . .	15,078	7,738	7,340
55-64 years . . . . .	10,568	5,099	5,469
65 years and over . . . . .	11,482	4,840	6,642
65-74 years . . . . .	7,408	3,360	4,048
75 years and over . . . . .	4,074	1,480	2,594
<b>Good:</b>			
All ages . . . . .	53,467	23,806	29,661
2-4 years . . . . .	1,702	893	809
5-11 years . . . . .	4,345	2,278	2,067
12-17 years . . . . .	3,651	1,750	1,902
18-34 years . . . . .	13,659	5,814	7,845
35-44 years . . . . .	7,968	3,580	4,388
45-54 years . . . . .	6,445	2,867	3,578
55-64 years . . . . .	6,419	2,908	3,511
65 years and over . . . . .	9,278	3,717	5,561
65-74 years . . . . .	5,654	2,394	3,260
75 years and over . . . . .	3,624	1,323	2,301
<b>Fair or poor:</b>			
All ages . . . . .	23,229	10,083	13,146
2-4 years . . . . .	302	167	135
5-11 years . . . . .	550	313	237
12-17 years . . . . .	605	229	376
18-34 years . . . . .	3,243	1,274	1,969
35-44 years . . . . .	2,831	1,198	1,633
45-54 years . . . . .	3,071	1,325	1,746
55-64 years . . . . .	4,335	2,051	2,284
65 years and over . . . . .	8,293	3,527	4,766
65-74 years . . . . .	4,663	2,146	2,517
75 years and over . . . . .	3,630	1,381	2,249
<b>Limitation of activity</b>			
<b>Unable to carry on usual activity:</b>			
All ages . . . . .	10,013	5,464	4,548
2-4 years . . . . .	77	52	*25
5-11 years . . . . .	119	78	40
12-17 years . . . . .	118	58	60
18-34 years . . . . .	1,362	746	617
35-44 years . . . . .	1,334	731	602
45-54 years . . . . .	1,475	773	703
55-64 years . . . . .	2,575	1,530	1,045
65 years and over . . . . .	2,952	1,496	1,457
65-74 years . . . . .	1,858	1,092	766
75 years and over . . . . .	1,094	403	691
<b>Limited in amount or kind of major activity:</b>			
All ages . . . . .	13,192	5,881	7,311
2-4 years . . . . .	153	93	60
5-11 years . . . . .	1,062	670	393
12-17 years . . . . .	805	503	302
18-34 years . . . . .	2,063	1,047	1,016
35-44 years . . . . .	1,836	881	954
45-54 years . . . . .	1,563	632	931
55-64 years . . . . .	2,001	799	1,202
65 years and over . . . . .	3,708	1,256	2,453
65-74 years . . . . .	1,969	790	1,179
75 years and over . . . . .	1,739	466	1,274
<b>Limited, but not in major activity:</b>			
All ages . . . . .	10,885	4,700	6,185
2-4 years . . . . .	78	50	*28
5-11 years . . . . .	355	223	131
12-17 years . . . . .	511	276	235
18-34 years . . . . .	1,579	684	895
35-44 years . . . . .	1,244	534	710
45-54 years . . . . .	1,188	483	705
55-64 years . . . . .	1,412	516	896
65 years and over . . . . .	4,519	1,933	2,586
65-74 years . . . . .	2,412	1,048	1,364
75 years and over . . . . .	2,107	886	1,222



**Table 23. Number of persons, by sex and selected health characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

<i>Characteristic</i>	<i>Total population</i>	<i>Male</i>	<i>Female</i>
Limitation of activity—Con.			
Number in thousands			
Not limited in activity:			
All ages . . . . .	201,768	98,057	103,711
2-4 years . . . . .	10,787	5,505	5,281
5-11 years . . . . .	23,694	11,888	11,807
12-17 years . . . . .	18,571	9,449	9,122
18-34 years . . . . .	63,209	30,978	32,231
35-44 years . . . . .	31,569	15,442	16,127
45-54 years . . . . .	20,458	10,078	10,379
55-64 years . . . . .	15,441	7,258	8,183
65 years and over . . . . .	18,039	7,459	10,581
65-74 years . . . . .	11,589	5,005	6,584
75 years and over . . . . .	6,450	2,453	3,997
Dentition status			
Dentate:			
35 years and over . . . . .	90,311	42,702	47,609
35-44 years . . . . .	33,895	16,601	17,293
45-54 years . . . . .	21,368	10,426	10,942
55-64 years . . . . .	16,672	7,912	8,760
65 years and over . . . . .	18,377	7,764	10,613
65-74 years . . . . .	12,276	5,495	6,781
75 years and over . . . . .	6,101	2,269	3,832
Edentulous:			
35 years and over . . . . .	17,439	7,491	9,949
35-44 years . . . . .	932	412	520
45-54 years . . . . .	2,480	1,158	1,321
55-64 years . . . . .	4,072	1,860	2,212
65 years and over . . . . .	9,955	4,060	5,895
65-74 years . . . . .	5,061	2,244	2,817
75 years and over . . . . .	4,893	1,816	3,077
Unknown:			
35 years and over . . . . .	3,565	1,609	1,956
35-44 years . . . . .	1,155	576	579
45-54 years . . . . .	837	382	455
55-64 years . . . . .	685	332	353
65 years and over . . . . .	887	319	568
65-74 years . . . . .	491	196	295
75 years and over . . . . .	397	124	273

**Table 24. Number of persons, by education level and selected characteristics: United States, 1989**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level		
	Less than 12 years	12 years	13 years or more
Family income			
Number in thousands			
All incomes:			
All ages, 22 years and over . . . . .	36,173	62,236	64,957
22-34 years . . . . .	7,487	21,459	24,358
35-44 years . . . . .	4,401	13,096	18,142
45-54 years . . . . .	4,884	9,999	9,582
55-64 years . . . . .	6,554	8,263	6,367
65 years and over . . . . .	12,846	9,420	6,507
Loss than \$15,000:			
All ages, 22 years and over . . . . .	13,564	9,766	5,141
22-34 years . . . . .	2,717	3,628	2,511
35-44 years . . . . .	1,394	1,528	805
45-54 years . . . . .	1,299	943	405
55-64 years . . . . .	2,128	1,015	372
65 years and over . . . . .	6,027	2,652	1,048
\$15,000-\$34,999:			
All ages, 22 years and over . . . . .	11,368	23,700	18,339
22-34 years . . . . .	2,709	9,158	8,201
35-44 years . . . . .	1,550	4,805	4,524
45-54 years . . . . .	1,601	3,051	1,827
55-64 years . . . . .	2,247	3,183	1,528
65 years and over . . . . .	3,261	3,503	2,258
\$15,000-\$24,999:			
All ages, 22 years and over . . . . .	7,496	12,470	8,289
22-34 years . . . . .	1,697	4,686	3,744
35-44 years . . . . .	933	2,256	1,824
45-54 years . . . . .	947	1,450	692
55-64 years . . . . .	1,413	1,773	643
65 years and over . . . . .	2,507	2,306	1,387
\$25,000-\$34,999:			
All ages, 22 years and over . . . . .	3,872	11,231	10,050
22-34 years . . . . .	1,012	4,472	4,458
35-44 years . . . . .	618	2,550	2,700
45-54 years . . . . .	654	1,601	1,136
55-64 years . . . . .	833	1,410	884
65 years and over . . . . .	754	1,197	872
\$35,000 or more:			
All ages, 22 years and over . . . . .	3,873	17,941	32,506
22-34 years . . . . .	795	5,473	10,634
35-44 years . . . . .	683	4,708	10,678
45-54 years . . . . .	1,012	4,236	6,096
55-64 years . . . . .	797	2,391	3,363
65 years and over . . . . .	585	1,132	1,736
Race			
White, all incomes:			
All ages, 22 years and over . . . . .	29,510	54,271	56,833
22-34 years . . . . .	6,031	17,887	20,606
35-44 years . . . . .	3,458	11,137	15,894
45-54 years . . . . .	3,856	8,821	8,385
55-64 years . . . . .	5,231	7,559	5,800
65 years and over . . . . .	10,935	8,867	6,147
White, with income less than \$15,000:			
All ages, 22 years and over . . . . .	10,547	7,582	4,076
22-34 years . . . . .	2,023	2,501	1,862
35-44 years . . . . .	998	1,094	611
45-54 years . . . . .	925	689	325
55-64 years . . . . .	1,608	872	311
65 years and over . . . . .	4,993	2,426	967
White, with income \$15,000-\$34,999:			
All ages, 22 years and over . . . . .	9,636	20,908	15,781
22-34 years . . . . .	2,295	7,894	6,897
35-44 years . . . . .	1,272	4,116	3,849
45-54 years . . . . .	1,293	2,668	1,540
55-64 years . . . . .	1,856	2,890	1,366
65 years and over . . . . .	2,920	3,340	2,129
White, with income \$15,000-\$24,999:			
All ages, 22 years and over . . . . .	6,296	10,795	6,985
22-34 years . . . . .	1,451	3,926	3,028
35-44 years . . . . .	733	1,850	1,512
45-54 years . . . . .	744	1,242	570
55-64 years . . . . .	1,141	1,575	567
65 years and over . . . . .	2,226	2,202	1,307

**Table 24. Number of persons, by education level and selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level		
	Less than 12 years	12 years	13 years or more
Race—Con.			
Number in thousands			
White, with income \$25,000–\$34,999:			
All ages, 22 years and over . . . . .	3,339	10,113	8,796
22–34 years . . . . .	844	3,968	3,869
35–44 years . . . . .	539	2,266	2,337
45–54 years . . . . .	549	1,426	969
55–64 years . . . . .	714	1,315	798
65 years and over . . . . .	694	1,138	822
White, with income \$35,000 or more:			
All ages, 22 years and over . . . . .	3,401	16,530	29,335
22–34 years . . . . .	705	4,985	9,461
35–44 years . . . . .	599	4,279	9,648
45–54 years . . . . .	893	3,922	5,454
55–64 years . . . . .	698	2,277	3,123
65 years and over . . . . .	506	1,068	1,647
Black, all incomes:			
All ages, 22 years and over . . . . .	5,617	6,607	5,348
22–34 years . . . . .	1,185	3,028	2,513
35–44 years . . . . .	754	1,614	1,470
45–54 years . . . . .	883	939	725
55–64 years . . . . .	1,144	560	381
65 years and over . . . . .	1,651	466	259
Black, with income less than \$15,000:			
All ages, 22 years and over . . . . .	2,622	1,922	757
22–34 years . . . . .	578	1,002	422
35–44 years . . . . .	319	369	154
45–54 years . . . . .	342	215	64
55–64 years . . . . .	451	125	46
65 years and over . . . . .	932	211	71
Black, with income \$15,000–\$34,999:			
All ages, 22 years and over . . . . .	1,401	2,386	1,814
22–34 years . . . . .	325	1,080	946
35–44 years . . . . .	216	596	483
45–54 years . . . . .	266	324	181
55–64 years . . . . .	339	250	121
65 years and over . . . . .	254	135	82
Black, with income \$15,000–\$24,999:			
All ages, 22 years and over . . . . .	982	1,426	892
22–34 years . . . . .	197	649	492
35–44 years . . . . .	157	345	203
45–54 years . . . . .	176	172	81
55–64 years . . . . .	236	170	55
65 years and over . . . . .	216	89	61
Black, with income \$25,000–\$34,999:			
All ages, 22 years and over . . . . .	419	960	922
22–34 years . . . . .	129	430	454
35–44 years . . . . .	59	251	281
45–54 years . . . . .	89	153	101
55–64 years . . . . .	103	80	65
65 years and over . . . . .	*38	46	*22
Black, with income \$35,000 or more:			
All ages, 22 years and over . . . . .	332	998	1,815
22–34 years . . . . .	68	341	676
35–44 years . . . . .	56	329	595
45–54 years . . . . .	85	215	337
55–64 years . . . . .	75	70	143
65 years and over . . . . .	48	43	64
Other races, all incomes:			
All ages, 22 years and over . . . . .	1,046	1,358	2,776
22–34 years . . . . .	271	545	1,240
35–44 years . . . . .	190	345	777
45–54 years . . . . .	145	238	472
55–64 years . . . . .	179	144	186
65 years and over . . . . .	261	87	100
Other races, with income less than \$15,000:			
All ages, 22 years and over . . . . .	396	262	307
22–34 years . . . . .	116	125	227
35–44 years . . . . .	78	65	40
45–54 years . . . . .	*32	*38	*15
55–64 years . . . . .	68	*19	*15
65 years and over . . . . .	102	*16	*10

**Table 24. Number of persons, by education level and selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level		
	Less than 12 years	12 years	13 years or more
Race—Con.			
Number in thousands			
Other races, with income \$15,000–\$34,999:			
All ages, 22 years and over . . . . .	331	407	744
22–34 years . . . . .	89	184	358
35–44 years . . . . .	62	92	191
45–54 years . . . . .	42	59	106
55–64 years . . . . .	52	43	41
65 years and over . . . . .	87	*28	47
Other races, with income \$15,000–\$24,999:			
All ages, 22 years and over . . . . .	218	249	412
22–34 years . . . . .	49	110	223
35–44 years . . . . .	43	60	109
45–54 years . . . . .	*26	*37	40
55–64 years . . . . .	*36	*27	*20
65 years and over . . . . .	65	*15	*19
Other races, with income \$25,000–\$34,999:			
All ages, 22 years and over . . . . .	114	158	332
22–34 years . . . . .	40	74	135
35–44 years . . . . .	*20	*32	82
45–54 years . . . . .	*16	*22	66
55–64 years . . . . .	*16	*16	*21
65 years and over . . . . .	*22	*13	*28
Other races, with income \$35,000 or more:			
All ages, 22 years and over . . . . .	139	413	1,356
22–34 years . . . . .	*23	147	497
35–44 years . . . . .	*28	100	435
45–54 years . . . . .	*34	100	304
55–64 years . . . . .	*24	45	96
65 years and over . . . . .	*31	*21	*24
Male, all incomes:			
All ages, 22 years and over . . . . .	16,884	27,480	33,082
22–34 years . . . . .	3,885	10,445	11,922
35–44 years . . . . .	2,147	5,810	9,468
45–54 years . . . . .	2,364	4,380	5,107
55–64 years . . . . .	3,091	3,289	3,579
65 years and over . . . . .	5,397	3,557	3,006
Male, with income less than \$15,000:			
All ages, 22 years and over . . . . .	5,371	3,507	2,178
22–34 years . . . . .	1,187	1,518	1,182
35–44 years . . . . .	606	581	336
45–54 years . . . . .	519	327	152
55–64 years . . . . .	804	314	165
65 years and over . . . . .	2,256	767	342
Male, with income \$15,000–\$34,999:			
All ages, 22 years and over . . . . .	6,109	10,940	8,928
22–34 years . . . . .	1,558	4,556	4,052
35–44 years . . . . .	809	2,277	2,277
45–54 years . . . . .	865	1,323	834
55–64 years . . . . .	1,167	1,240	724
65 years and over . . . . .	1,710	1,543	1,042
Male, with income \$15,000–\$24,999:			
All ages, 22 years and over . . . . .	3,954	5,489	3,865
22–34 years . . . . .	974	2,300	1,817
35–44 years . . . . .	477	997	868
45–54 years . . . . .	497	549	310
55–64 years . . . . .	692	650	281
65 years and over . . . . .	1,314	994	589
Male, with income \$25,000–\$34,999:			
All ages, 22 years and over . . . . .	2,155	5,450	5,063
22–34 years . . . . .	585	2,256	2,235
35–44 years . . . . .	332	1,280	1,409
45–54 years . . . . .	368	774	524
55–64 years . . . . .	475	591	443
65 years and over . . . . .	396	549	453
Male, with income \$35,000 or more:			
All ages, 22 years and over . . . . .	2,094	8,333	17,528
22–34 years . . . . .	485	2,749	5,211
35–44 years . . . . .	350	2,005	5,765
45–54 years . . . . .	554	1,966	3,469
55–64 years . . . . .	451	1,125	2,075
65 years and over . . . . .	254	489	1,008

**Table 24. Number of persons, by education level and selected characteristics: United States, 1989—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Education level		
	Less than 12 years	12 years	13 years or more
Race—Con.			
Number in thousands			
Female, all incomes:			
All ages, 22 years and over . . . . .	19,289	34,756	31,875
22–34 years . . . . .	3,602	11,015	12,436
35–44 years . . . . .	2,255	7,286	8,674
45–54 years . . . . .	2,520	5,618	4,476
55–64 years . . . . .	3,463	4,974	2,788
65 years and over . . . . .	7,449	5,864	3,501
Female, with income less than \$15,000:			
All ages, 22 years and over . . . . .	8,193	6,259	2,963
22–34 years . . . . .	1,531	2,110	1,329
35–44 years . . . . .	788	946	469
45–54 years . . . . .	780	616	253
55–64 years . . . . .	1,324	702	206
65 years and over . . . . .	3,770	1,885	706
Female, with income \$15,000–\$34,999:			
All ages, 22 years and over . . . . .	5,259	12,761	9,411
22–34 years . . . . .	1,151	4,602	4,149
35–44 years . . . . .	741	2,528	2,248
45–54 years . . . . .	736	1,728	993
55–64 years . . . . .	1,079	1,943	804
65 years and over . . . . .	1,551	1,960	1,216
Female, with income \$15,000–\$24,999:			
All ages, 22 years and over . . . . .	3,542	6,980	4,424
22–34 years . . . . .	723	2,386	1,926
35–44 years . . . . .	455	1,259	956
45–54 years . . . . .	450	901	381
55–64 years . . . . .	722	1,123	363
65 years and over . . . . .	1,193	1,312	798
Female, with income \$25,000–\$34,999:			
All ages, 22 years and over . . . . .	1,716	5,781	4,987
22–34 years . . . . .	428	2,216	2,223
35–44 years . . . . .	286	1,269	1,291
45–54 years . . . . .	286	827	612
55–64 years . . . . .	358	820	442
65 years and over . . . . .	358	648	419
Female, with income \$35,000 or more:			
All ages, 22 years and over . . . . .	1,779	9,608	14,977
22–34 years . . . . .	310	2,725	5,423
35–44 years . . . . .	334	2,703	4,913
45–54 years . . . . .	458	2,271	2,626
55–64 years . . . . .	346	1,266	1,288
65 years and over . . . . .	331	644	727

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# Appendix I

## Technical notes on methods

### Background

This report is one of a series of statistical reports published by the staff of the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households included in the National Health Interview Survey (NHIS). Data are obtained on the personal, sociodemographic, and health characteristics of the family members and unrelated individuals living in these households.

Field operations for the survey are conducted by the U.S. Bureau of the Census under specifications established by NCHS. The U.S. Bureau of the Census participates in the survey planning, selects the sample, and conducts the interviews. The data are then transmitted to NCHS for preparation, processing, and analysis.

Summary reports and reports on special topics for each year's data are prepared by the staff of the Division of Health Interview Statistics for publication in the NCHS, *Vital and Health Statistics*, Series 10. Data are also tabulated for other reports published by NCHS staff and for use by other organizations and by researchers within and outside the Government. Since 1969, public use tapes have been prepared for each year of data collection.

It should be noted that the health characteristics described by NHIS estimates pertain only to the resident, civilian noninstitutionalized population of the United States living at the time of the interview. The sample does not include persons residing in nursing homes, members of the armed forces, institutionalized persons, or U.S. nationals living abroad.

### Statistical design of NHIS

#### General design

Data from NHIS have been collected continuously since 1957. The sample design of the survey has undergone changes following each decennial census. This periodic redesign of the NHIS sample allows the incorporation of the latest population information and statistical methodology into the survey design. The data presented in this report are from an NHIS sample design first used in 1985. It is anticipated that this design will be used until 1995.

The sample design plan of the NHIS follows a multi-stage probability design that permits continuous sampling

of the civilian noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target population and the weekly samples are additive over time. This design permits estimates for high-frequency measures or for large population groups to be produced from a short period of data collection. Estimates for low-frequency measures or for smaller population subgroups can be obtained from a longer period of data collection. The annual sample is designed so that tabulations can be provided for each of the four major geographic regions. Because interviewing is done throughout the year, there is no seasonal bias for annual estimates.

The continuous data collection also has administrative and operational advantages because field work can be handled on a continuing basis with an experienced, stable staff.

#### Sample selection

The target population for NHIS is the civilian noninstitutionalized population residing in the United States. For the first stage of the sample design, the United States is considered to be a universe composed of approximately 1,900 geographically defined primary sampling units (PSU's). A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia. The 52 largest PSU's are selected into the sample with certainty and are referred to as self-representing PSU's. The other PSU's in the universe are referred to as nonself-representing PSU's. These PSU's are clustered into 73 strata, and two sample PSU's are chosen from each stratum, with probability proportional to population size. This gives a total of 198 PSU's selected in the first stage.

Within a PSU, two types of second-stage units, referred to as segments, are used. The first type, area segments, are defined geographically, and each contains an expected eight households. The second type, permit area segments, cover geographical areas containing housing units built after the 1980 census. The permit area segments are defined using updated lists of building permits issued in the PSU since 1980; each contains an expected four households.

Within each segment, all occupied households are targeted for interview. On occasion, a sample segment may contain a large number of households. In this situation, the households are subsampled to provide a manageable interviewer workload.

The sample was designed so that a typical NHIS sample for the data collection years 1985–95 will consist of approximately 7,500 segments containing about 59,000 assigned households. Of these households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000 occupied households will yield a probability sample of about 127,000 persons.

## New features of the NHIS sample redesign

Starting in 1985, the NHIS design incorporated several new design features (12). The major changes include the following:

- *Use of an all-area frame.* The NHIS sample is now designed so that it can serve as a sample frame for other NCHS population-based surveys. In previous NHIS designs, about two-thirds of the sample was obtained from lists of addresses compiled at the time of the decennial census; that is, a list frame. Due to U.S. Bureau of the Census confidentiality restrictions, these sample addresses could be used for only those surveys being conducted by the U.S. Bureau of the Census. The methodology used to obtain addresses in the 1985 NHIS area frame does not use the census address lists. The sample addresses thus obtained can be used as a sampling frame for other NCHS surveys.
- *The NHIS as four panels.* Four national subdesigns, or panels, constitute the full NHIS. Each panel contains a representative sample of the U.S. civilian noninstitutionalized population. Each of the four panels has the same sampling properties, and any combination of panels defines a national design. Panels were constructed to facilitate the linkage of NHIS to other surveys and also to efficiently make large reductions in the size of the sample by eliminating panels from the survey.

Budgetary considerations required the NHIS sample to be reduced by 50 percent for the 1986 data collection year. This was accomplished by dropping two panels from the NHIS design. For 1986 the sample consisted of 4,076 segments, containing 29,751 assigned households. Of the 24,698 households eligible for interview, 23,838 households were actually interviewed, resulting in a sample of 62,052 persons.

- *Oversampling of black persons.* One of the goals in designing the current NHIS was to improve the precision of estimates for black persons. This was accomplished by the use of differential sampling rates in PSU's with between about 5 and 50 percent black population. Sampling rates for selection of segments were increased in areas known to have the highest concentrations of black persons. Segment sampling

rates were decreased in other areas within the PSU to ensure that the total sample in each PSU was the same size as it would have been without oversampling black persons.

- *Reduction in the number of sampled PSU's.* Interviewer travel to sample PSU's constitutes a large component of the total field costs for the NHIS. The previous NHIS design included 376 PSU's. Research showed that reducing the number of sample PSU's, while increasing the sample size within PSU's, would reduce travel costs and also maintain the reliability of health estimates (Moore, 1985). The design now contains 198 PSU's.
- *Selection of two PSU's per nonself-representing stratum.* In the previous design, one PSU was selected from each nonself-representing stratum. This feature necessitated the use of less efficient variance estimation procedures; the selection of two PSU's allows more efficient variance estimation methodology (Moore, 1985).

## Collecting and processing the data

The NHIS questionnaire contains two major parts. The first consists of topics that remain relatively the same from year to year. Among these topics are the incidence of acute conditions, the prevalence of chronic conditions, the number of persons limited in activity due to chronic conditions, restriction in activity due to impairment or health problems, and utilization of health care services involving physician care and short-stay hospitalization. The second part consists of special topics added as supplements to each year's questionnaire.

Careful procedures are followed to ensure the quality of data collected in the interview. Most households in the sample are contacted by mail before the interviewers arrive; potential respondents are informed of the importance of the survey and assured that all information obtained in the interview will be held in strict confidence. Interviewers make repeated trips to a household when a respondent is not immediately found. The success of these procedures is indicated by the response rate for the survey, which has been between 95 and 98 percent over the years.

When contact is made, the interviewer attempts to have all family members of the household 19 years of age and over present during the interview. When this is not possible, proxy responses for absent adult family members are accepted. In most situations, proxy respondents are used for persons under 19 years of age. Persons 17 and 18 years of age may respond for themselves, however.

Interviewers undergo extensive training and retraining. The quality of their work is checked by means of periodic observation and by reinterview and is also evaluated in statistical studies of the data they obtain in their interviews. A field edit is performed on all completed interviews so that if there are any problems with the information on the questionnaire, respondents may be recontacted to solve the problem.



Completed questionnaires are sent from the U.S. Bureau of the Census field offices to NCHS for coding and editing. To ensure the accuracy of coding, 5 percent of all questionnaires are recoded and keyed by other coders. A 100-percent verification procedure is used when certain error tolerances are exceeded. Staff of the Division of Health Interview Statistics then edit the files to remove impossible and inconsistent codes.

The interview, field work, and data processing procedures summarized above are described in detail in *Vital and Health Statistics*, Series 1, No. 18 (13).

## Estimation procedures

Because the design of NHIS is a complex, multistage probability sample, it is necessary to reflect its complex procedures in the derivation of estimates. The estimates presented in this report are based upon 1989 sample person counts weighted to produce national estimates. The weight for each sample person is the product of four component weights:

- *Probability of selection.* The basic weight for each person is obtained by multiplying the reciprocals of the probabilities of selection at each step in the design: PSU, segment, and household.
- *Household nonresponse adjustment within segment.* In NHIS, interviews are completed for about 95 percent of all eligible households. Because of household nonresponse, a weighting adjustment is required. The nonresponse adjustment weight is a ratio, with the number of households in a sample segment as the numerator and the number of households actually interviewed in that segment as the denominator. This adjustment reduces bias in an estimate to the extent that persons in the noninterviewed households have the same characteristics as the persons in the interviewed households in the same segment.
- *First-stage ratio adjustment.* The weight for person in the nonself-representing PSU's is ratio-adjusted to the 1980 population within four race-residence classes of the nonself-representing strata within each geographic region.
- *Poststratification by age-sex-race.* Within each of 60 age-sex-race cells (table I), a weight is constructed each quarter to ratio-adjust the first-stage population estimate based on the NHIS to an independent estimate of the population of each cell. These independent estimates are prepared by the U.S. Bureau of the Census and are updated quarterly.

The main effect of the ratio estimating process is to make the sample more closely representative of the target population in age, sex, race, and residence. The poststratification adjustment helps to reduce the bias resulting from sampling frame undercoverage; further, this adjustment frequently reduces sampling variance.

Table I. The 60 poststratification age-sex-race cells in the National Health Interview Survey

Age	Black		All other	
	Male	Female	Male	Female
Under 1 year . . . . .	X	X	X	X
1-4 years . . . . .	X	X	X	X
5-9 years . . . . .	X	X	X	X
10-14 years . . . . .	X	X	X	X
15-17 years . . . . .	X	X	X	X
18-19 years . . . . .	X	X	X	X
20-24 years . . . . .	X	X	X	X
25-29 years . . . . .	X	X	X	X
30-34 years . . . . .	X	X	X	X
35-44 years . . . . .	X	X	X	X
45-49 years . . . . .	X	X	X	X
50-54 years . . . . .	X	X	X	X
55-64 years . . . . .	X	X	X	X
65-74 years . . . . .	X	X	X	X
75 years and over . . . . .	X	X	X	X

## Types of estimates

As noted, NHIS data were collected on a weekly basis, with each week's sample representing the resident, civilian noninstitutionalized population of the United States living during that week. The weekly samples are consolidated to produce quarterly files (each consisting of data for 13 weeks). Weights adjusting the data to represent the U.S. population are assigned to each of the four quarterly files. These quarterly files are later consolidated to produce the annual file, which is the basis of most tabulations of NHIS data.

NHIS uses various reference periods to reduce the amount of bias associated with poor respondent memory. A 2-week reference period is used in collecting data on the incidence of acute conditions, restriction in activity due to a health problem, and physician contacts. Each of these involves health-related events that may be forgotten soon after they occur, such as telephoning a physician about a minor illness, missing a day from work because of a routine health problem, or having a cold. Depending on the type of statistic, either a 12- or a 6-month reference period is used for hospitalization data, because hospitalization ordinarily involves a major event in a person's life and is not quickly forgotten. Chronic condition prevalence estimates are based on a 12-month reference period.

Because most NHIS estimates based on a 2-week reference period are designed to represent the number of health events for a 12-month period, these data must be adjusted to an annual basis. Data based on a 2-week reference period are multiplied by 6.5 to produce the 13-week estimate for the quarter. These reference period adjustments are made at the time that the quarterly files are produced. Therefore, the data can be used to produce estimates for each quarter and are used that way to study seasonal variation. The data from the four quarterly files (representing the number of events in each quarter) are summed to produce the annual estimate. Although these data are collected for only 2 weeks for each person included in the survey, any unusual event during a particular 2-week period does not bias the estimate,

because the quarterly estimate is a sum of the estimate produced for each week's sample during the entire quarter and the annual estimate is the sum of those for the four quarters.

For prevalence statistics, such as the number of persons limited in activity due to chronic conditions, the annual estimate results from summing the weighted files and dividing by 4. This division is necessary because, as noted above, each quarterly file has been weighted to produce an estimate of the number of persons in the U.S. population having a given characteristic. Summing the four quarters and dividing by 4 in effect averages these quarterly results for the year. Thus, the type of prevalence estimate ordinarily derived from NHIS data is an annual average prevalence estimate.

For data related to short-stay hospital discharges that are based on a 6-month reference period, cases identified during any quarter of data collection are multiplied by 2 to produce a quarterly estimate of the annual number of characteristics associated with short-stay hospital discharges. The NHIS average annual estimate of hospital discharges is derived by summing the four quarterly estimates and dividing by 4, just as the prevalence estimates are.

## Reliability of the estimates

Because NHIS estimates are based on a sample, they may differ somewhat from the figures that would have been obtained had a complete census been taken using the same survey and processing procedures. Two types of errors are possible in an estimate based on a sample survey: sampling and nonsampling errors. To the extent possible, these types of errors are kept to a minimum by methods built into the survey procedures described earlier(14). Although it is very difficult to measure the extent of bias in NHIS, a number of studies of this problem have been conducted. The results have been published in several reports (15–18).

### Nonsampling errors

*Interviewing process*—Such information as the number of days of restricted activity caused by a condition can be obtained more accurately from household members than from any other source, because only the persons concerned are in a position to report this information. However, there are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information, for example, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. Further, a respondent may answer a question in other than the intended manner because he or she has not properly understood the question, has forgotten the event, does not know, or does not wish to divulge the answer. Regardless of the type of measure, all NHIS data are estimates of known reported morbidity, disability, and so forth.

*Reference period bias*—NHIS estimates do not represent a complete measure of any given topic during the specified calendar period, because data are not collected in the interview for persons who died or were institutionalized during the reference period. For many types of statistics collected in the survey, the reference period is the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small; however, the contribution by decedents during a long reference period (such as 1 year) might be significant, especially for older persons.

Underreporting associated with a long reference period is most germane to data on hospitalization. Analysis has shown that there is an increase in underreporting of hospitalizations with an increase in the time interval between discharge and interview. Exclusive of the hospital experience of decedents, the net underreporting using a 12-month recall period is in the neighborhood of 10 percent (19). The underreporting of discharges within 6 months before the week of interview, however, is estimated to be only about 5 percent (19). For this reason, hospital discharge data are based on hospital discharges reported to have occurred within those 6 months.

Because hospitalization is common in the period immediately preceding death or institutionalization, and because older persons are much more likely to die than are younger ones, these data should not be used to estimate the volume of hospitalization of the elderly—although they can be used to measure characteristics of elderly people.

It should further be noted that, although the reported frequencies and rates related to hospital episodes are presented by the year in which the data were collected, the estimates are, in most cases, based on hospitalizations that occurred during the year of data collection and the prior year. Overall, approximately one-half of the reported hospitalizations for the 12-month reference period occurred in the year prior to the year of data collection.

*Population estimates*—Some of the published tables include population figures for specified categories. Except for overall totals for the 60 age, sex, and race groups, which are adjusted to independent estimates, these figures are based on the sample of households in NHIS. They are given primarily to provide denominators for rate computation, and for this purpose they are more appropriate for use with the accompanying measures of health characteristics than are other population data that may be available. With the exception of the overall totals by age, sex, and race mentioned above, the population figures may differ from figures (which are derived from different sources) published in reports of the U.S. Bureau of the Census. Official population estimates are presented in the U.S. Bureau of the Census reports, Series P-20, P-25, and P-60.

*Rounding of numbers*—In published tables, the figures are rounded to the nearest thousand, although they are not necessarily accurate to that detail. Derived statistics, such as rates and percent distributions, were computed after the estimates on which they are based were rounded to the nearest thousand.

*Combining data years*—To reduce sampling error, some data for a number of years may have been combined. However, in so doing, the questionnaire for each of the years should be checked, because even a small change in questionnaire design may lead to large changes in the derived estimates. This caution also applies to using NHIS data on health measures when changes in other events, such as legislative changes, have occurred over time.

### Sampling errors

The standard error is primarily a measure of sampling error, that is, the variations that occur by chance because only a sample of the population is surveyed. The chances are about 68 out of 100 that an estimate from the sample would differ from data on a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

Individual standard error were not computed for each estimate in this report. Instead, standard errors were computed for a broad spectrum of estimates. Regression techniques were then applied to produce equations from which a standard error for any estimate can be approximated. The regression equations, represented by parameters *a* and *b*, are presented in table II. Rules explaining their use are presented below.

This procedure will, however, give an approximate standard error of an estimate, rather than the precise standard error. Particular care should be exercised when the denominator is small.

### General rules for determining standard errors

To produce an approximate standard error for NHIS estimates, first determine the type of characteristics to be estimated—that is, which parameter set in table II to use. Then determine the type of estimate for which the standard error is needed. The type of estimate corresponds to one of five general rules for determining standard errors:

Rule 1. *Estimated number of people or events*—For the estimated numbers of people or events published in this report there are two cases to consider. For

**Table II. Estimated standard error parameters for the 1989 National Health Interview Survey**

Parameter set	Characteristic	Estimated parameters	
		<i>a</i>	<i>b</i>
I	Population estimates for demographic, socioeconomic, and health characteristics . . . . .	0.0000307	3,640
II	Age-sex-race population, based on combined poststratification cells from table I . . . . .	0.0	0.0
III	Number of dental visits, based on a 2-week reference period . . . . .	0.00033	96,000

NOTE: The 1989 NHIS was based on a full sample. Therefore 45,711 households were interviewed, resulting in a sample of 116,929 persons.

the first case, if the estimated number is any combination of the poststratification age-sex-race cells in table I, then its value has been adjusted to official U.S. Bureau of the Census figures and its standard error is assumed to be 0.0. This corresponds to parameter set II in table II. As an example, this would be the case for the number of persons in the U.S. target population of the number of black persons aged 18–44 years. Although the race class “white” is not specifically adjusted to Census Bureau figures, it dominates the poststratification “all other” race class; consequently, age-sex-“all other” race combinations in table I can be treated as age-sex-white combinations for the purpose of approximating standard errors.

For the second case, the standard errors for all other estimates of numbers of people or events, such as the number of people limited in activity or the number of dental visits, are approximated using the parameters provided in table II and formula (1) below.

If the aggregate *x* for a characteristic has associated parameters *a* and *b*, then the approximate standard error for *x*, SE(*x*), can be computed by the formula.

$$SE(x) = \sqrt{ax^2 + bx} \quad (1)$$

Rule 2. *For rates, proportions, and percents for which the denominator is generated by the poststratification age-sex-race classes (table I)*—In this case, the denominator has no sampling error. For example, rule 2 would apply to the estimated number of dental visits per person for black persons age 65 years and over, because the denominator is a combination of the poststratification cells. Approximate standard errors for such estimates can be computed using parameters *a* and *b* associated with the numerator characteristics, along with formula (2) below.

If the estimate of rate, proportion, or percent *p* is the ratio of two estimated numbers,  $p = x/Y$  (where *p* may be inflated by 100 for percents or by 1,000 for rates per 1,000 persons), with *Y* having no sampling error, then the approximate standard error for *p* is given by the formula

$$SE(p) = p \sqrt{a + \frac{b}{x}} \quad (2)$$

In this report, the value of the denominator *Y* is always provided, but in a few cases the numerator value *x* is not published. For these cases the value of *x* may be computed by the formula

$$x = pY \quad \text{if } p \text{ is a proportion or rate per unit}$$

$$x = \frac{pY}{100} \quad \text{if } p \text{ is a percent or rate per 100 units}$$

$$x = \frac{pY}{1,000} \quad \text{if } p \text{ is a rate per 1,000 units.}$$

Rule 3. *Proportions and percents when the denominator is not generated by the poststratification age-sex-race classes*—If  $p$  represents an estimated percent,  $b$  is the parameter from table II associated with the numerator characteristics, and  $y$  is the number of persons in the denominator upon which  $p$  is based, then the standard error of  $p$  may be approximated by

$$SE(p) = \sqrt{\frac{bp(100-p)}{y}} \quad (3)$$

(If  $p$  is a proportion, the above formula can be used with 100 replaced by 1.0.)

Rule 4. *Rates when the denominator is not generated by the poststratification age-sex-race classes*—If the estimated rate  $p$  is expressed as the ratio of two estimates,  $p = x/y$  (inflated by 100 or 1,000, when appropriate), then the estimated standard error for  $p$  is given by the formula

$$SE(p) = p \sqrt{\frac{SE(x)^2}{x^2} + \frac{SE(y)^2}{y^2} - 2r \frac{SE(x)}{x} \frac{SE(y)}{y}} \quad (4)$$

where  $SE(x)$  and  $SE(y)$  are computed using rule 1 and  $x$  and  $y$  are obtained from the table. No estimates of  $r$ , the correlation between the numerator and denominator, are presented in this report; therefore, only the first two terms are available. Assume that  $r = 0.0$  will yield an overestimate of the standard error if  $r$  is actually positive and an underestimate if  $r$  is negative.

Rule 5. *Difference between two statistics (mean, rate, total, and proportion)*—If  $x_1$  and  $x_2$  are two estimates, the standard error of the difference ( $x_1 - x_2$ ) can be computed as follows:

$$SE(x_1 - x_2) = \sqrt{SE(x_1)^2 + SE(x_2)^2 - 2r SE(x_1)SE(x_2)}$$

where  $SE(x_1)$  and  $SE(x_2)$  are computed using rules 1–4, as appropriate, and  $r$  is the correlation coefficient between  $x_1$  and  $x_2$  (assuming  $r = 0.0$  will result in an accurate standard error if the two estimates are actually uncorrelated). It will result in an overestimate of the standard error if the

correlation is positive or an underestimate if the correlation is negative.

### Relative standard errors

Prior to 1985, relative standard error (RSE) curves were presented in Current Estimates (Series 10, *Vital and Health Statistics*) for approximating relative standard error. For readers who wish to continue using them, the following provides guidance. The relative standard error (RSE) of an estimate is obtained by dividing the standard error (SE) of the estimate by the estimate  $x$  itself. This quantity is expressed as a percent of the estimate:

$$RSE = 100 \frac{SE(x)}{x}$$

### Adjustment of rates

This report includes data that have been adjusted by the direct method to the age distribution of the standard population. The standard population used is the 1986 civilian noninstitutionalized population of the United States. The 1986 population was used for comparison with 1986 data. The standard age categories used are as follows:

Age category	Standard population in thousands (both sexes)
2 years and over	229,032
2–4 years	10,861
5–11 years	23,503
12–17 years	21,454
18–44 years	100,980
22–44 years	86,347
35–44 years	32,548
45–64 years	44,698
65 years and over	27,538

Age adjustment by the direct method is accomplished by multiplying the age-specific rate for each age group by the population for the corresponding age group in the standard population. The cross-products of the multiplications are then summed and divided by the total of the standard population to obtain the adjusted rate.

## Appendix II

### Definitions of certain terms used in this report

#### Terms relating to dental health

*Dental visit*—A dental visit is defined as any visit to a dentist's office for treatment or advice, including services by a technician or hygienist acting under a dentist's supervision. Dental services given on a mass basis, such as screening examinations given to a group of children at school, are excluded.

*Interval since last dental visit*—The interval since the last dental visit is the length of time prior to the week of interview since a dentist or dental hygienist was last visited for treatment or advice of any type.

*Edentulous persons*—Persons who have lost all their permanent teeth are edentulous. An edentulous person may have dentures.

*Fluoride mouthrinse*—Any substance containing fluoride that is used as a mouthrinse. Commercial mouthrinse preparations containing fluoride, as well as fluoride powder that is dissolved in water and used as a mouthrinse, are included. Topical fluoride treatments provided in a dentist's office are excluded.

*Fluoride supplements*—Includes fluoride drops, fluoride tablets, vitamin drops with fluoride, vitamin tablets with fluoride, and any other fluoride supplement that is swallowed. Topical fluoride treatments provided in a dentist's office are excluded.

*Fluoride toothpaste*—A toothpaste or gel that contains fluoride.

*Dental sealants*—Plastic coatings that are painted on the chewing surfaces of teeth to prevent decay (usually provided for children and youth). Sealants are placed in the grooves and crevices of teeth by a dentist, dental hygienist, or dental assistant.

*Dental insurance*—Any insurance plan specifically designed to pay all or part of the dental expenses of the insured individual, except oral surgery. The insurance can be either a group or an individual policy, with the premiums paid by the individual, the employer, a third party, or a combination of these. Benefits can be received under the plan in the form of payment to the individual or to the dentist. However, the plan must be a formal one, with defined membership and benefits, rather than an informal one. For example, an employer's simply paying a dental bill for an employee would not constitute a health insurance plan.

For the National Health Interview Survey, health insurance excludes the following kinds of plans: plans

limited to the "dread diseases," such as cancer and polio; free care, such as public assistance, public welfare, Medicaid, care given free of charge to veterans, care given under the Uniformed Services Health Benefits to Military Dependents Program, care given under the Crippled Children Program or similar programs, and care of persons admitted to a hospital for research purposes; insurance that pays bills only for accidents, such as liability insurance held by a car or property owner, insurance that covers children for accidents at school or camp, and insurance for workers that covers them only for accidents, injuries, or diseases incurred on the job; and insurance that pays only for loss of income.

#### Terms relating to disability

*Limitation of activity because of chronic conditions*—Limitation of activity refers to a long-term reduction in a person's capacity to perform the average kind or amount of activities associated with his or her age group. Persons are classified in terms of the major activity usually associated with their particular age group. The major activities for the age groups are: ordinary play, for children under 5 years of age; attending school, for those 5–17 years of age; working or keeping house, for persons 18–69 years of age; and capacity for independent living (the ability to bathe, shop, dress, eat, and so forth, without needing the help of another person) for those 70 years of age and over. People aged 18–69 years who are classified as keeping house are also classified by their ability to work at a job or business. (In this report, the major activity of persons 65–69 years is assumed to be working or keeping house; however, questions were also asked about the capacity for independent living in this age group, which would permit an alternative definition of "limitation.")

In regard to these activities, each person is classified into one of four categories: (1) unable to perform major activity, (2) able to perform a major activity but limited in the kind or amount of this activity, (3) not limited in major activity but limited in the kind or amount of other activities, and (4) not limited in any way. In regard to these four categories, NHIS publications often classify persons only by whether they are limited (groups 1–3) or not limited (group 4). A person is not classified as limited in activity unless one or more chronic conditions are reported as the cause of the activity limitation. When more than one

condition is reported, the respondent is asked to identify the condition that is the major cause of the limitation.

*Assessed health status*—The categories related to this concept result from asking the respondent, “Would you say \_\_\_\_\_’s health is excellent, very good, good, fair, or poor?” As such, they are based on a respondent’s opinion and not directly on any clinical evidence.

## Demographic terms

*Age*—The age recorded for each person is the age at last birthday. Age is recorded in single years and grouped in a variety of distributions, depending on the purpose of the table.

*Geographic region*—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the U.S. Bureau of the Census, are as follows:

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

*Place of residence*—The place of residence of a member of the civilian noninstitutionalized population is classified as inside or outside a metropolitan statistical area (MSA). Residence inside an MSA is further classified as either central city or not central city.

*Metropolitan statistical area*—The definition and titles of MSA’s are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Metropolitan Statistical Areas. Generally speaking, an MSA consists of a county or group of counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city. Towns and cities, rather than counties, are the units used in defining MSA’s in New England. There is no limit to the number of adjacent counties included in an MSA, as long as they are integrated with the central city, nor is an MSA limited to a single State; boundaries may cross State lines. The

metropolitan population in this report is based on MSA’s as defined in the 1980 census and does not include any subsequent additions or changes.

*Central city of an MSA*—The largest city in an MSA is always its central city. One or two additional cities may be secondary central cities in the MSA, on the basis of either of the following criteria: The additional city or cities must have a population one-third or more of that of the largest city, with a minimum population of 25,000, or the additional city or cities must have at least 250,000 inhabitants.

*Not the central city of an MSA*—This includes all of the MSA that is not part of the central city itself.

*Not in an MSA*—This includes all other places in the country.

*Hispanic*—Persons are Hispanic if any of the following describes their national origin or ancestry—Puerto Rican, Cuban, Mexican, Mexicano, Mexican-American, Chicano, other Latin American, other Spanish. Respondents make this determination by looking at a flashcard containing the above-listed Hispanic groups and deciding whether one of them describes their national origin or ancestry. The Hispanic population includes all Hispanic people, regardless of race.

*Non-Hispanic*—For this report, persons not classified as Hispanic are non-Hispanic. This includes persons whose Hispanic status is unknown.

*Income of family or of unrelated individuals*—Each member of a family is classified according to the total income of the family. Within the household, all person related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own incomes.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12-month period preceding the week of interview. Income from all sources—for example, wages, salaries, rents from property, pensions, Government payments, and help from relatives—is included.

*Education*—The categories of education status show the years of school completed. Only years completed in regular schools, where persons are given a formal education, are included. A regular school is one that advances a person toward an elementary or high school diploma or a college, university, or professional school degree. Thus education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

*Race*—The population is divided into three racial groups: “white,” “black,” and “all other.” “All other” includes Aleut, Eskimo or American Indian, Asian, or Pacific Islander, and any other races. Race characterization is based on the respondent’s description of his or her racial background.

*Poverty*—Families and unrelated individuals are classified as being above or below the poverty level, using the poverty index that originated at the Social Security Administration in 1964 and was revised by Federal Interagency Communities in 1969 and 1980. The poverty index

is based solely on money income and does not reflect the fact that many low-income persons receive noncash benefits such as food stamps, Medicaid, and public housing. The index is based on the Department of Agriculture's 1961 economy food plan and reflects the varying consumption requirements of families based on their size and composition. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index.

Because NHIS data on family income are collected by income categories rather than specific amounts of money, NHIS estimates of the number of persons living in poverty will vary slightly from Current Population Survey estimates. The 1989 poverty index is based on the 1988 poverty levels in the August 1989 Current Population Survey.

# Appendix III Questionnaire

Section P — DENTAL		PERSON 1	RT 70 3-4
<p><i>Hand calendar.</i></p> <p>These next questions are about dental care received during the 2 weeks (outlined in red on that calendar/beginning Monday (date) and ending this past Sunday (date)).</p> <p><b>1a. DURING THOSE 2 WEEKS</b> did anyone in the family go to a dentist? Include all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists. <input type="checkbox"/> Yes <input type="checkbox"/> No (2) <input type="checkbox"/> DK (2)</p>			5
<p><b>b. Who was this?</b> Mark "Dental visits" box in person's column.</p>		<b>1b.</b>	6
<p><b>c. During those 2 weeks, did anyone else in the family go to a dentist?</b> <input type="checkbox"/> Yes (Reask 1b and c) <input type="checkbox"/> No</p> <p>Ask for each person with "Dental visit" in 1b.</p>			6-7
<p><b>d. During those 2 weeks, how many times did — go to a dentist?</b></p>		<b>d.</b>	8-10
<p>Mark box if under 2.</p> <p><b>2a. During the past 12 months (that is, since (12-month date) a year ago), about how many visits did — make to a dentist? (Include the (number in 1d) visits) you already told me about.</b></p> <p>998 <input type="checkbox"/> Under 2 (NP)</p> <p>_____ 12-month dental visits</p> <p>000 <input type="checkbox"/> None</p>		<b>2a.</b>	11
<p>Mark "2-week dental visit" box in person's column if visit(s) reported in 1d.</p> <p><b>b. ABOUT how long has it been since — LAST went to a dentist?</b></p>		<b>b.</b>	(NP) (3)
<p><b>3. What are the reasons — has (not visited the dentist in over 12 months/never gone to the dentist)?</b> Do not read categories. Circle all that apply.</p> <p>01 Afraid                      07 Can't get there                      99 Don't know</p> <p>02 Nervous                      08 No problems</p> <p>03 Needles                      09 No teeth</p> <p>04 Cost                          10 Not important</p> <p>05 Don't know dentist                      11 Didn't think of it</p> <p>06 Dentist too far                      88 Other (Specify)</p>		<b>3.</b>	12-13 14-15 16-17 18-19 20-21 22-23 24-25 26-27 28-29 30-31 32-33 34-35 36-37
<p><b>4a. Is there anyone in the family who has lost ALL of his or her upper (permanent) natural teeth?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No (4a)</p>			38
<p><b>b. Who is this?</b> Mark "No uppers" box in person's column.</p>		<b>4b.</b>	39
<p><b>c. Anyone else?</b> <input type="checkbox"/> Yes (Reask 4b and c) <input type="checkbox"/> No</p> <p>Ask for each person with "No uppers" in 4b.</p>		<b>d.</b>	40
<p><b>d. Does — have an upper denture or plate?</b></p>			41
<p><b>e. Is there anyone in the family who has lost ALL of his or her lower (permanent) natural teeth?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No (5)</p>			41
<p><b>f. Who is this?</b> Mark "No lowers" box in person's column.</p>		<b>f.</b>	41
<p><b>g. Anyone else?</b> <input type="checkbox"/> Yes (Reask 4f and g) <input type="checkbox"/> No</p> <p>Ask for each person with "No lowers" in 4f.</p>		<b>h.</b>	41
<p><b>h. Does — have a lower denture or plate?</b></p>			41



Section P — DENTAL — Continued		PERSON 1
<b>CHECK ITEM 1</b>	Refer to 4b AND 4f. 1 <input type="checkbox"/> All family members have lost all teeth: upper and lower (Check Item 2) 2 <input type="checkbox"/> Other (5)	42
<b>5a.</b> Dental SEALANTS are special plastic coatings that are painted on the tops of the back teeth to prevent tooth decay. They are DIFFERENT from fillings, caps, crowns, and fluoride treatments. Has anyone in the family EVER had dental SEALANTS painted on their teeth? <input type="checkbox"/> Yes <input type="checkbox"/> No (6) <input type="checkbox"/> DK (6)		
<b>b.</b> Who is this? Mark "Dental sealants" box in person's column.		43
<b>c.</b> Anyone else? <input type="checkbox"/> Yes (Reask 5b and c) <input type="checkbox"/> No		5b. 1 <input type="checkbox"/> Dental sealants
<b>6a.</b> In the past two weeks has anyone in the family used a mouthwash or mouthrinse at home? <input type="checkbox"/> Yes <input type="checkbox"/> No (Check Item 2) <input type="checkbox"/> DK (Check Item 2)		
<b>b.</b> Who is this? Mark "Mouthrinse" box in person's column.		44
<b>c.</b> Anyone else? <input type="checkbox"/> Yes (Reask 6b and c) <input type="checkbox"/> No		6b. 1 <input type="checkbox"/> Mouthrinse
Ask for each person with "Mouthrinse" in 6b.		
<b>d.</b> What brand did — use most often during the past 2 weeks? Do not read answer categories. Circle ONE brand.		45-46
1. { ACT Fluorigard Kolydos Listermint Reach StanCare	2. Prescription fluoride rinse 3. PLAX 4. Scope, Listerine, Lavoris 5. Other (Specify) 9. Don't know	d. 1 2 3 4 8 7 9 (Specify)
Ask or verify.		47
<b>e.</b> Does this mouthrinse contain fluoride?		1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 9 <input type="checkbox"/> DK
<b>CHECK ITEM 2</b>	Refer to age.	48
<b>7.</b> (Some schools have fluoride MOUTHRINSE programs.) Does — now take part in a fluoride MOUTHRINSE program at school?		
		49
<b>8.</b> Does — now take vitamins with FLUORIDE in them or any other kind of FLUORIDE tablets, drops, or supplements?		50
Notes		

Section P — DENTAL — Continued		PERSON 1
<p>These next questions refer to the 2 weeks [outlined on that calendar/beginning Monday (date) and ending Sunday (date)].</p> <p><b>9a.</b> During that 2 week period, did anyone in the family miss any time from work or school because of a dental problem or dental visit? <input type="checkbox"/> Yes <input type="checkbox"/> No (10) <input type="checkbox"/> DK (10)</p> <hr/> <p><b>b.</b> Who was this? Mark "Missed time" box in person's column.</p> <hr/> <p><b>c.</b> Anyone else? <input type="checkbox"/> Yes (Reask 9b and c) <input type="checkbox"/> No <input type="checkbox"/> DK</p> <hr/> <p>Ask for each person with "Missed time" in 9b.</p> <p><b>d.</b> How much time did — miss because of a dental problem or dental visit?</p>		<p style="text-align: right;">51</p> <p><b>9b.</b> 1 <input type="checkbox"/> Missed time</p> <hr/> <p><b>d.</b> 51 <input type="checkbox"/> Less than 1 hour 52 <input type="checkbox"/> 1 hour, less than 3 hours 53 <input type="checkbox"/> 3 hours, less than 5 hours 54 <input type="checkbox"/> 5 hours, less than 7 hours 55 <input type="checkbox"/> 7 or more hours OR _____ Days</p> <p style="text-align: right;">52-53</p>
<p><b>10a.</b> During that two week period did anyone in the family miss any time from work or school to assist a relative or friend with a dental problem or dental visit? <input type="checkbox"/> Yes <input type="checkbox"/> No (11) <input type="checkbox"/> DK (11)</p> <hr/> <p><b>b.</b> Who was this? Mark "Missed time" box in person's column.</p> <hr/> <p><b>c.</b> Anyone else? <input type="checkbox"/> Yes (Reask 10b and c) <input type="checkbox"/> No <input type="checkbox"/> DK</p> <hr/> <p>Ask for each person with "Missed time" marked in 10b.</p> <p><b>d.</b> How much time did — miss because — was assisting a relative or friend with a dental problem or visit?</p>		<p style="text-align: right;">54</p> <p><b>10b.</b> 1 <input type="checkbox"/> Missed time</p> <hr/> <p><b>d.</b> 51 <input type="checkbox"/> Less than 1 hour 52 <input type="checkbox"/> 1 hour, less than 3 hours 53 <input type="checkbox"/> 3 hours, less than 5 hours 54 <input type="checkbox"/> 5 hours, less than 7 hours 55 <input type="checkbox"/> 7 or more hours OR _____ Days</p> <p style="text-align: right;">55-56</p>
<p><b>11a.</b> (Not counting the time missed from work or school) Was there any (other) time during those 2 weeks that anyone in the family cut down on normal activities for MORE THAN HALF OF THE DAY because of a dental problem or dental visit? <input type="checkbox"/> Yes <input type="checkbox"/> No (Check Item 3) <input type="checkbox"/> DK (Check Item 3)</p> <hr/> <p><b>b.</b> Who was this? Mark "Cut down" box in person's column.</p> <hr/> <p><b>c.</b> Anyone else? <input type="checkbox"/> Yes (Reask 11b and c) <input type="checkbox"/> No <input type="checkbox"/> DK</p> <hr/> <p>Ask for each person with "Cut down" in 11b.</p> <p><b>d.</b> During that period, how many (other) days did — cut down for MORE THAN HALF OF THE DAY because of a dental problem or dental visit?</p>		<p style="text-align: right;">57</p> <p><b>11b.</b> 1 <input type="checkbox"/> Cut down</p> <hr/> <p><b>d.</b> 00 <input type="checkbox"/> None _____ Days</p> <p style="text-align: right;">58-59</p>
<b>CHECK ITEM 3</b>	a. Mark first appropriate box.	<p><b>CK 3a.</b> 0 <input type="checkbox"/> Under 17 1 <input type="checkbox"/> Present for all questions 2 <input type="checkbox"/> Present for some questions 3 <input type="checkbox"/> Not present</p> <p style="text-align: right;">60</p>
	b. Enter person number(s) of respondent(s) to "Dental" section.	<p><b>b.</b> _____</p> <p style="text-align: right;">61-62</p> <p>Person number(s) of respondent(s)</p>
Notes		

- 4a. (Not counting Medicare) Is anyone in the family now covered by a health insurance plan which pays any part of hospital, doctor, or dental bills? Do NOT include plans that pay for ONLY ONE type of service, such as nursing home care or accidents.  
 Yes  No (B)  DK (B)
- b. It's important that we have the complete and accurate name of your health insurance plan. What is the COMPLETE name of the plan?  
 Record in Table H.I. If "DK", probe: Do you have something with the plan name on it?
- c. Is anyone in the family now covered by any OTHER health insurance plan? Again, do NOT include plans that pay for ONLY ONE service.  
 Yes (Reask 4b and c)  No  DK

**TABLE H.I.**  
 (Now I am going to ask some questions about the plan(s) you just told me about.)  
 Read if necessary: Health Maintenance Organizations, or HMO's, sometimes called Individual Practice Associations, or IPA's, are plans whose members are required to use only those health care providers who work for the HMO or IPA. Also, members do not have to submit claims for costs of medical care services.

<p>5a. Is this (name) plan a Health Maintenance Organization or HMO?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>67</p> <p>b. Was this plan obtained through an employer or union?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2 (6a)</td> <td>9 (6a)</td> </tr> </table> <p>68</p> <p>c. Is it now carried through an employer or union?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>69</p>	Yes	No	DK	1	2	9	Yes	No	DK	1	2 (6a)	9 (6a)	Yes	No	DK	1	2	9	<p>6a. Does this (name) plan pay any part of hospital expenses?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>70</p> <p>b. Does this plan pay any part of doctor's or surgeon's bills for operations?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>71</p> <p>c. Does it pay for any DENTAL services other than oral surgery?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>72</p> <p>d. Does it pay for any prescription drugs other than those administered during a hospital stay?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>73</p> <p>e. Does it pay for any mental health, alcoholism, or drug abuse services?</p> <table border="1"> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> <tr> <td>1</td> <td>2</td> <td>9</td> </tr> </table> <p>74</p>	Yes	No	DK	1	2	9	Yes	No	DK	1	2	9	Yes	No	DK	1	2	9	Yes	No	DK	1	2	9	Yes	No	DK	1	2	9	<p>7. Is --- covered under this (name) plan?</p> <p>7. <input type="checkbox"/> Covered .. } (NP)  <input type="checkbox"/> Not covered }  <input type="checkbox"/> DK .....</p>
Yes	No	DK																																																
1	2	9																																																
Yes	No	DK																																																
1	2 (6a)	9 (6a)																																																
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<p>8a. (In addition to the plan(s) you just mentioned) Is anyone in the family now covered by an insurance plan that pays for ONLY ONE type of health care service, such as nursing home care, eye care, or prescriptions?  <input type="checkbox"/> Yes <input type="checkbox"/> No (Check Item 2) <input type="checkbox"/> DK (Check Item 2)</p> <p>b. Is --- covered by this type of plan?</p>	<p>8b. <input type="checkbox"/> Covered <input type="checkbox"/> DK  <input type="checkbox"/> Not covered</p> <p>76</p>																																																	
<p>Ask for each person "Covered" in 8b:</p> <p>c. What type of service does --- plan pay for?</p> <p>d. Is --- now covered by any OTHER insurance plan that pays for ONLY ONE service?</p>	<p>c. <input type="checkbox"/> Prescriptions 77  <input type="checkbox"/> Eyecare 78  <input type="checkbox"/> Cancer treatment 79  <input type="checkbox"/> Catastrophic 80  <input type="checkbox"/> Nursing home care 81  <input type="checkbox"/> Accidents 82  <input type="checkbox"/> Dental care 83  <input type="checkbox"/> Other - Specify 84</p> <p>d. <input type="checkbox"/> Yes (Reask 8c-d)  <input type="checkbox"/> No (NP with "Covered" in 8b)</p>																																																	
<p>Ask for each person "Not covered" in Check Item 2.      If "Not covered 65 and over," in Check Item 2, include "or Medicare."</p> <p>9a. (Many people do not carry health insurance for various reasons.) Hand Card M.      Which of those statements describes why --- is not covered by any health insurance (or Medicare)?      Any other reason? Circle all reasons given.</p> <p>Mark box if only one reason.      If "Not covered 65 and over," in Check Item 2, include "or Medicare."</p> <p>b. What is the MAIN reason --- is not covered by any health insurance (or Medicare)?</p>	<p>86-87</p> <p>9a. 1 2 3 4 5 6 7 8 9</p> <p>(Specify)</p> <p>88-89          90-91          92-93</p> <p>b. <input type="checkbox"/> Only one reason</p> <p>1 2 3 4 5 6 7 8 9</p> <p>(Specify)</p>																																																	

FORM IHS 1A(1985) (3-10 88)

**CARD M**

**REASONS FOR NOT HAVING  
HEALTH INSURANCE**

1. **Job layoff, job loss, or any reasons related to unemployment**
2. **Can't obtain insurance because of poor health, illness, or age**
3. **Too expensive, can't afford health insurance**
4. **Dissatisfied with previous insurance**
5. **Don't believe in insurance**
6. **Have been healthy, not much sickness in the family, haven't needed health insurance**
7. **Covered by some other health plan**
8. **Some other reason**

Medicare

Card M

(Use this space for notes)

40-501 (1-1989) (9-1-88)

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ISBN 0-16-041590-X



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For sale by the U.S. Government Printing Office  
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328  
ISBN 0-16-041590-X