

VITAL & HEALTH STATISTICS

Dental Visits Volume and Interval Since Last Visit: United States, 1978 and 1979

Statistics are presented on the volume of dental visits and the time interval since the last dental visit, by age, sex, race, family income, education of the head of family, usual activity status, place of residence, and geographic region. Estimates are based on data collected in health interviews during 1978 and 1979. Statistics are also presented on the proportion of persons with no out-of-pocket dental expense, those with expense by selected expense intervals, and per capita annual dental expense, by age and sex. Estimates are based on data collected by self-reporting during January-March 1978 on out-of-pocket spending for 1977.

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Series 10, No. 138**

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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 Division of Health Interview Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

Contents

Introduction	1
Highlights	2
Source and limitations of the data	3
Interval since last dental visit	5
Volume of dental visits	10
Out-of-pocket dental expense	14
References	17
List of detailed tables	18

Appendixes

Contents	37
I. Technical notes on methods	38
II. Definitions of certain terms used in this report	47
III. Questionnaire items relating to dental visits	50
IV. Questionnaire items relating to out-of-pocket health expenses	52

List of text figures

1. Unadjusted and age-adjusted percent of population with a dental visit within a year of interview, by family income: United States, 1978 and 1979	9
2. Unadjusted and age-adjusted percent of population with a dental visit within a year of interview, by education of head of family: United States, 1978 and 1979	9
3. Number of dental visits per person per year, by age: United States, 1978 and 1979	12
4. Number of dental visits per person per year, by family income: United States, 1978 and 1979	12
5. Number of dental visits per person per year, by education of head of family: United States, 1978 and 1979	13
6. Annual out-of-pocket dental expense per person, per capita expense, and average expense for persons with expense, by age: United States, 1977	16

List of text tables

A. Percent of population with 1 or more dental visits within a year of interview and number of dental visits per person per year, by selected characteristics: United States, July 1963-June 1964, 1969, and 1978 and 1979	6
B. Civilian noninstitutionalized population and percent distribution, by family income: United States, July 1963-June 1964, 1969, and 1978 and 1979	7
C. Percent distribution of persons under 6 years of age by time interval since last dental visit and number of dental visits per person per year, according to single years of age: United States, 1978 and 1979	7

D. Unadjusted and age-adjusted percent of population with dental visit within a year of interview, by selected characteristics: United States, 1978 and 1979	8
E. Unadjusted and age-adjusted number of dental visits per person per year, by age and selected characteristics: United States, 1978 and 1979	11
F. Percent distribution of persons in January-March 1978 by intervals of annual out-of-pocket dental expense, average expense for persons with expense, and per capita expense, according to sex and age: United States, 1977	15

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 standards of reliability or precision
 - #** Figure suppressed to comply with confidentiality requirements
-

Dental Visits Volume and Interval Since Last Visit

by Charles S. Wilder, formerly with Division of Health Interview Statistics

Introduction

National estimates of the volume of dental visits and the distribution of the population by interval since last dental visit are presented in this report based on data collected in the National Health Interview Survey during 1978 and 1979. The population covered by the survey is the civilian noninstitutionalized population of the United States. A dental visit is defined as any visit to a dentist's office for treatment or advice, even if the service was not provided directly by the dentist but by a technician or hygienist acting under a dentist's supervision.

Also presented in this report is information on out-of-pocket expenses for dental care in 1977. This information is based on data collected from respondents to the National Health Interview Survey during January-March 1978. Per capita dental expense, average expense per person with expense, and a distribution by interval of expense are shown.

Data in this report can be compared with that on dental visits presented in several earlier published reports from the National Center for Health Statistics

in Series 10. The most recent of these reports on dental visits was that for 1969 in Series 10, Number 76, and prior to that for July 1963-June 1964 in Series 10, Numbers 23 and 29. Summary statistics on dental visits and interval since last visit by age and sex are published each year in the Current Estimates reports in Series 10.

The information on dental visits presented in this report are averages based on data collected during 1978 and 1979. Two years of data were used to increase the stability of the estimates since increasing the sample size leads to smaller sampling errors. A comparison between the 2-year averages and the statistics for individual years is shown below:

	Average 1978 and 1979	1978	1979
Population	214,776,000	213,828,000	215,723,000
Percent with visit in year prior to interview	50.0	49.9	50.2
Number of dental visits per person per year	1.6	1.6	1.7

Highlights

1. An estimated 50 percent of the civilian noninstitutionalized population of the United States made at least one dental visit in the year prior to interviews in 1978 and 1979.
2. The average person made 1.6 dental visits.
3. About 2.9 percent of the population age 6 years and over had never made a dental visit.
4. Females had more dental visits per person than males did.
5. Children aged 6-16 years had the highest rate of dental visits.
6. White persons made more dental visits per person than persons of other races did.
7. Persons with annual family incomes of \$25,000 or more had the highest rate of dental visits.
8. Persons whose head of family had 16 years or more of education had high rates.
9. Residents of metropolitan areas made more dental visits per person than those living outside these areas did.
10. Persons living in the Northeast and West Regions had higher rates of dental visits than residents of the other two regions.
11. Average out-of-pocket expense for dental care in 1977 was \$47 per person. The average was \$113 per person with dental expense.

Source and limitations of the data

The information from the National Health Interview Survey (NHIS) presented in this report is based primarily on data collected in a continuing nationwide survey conducted by household interview. (The data on out-of-pocket dental expenses were obtained by self-reporting, as explained later.) Each week a probability sample of households is interviewed by trained personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of each member of the household in the civilian noninstitutionalized population of the United States.

Most of the estimates in this report are for the 2-year period 1978 and 1979. During these 104 weeks the probability sample was composed of about 83,000 eligible occupied households of which 80,000 were interviewed. These interviewed households contained about 220,500 persons living at the time of the interview. The total noninterview rate for 1978 and 1979 was 3.6 percent, of which 2.0 percent was due to respondent refusal, and the remainder was primarily due to the failure to find an eligible respondent at home after repeated calls.

The population figures used in computing rates and percentages presented in this report are found in tables F, 1, 15-18.

The data on dental expenses were obtained from responses to a questionnaire left with the respondents to the interviews conducted during January-March 1978. During these 13 weeks the sample included about 10,300 occupied households, of which 9,888 containing approximately 27,200 persons were interviewed. Following the household interview, the interviewer left a family medical expenses questionnaire for each family or each unrelated individual in the household for self-enumeration. Completed questionnaires were mailed to the U.S. Bureau of the Census. After followup of nonrespondents, the response rate was 86.7 percent of the persons in the interviewed households. (Two forms of the questionnaire were used; the answers to the questions were about the

same for each type of questionnaire and, thus, the results were pooled.)

A description of the design of the National Health Interview Survey, the methods used in estimation, and the general qualifications of the data obtained from this survey are presented in appendix I. Because the estimates shown in this report are based on a sample of the population, they are subject to sampling error. Therefore particular attention should be paid to the section entitled, "Reliability of estimates." Sampling errors for most of the estimates are relatively low. However, where an estimated number or the numerator or denominator of a rate or percentage is small, the sampling error may be high. Charts of relative sampling errors and instructions for their use are shown in appendix I.

Certain terms used in this report are defined in appendix II. Some of the terms have specified meanings for the purpose of this survey.

The questions used in 1978 and 1979 to obtain information on dental visits and interval since last dental visit are illustrated in appendix III. Also presented are the questions used in 1969 and July 1963-June 1964, from which the comparison information in table A is derived. The entire questionnaire used in 1978 is shown in the Current Estimates, Series 10, No. 130, and for 1979 in Series 10, No. 136. The health expenses questionnaires used in January-March 1978 are also presented in appendix III.

Questionnaire design and interviewer training have aimed at minimizing the effects of respondent differences in reporting. Respondent differences in reporting occur when household respondents do not know the requested information, fail to recall accurately events occurring during the reference period, report events as having occurred during the reference period that actually happened outside the reference period, or withhold information.

In this report, terms such as "similar" and "no difference" indicate that the difference between the

measures being compared is not statistically significant. Terms indicating difference (e.g., "greater than," "higher than," "less than") show that the difference is statistically significant at the 5-percent level of significance employing the *t*-test with a

critical value of ± 1.96 . Lack of comment regarding the difference between any two statistics does *not* mean the difference was tested and found to be not significant.

Interval since last dental visit

An estimated average of 107.4 million persons in the civilian noninstitutionalized population, or 50.0 percent of this population, made at least one visit to a dentist's office for treatment or advice during the year prior to interview in 1978 and 1979 (tables A, 1 and 2). This estimate of half of the population with a dental visit in the past year was markedly higher than the percent reported for July 1963-June 1964 and 1969 of 42.0 and 45.0, respectively. During recent years, according to the Current Estimates reports, the percent of the population with a dental visit in the year prior to interview has been near 50 percent.^a

In general, for most demographic characteristics the proportion of the population with at least one dental visit in the year prior to interview was higher in 1978 and 1979 than in 1969. The exception was the income groups from \$7,000 annual family income and up. For each of the three income groups of \$7,000 or more shown in table A the percent in 1978 and 1979 was lower than in 1969. This fall in proportion was noted in the previous report on dental visits for 1969 (Series 10, No. 76). The explanation given there of the sizable number of persons shifting to a higher income level with no appreciable change in demand for dental services probably explains the drop in the percent with a visit for the current data.

Table B shows the population and percent distribution by family income for three time periods. The shift in population to higher income groups is in line with the rise in the Consumer Price Index (CPI) during the period. For example, the CPI, all items, was 116.3 in 1970, 195.3 in 1978, and 217.7 in 1979.¹ Thus from 1970 to 1979 the CPI rose 87

percent. An income of \$4,000 in 1970 had to rise to \$7,480 in 1979 to maintain the same standard of living. Similarly, an income of \$10,000 in 1970 would have been \$18,700 in 1979. Therefore, if a sizable number of persons moved from one income level to another and the demand for dental services did not change appreciably, a drop in the percent with a visit could occur.

An estimated average of 9.1 percent of the population during 1978 and 1979 was reported as never having made a dental visit (table 2). This percent represents a substantial drop from the level of 13.3 percent reported for 1969 (Series, 10, No. 76). For the current data, an estimated 74.3 percent of the children under 6 years of age had never seen a dentist. The corresponding percent for persons 6 years of age and over was 2.9 percent. Table C shows the population under 6 years of age by single years and indicates that none of the children under 2 years of age and few of the 2 and 3 year olds had ever seen a dentist.

An estimated 8.8 percent of children 6-16 years were reported as never having made a dental visit (table 2). In addition, for this age group, 25.3 percent had not visited a dentist 1 year or more prior to the interview. Thus about one-third (34.1 percent) of the school-age children 6-16 years show evidence of neglected dental care. A report based on data from the National Health and Nutrition Examination Survey of 1971-74 reveals information about decayed, missing, and filled teeth (DMF) in the age groups 6-11 years and 12-17 years.² Among children 6-11 years the survey reported an average DMF score of 1.7 teeth per child. "The average score is comprised of 0.7 decayed, 0.1 missing, and 0.8 filled permanent teeth." For children aged 12-17 years, the estimated average DMF score was 6.2, consisting of 1.8 decayed teeth, 0.6 missing teeth, and 3.7 filled permanent teeth.

Because of the importance of dental care in the formative years, the age group 6-16 years was selected

^aThe percentages for 5 recent years were:

		<u>Current Estimates-Series 10</u>
1977	49.7 percent	No. 126
1976	48.7 percent	119
1975	50.3 percent	115
1974	49.3 percent	100
1973	48.9 percent	95

Table A. Percent of population with 1 or more dental visits within a year of interview and number of dental visits per person per year, by selected characteristics: United States, July 1963–June 1964, 1969, and 1978 and 1979

Selected characteristic	Percent of population with dental visit within a year			Number of dental visits per person per year		
	July 1963– June 1964	1969	1978 and 1979	July 1963– June 1964	1969	1978 and 1979
All persons ¹	42.0	45.0	50.0	1.6	1.5	1.6
Sex						
Male	40.1	43.8	48.3	1.4	1.4	1.5
Female	43.8	46.1	51.6	1.7	1.6	1.8
Age						
Under 5 years	11.1	11.0	14.3	0.3	0.3	0.4
5-14 years	54.9	58.8	64.2	1.9	1.8	2.0
15-24 years	55.1	55.6	56.6	2.0	1.7	1.7
25-44 years	48.5	49.5	54.3	1.9	1.6	1.7
45-64 years	38.4	42.3	48.9	1.7	1.6	1.8
65 years and over	20.8	23.2	32.5	0.8	1.0	1.3
Race						
White	44.6	47.3	52.3	1.7	1.6	1.7
All other	22.7	28.3	35.7	0.9	0.7	1.1
Family income						
Less than \$3,000	24.0	26.6	35.1	0.8	0.8	1.1
\$3,000-\$4,999	33.4	31.9	33.8	1.0	1.0	1.1
\$5,000-\$6,999	41.8	37.4	36.3	1.6	1.1	1.2
\$7,000-\$9,999	51.3	45.1	38.4	1.9	1.4	1.2
\$10,000-\$14,999	61.5	55.1	45.0	2.6	1.9	1.4
\$15,000 or more	71.2	66.7	60.4	3.4	2.5	2.0
Education of head of family						
Less than 9 years	26.9	28.1	29.6	1.0	0.8	1.0
9-12 years	43.9	45.3	48.3	1.6	1.5	1.5
13 years or more	62.6	62.9	64.2	2.6	2.2	2.3
Usual activity status						
Preschool (under 6 years)	16.5	17.3	21.2	0.5	0.4	0.6
School-age (6-16 years)	56.9	60.1	64.6	2.0	1.9	2.1
Usually working (17 years and over)	43.7	46.1	52.9	1.7	1.6	1.7
Usually keeping house (female, 17 years and over)	41.1	42.0	45.3	1.6	1.5	1.6
Retired (45 years and over)	19.5	22.0	32.1	0.8	0.9	1.2
Other activity (17 years and over)	53.2	54.5	54.7	2.0	1.7	1.7
Place of residence						
All SMSA	44.7	47.2	52.0	1.8	1.6	1.8
Outside SMSA:						
Nonfarm	38.1	40.9	45.3	1.2	1.2	1.3
Farm	33.7	39.9	48.6	0.9	1.1	1.2
Geographic region						
Northeast	47.7	49.8	54.9	2.1	1.8	2.0
North Central	43.9	46.0	51.8	1.5	1.4	1.6
South	34.9	39.3	44.1	1.1	1.1	1.4
West	43.4	46.4	52.0	1.7	1.8	1.8

¹Includes unknown income and education.

Table B. Civilian noninstitutionalized population and percent distribution, by family income: United States, July 1963—June 1964, 1969, and 1978 and 1979

Family income	July 1963— June 1964	1969	Average 1978 and 1979	July 1963— June 1964	1969	Average 1978 and 1979
	Population in thousands			Percent distribution		
All incomes	185,797	197,422	214,776	100.0	100.0	100.0
Less than \$3,000	35,576	22,070	9,550	19.1	11.2	4.4
\$3,000-\$4,999	35,329	22,239	12,892	19.0	11.3	6.0
\$5,000-\$6,999	39,651	32,856	14,947	21.3	16.6	7.0
\$7,000-\$9,999	36,476	41,221	19,551	19.6	20.9	9.1
\$10,000-\$14,999	20,360	43,206	35,466	11.0	21.9	16.5
\$15,000 or more	8,465	24,834	101,859	4.6	12.6	47.4
\$15,000-\$24,999	---	---	54,740	---	---	25.5
\$25,000 or more	---	---	47,119	---	---	21.9
Unknown	9,941	10,996	20,511	5.4	5.6	9.5

Table C. Percent distribution of persons under 6 years of age by time interval since last dental visit and number of dental visits per person per year, according to single years of age: United States, 1978 and 1979

Single years of age	Population under 6 years		Time interval since last dental visit					Number of visits per person per year	
	Number in thousands	Percent	Less than 6 months	6-11 months	1 year	2-4 years	Never		Unknown
Under 6 years	18,537	100.0	15.7	5.4	3.1	0.8	74.3	0.6	0.6
Under 1 year	3,263	100.0	-	-	100.0	-	-
1 year	3,146	100.0	-	-	-	...	100.0	-	-
2 years	3,062	100.0	7.7	1.9	1.7	*0.1	87.9	*0.7	0.4
3 years	3,033	100.0	17.9	5.5	3.0	*0.6	72.0	0.9	0.7
4 years	3,014	100.0	29.6	10.5	6.3	1.5	51.1	1.0	0.9
5 years	3,019	100.0	41.1	15.4	8.1	2.9	31.3	1.2	1.4

for this analysis of the interval since last dental visit and the presence of decayed, missing, and filled teeth as revealed in the average DMF score. The same type of analysis obviously can be made for other age groups.

Among the age groups provided in table 2, children in the 6-16 year age group were most likely to have had a dental visit in the past year (64.2 percent). With the exception of children under 6 years, persons 65 years and older were least likely to have had a dental visit (32.5 percent). An estimated 44.0 percent of these older persons had not visited a dentist's office within 5 years or more of the interview.

Table D examines the percent of the population with a dental visit in the past year for selected demographic characteristics by unadjusted and age-adjusted percentages. Since the age distributions in the various population groups may differ considerably, comparisons should be made by using age-adjusted percentages. Age-adjusted data can be compared directly since the rates assume identical age distributions for all groups. The reader should use

age-adjusted rates only for examination of the relationships within a given demographic characteristic. The unadjusted (crude) percentages are the actual ones, which should be quoted rather than the age-adjusted ones.

Females had a higher percent with a visit in the year prior to interview than males did for both unadjusted and age-adjusted data in table D. White persons reported a markedly higher proportion with a visit than persons of other races did—52.3 percent contrasted with 35.7 percent. Age-adjustment made no appreciable difference in the rates.

In 1978 and 1979 persons with annual family incomes of \$25,000 or more reported the highest proportion with a dental visit in the past year (66.5 percent). Similarly, college graduates with 16 years or more of education reported the highest percent with a visit in the past year (69.2 percent). Higher proportions for those with high income or education were also reported in earlier years (table A). Figures 1 and 2 provide age-adjusted percentages of the population with a dental visit in the past year for family income and education of the head of the family.

Table D. Unadjusted and age-adjusted percent of population with dental visit within a year of interview, by selected characteristics: United States, 1978 and 1979

Selected characteristic	With visit in past year	
	Unadjusted	Age-adjusted ¹
Total ²	50.0	50.0
Sex		
Male	48.3	48.0
Female	51.6	51.8
Race		
White	52.3	52.3
All other	35.7	35.2
Family income		
Less than \$3,000	35.1	36.4
\$3,000-\$4,999	33.8	37.2
\$5,000-\$6,999	36.3	37.9
\$7,000-\$9,999	38.4	39.0
\$10,000-\$14,999	45.0	45.4
\$15,000 or more	60.4	59.3
\$15,000-\$24,999	55.1	54.5
\$25,000 or more	66.5	64.8
Education of head of family		
Less than 9 years	29.6	31.4
9-12 years	48.3	47.9
9-11 years	40.7	40.6
12 years	51.6	51.2
13 years or more	64.2	64.2
13-15 years	58.6	58.5
16 years or more	69.2	69.1
Place of residence		
All SMSA	52.0	51.9
Outside SMSA:		
Nonfarm	45.3	45.7
Farm	48.6	48.8
Geographic region		
Northeast	54.9	55.0
North Central	51.8	51.8
South	44.1	44.2
West	52.0	52.0

¹Adjusted by the direct method to the age distribution of the total civilian noninstitutionalized population of the United States.

²Includes unknown income and education.

An estimated 52.9 percent of persons whose usual activity status was working had visited a dentist at least once in the year prior to interviews in 1978 and 1979 (table A). About one-third (32.1 percent) of the retired persons 45 years of age and over had made a dental visit in that period. This percentage is about 50 percent larger than the 22.0 percent reported for 1969.

Persons residing in standard metropolitan statistical areas (SMSA's) had a higher proportion with a dental visit than persons living outside SMSA's did. Contrary to the pattern for the 2 earlier years shown in table A, persons living on farms had a higher percent with a dental visit than persons not living on farms outside SMSA's did. Persons living in the Northeast Region had the highest proportion with a dental visit and those living in the South Region had the lowest percent.

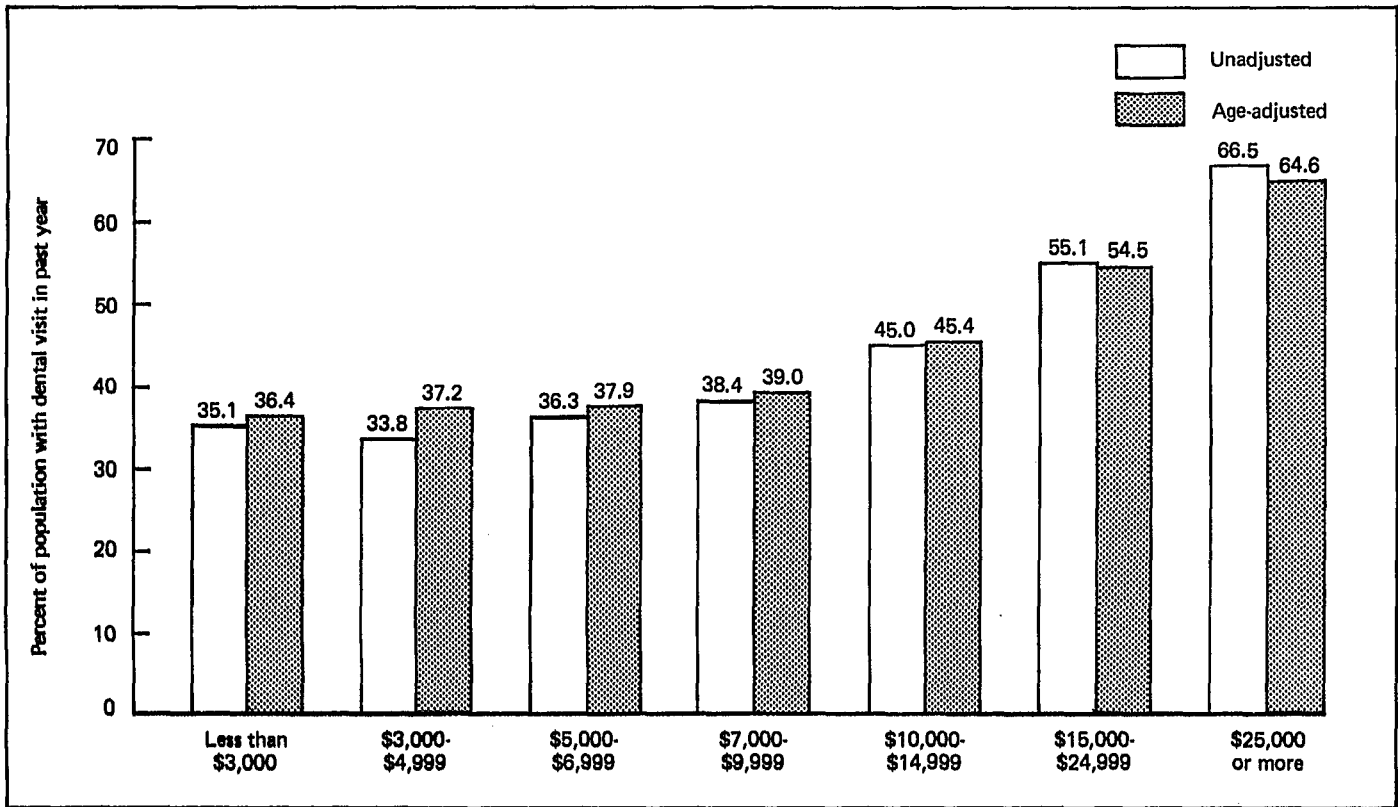


Figure 1. Unadjusted and age-adjusted percent of population with a dental visit within a year of interview, by family income: United States, 1978 and 1979

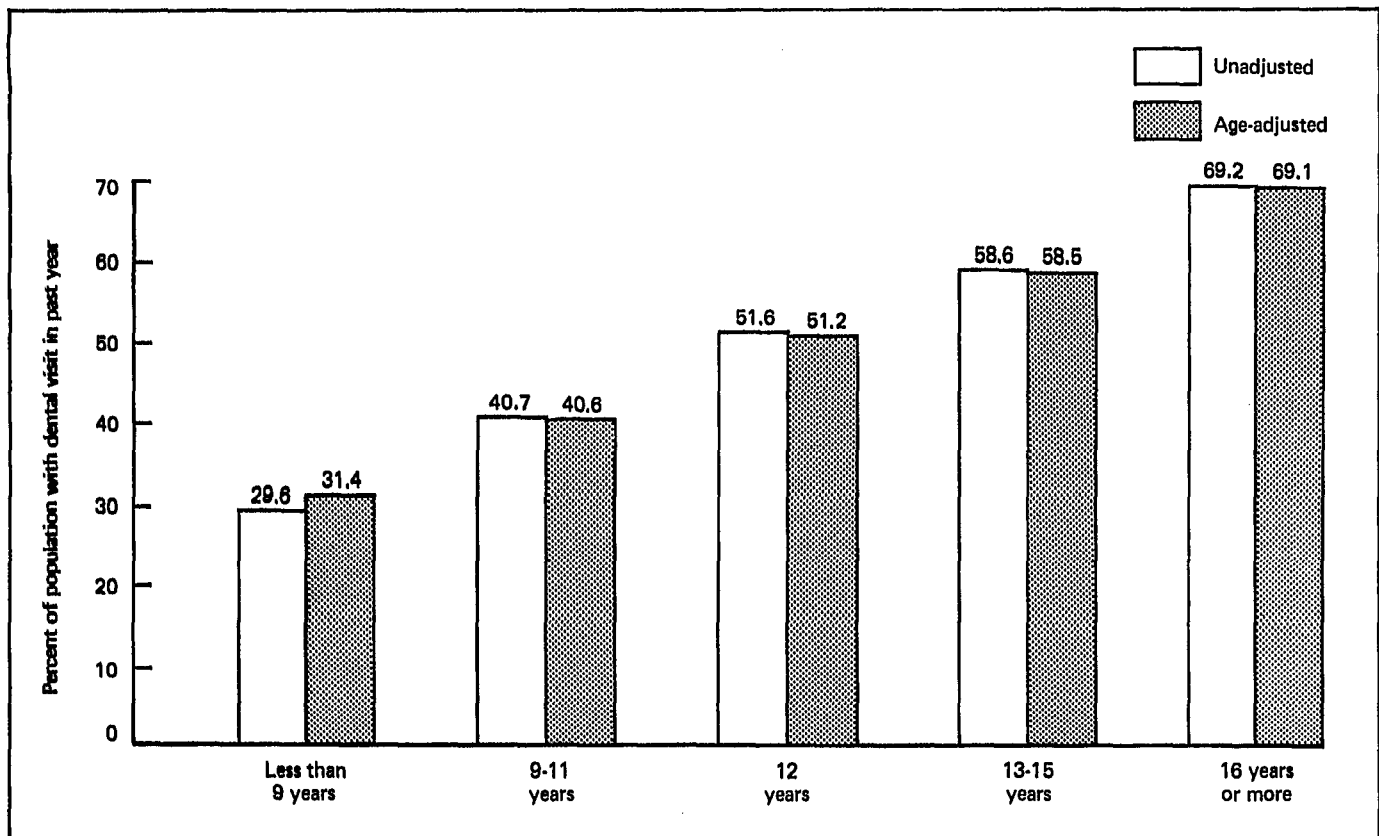


Figure 2. Unadjusted and age-adjusted percent of population with a dental visit within a year of interview, by education of head of family: United States, 1978 and 1979

Volume of dental visits

During the 2 years, 1978 and 1979, an estimated average annual 354.4 million dental visits were made by the civilian noninstitutionalized population, or an average of 1.6 visits per person per year (tables A and 3). The number of visits per person per year was 1.5 in 1969 and 1.6 in July 1963-June 1964. The rate of dental visits was higher for males and females in the current period than in 1969. The number of dental visits per person per year was substantially higher for persons other than white during 1978 and 1979 than in 1969, 1.1 visits compared with 0.7 visits. The rate of dental visits for persons with annual family incomes of \$10,000 or more was somewhat lower in 1978 and 1979 than in 1969. Again, the rapid change in composition of income groups probably explains the drop in rates. The rate of dental visits was higher for retired persons in 1978 and 1979 than in 1969. The number of dental visits per person per year was higher for persons residing in the South Region in 1978 and 1979 than in 1969.

If the total number of dental visits reported for the current period is divided by the number of persons who had a visit during the year prior to interview, an estimated rate of 3.3 visits per person with at least one visit is obtained (354,375,000 divided by 107,414,000 persons with a visit in a year, tables 1 and 3). For 1969 the corresponding estimate was also 3.3 visits per person with a visit.

Table E shows unadjusted and age-adjusted rates of dental visits and age-specific rates for 6 age groups: under 6, 6-16, 17-24, 25-44, 45-64 and 65 years and over. These are the age groups usually found in recent reports in Series 10. Figure 3 shows the distribution of age-specific rates of dental visits for all persons for the data collected in 1978 and 1979. The number of dental visits per person per year was lowest for persons under 6 years of age and highest for persons 6-16 years. The low rate for persons under 6 is examined by single years of age in table C. For persons 5 years of age, the rate of dental visits has almost reached the average for all persons in the population.

The average number of dental visits per person per year for 1978 and 1979 was higher for females than for males—1.8 and 1.5, respectively (tables E and 3). White persons reported an average of 1.7 visits per person per year with a combined rate of 1.1 visits for persons of other races.

The number of dental visits per person per year for each of seven family income groups is provided in figure 4 and tables E, 5, and 6. The age-adjusted rates were identical for the four lowest income groups (under \$10,000 annual family income). In the three highest groups (family income of \$10,000 or more) the rates increased for each successive income level.

The influence of the education of the head of the family on the distribution of the use of dental services is illustrated in figure 5 and tables 7, 8, 9, 10. For each increase in educational level there was an increase in the rate of dental visits. Persons whose family head had 16 years or more of education, that is a college graduate, had a rate of visits 2.5 times that for the lowest education level, less than 9 years of schooling. Even though the population of the education group, less than 9 years of schooling, is substantially older than that of the highest education level (see table 15), the individual age specific rates also show the substantial difference in rates for these two educational levels. Table 10 shows, by a cross-classification of income and education, the number of dental visits per person per year. The rate of dental visits for persons with family income under \$10,000 but whose family head had some college education (13 years or more of education) was equal to the average of 1.6 visits for all persons in the population.

The distribution of dental visits among the population by usual activity status is presented in table 11. The rate for the school-age population 6-16 years was 2.1 visits per person per year. Persons 17 years of age and over whose usual activity was going to school had an average rate of 1.9 visits per person. Among the usually working group, the rate of 1.9 visits for females exceeded that of 1.6 visits for males.

Persons living in metropolitan areas (SMSA's) had

Table E. Unadjusted and age-adjusted number of dental visits per person per year, by age and selected characteristics: United States, 1978 and 1979

Selected characteristic	All ages		Under 6 years	6-16 years	17-24 years	25-44 years	45-64 years	65 years and over
	Unadjusted	Age-adjusted ¹						
Total ²	1.6	1.6	0.6	2.1	1.6	1.7	1.8	1.3
Sex								
Male	1.5	1.5	0.5	2.0	1.3	1.6	1.7	1.2
Female	1.8	1.8	0.7	2.2	1.8	1.9	1.9	1.4
Race								
White	1.7	1.8	0.6	2.3	1.7	1.8	1.9	1.4
All other	1.1	1.1	0.4	1.2	1.0	1.3	1.3	1.0
Race and family income								
White—less than \$10,000	1.2	1.3	0.5	1.6	1.5	1.3	1.2	1.0
White—\$10,000 or more	1.9	1.9	0.6	2.5	1.8	1.9	2.1	1.9
All other—less than \$10,000	0.9	1.0	0.4	1.0	0.9	1.1	1.1	0.8
All other—\$10,000 or more	1.4	1.4	0.5	1.5	1.2	1.5	1.6	*1.4
Family income								
Less than \$3,000	1.1	1.2	*0.4	1.3	1.5	1.3	1.2	0.8
\$3,000-\$4,999	1.1	1.2	0.6	1.4	1.2	1.5	1.0	1.0
\$5,000-\$6,999	1.2	1.2	0.5	1.5	1.5	1.3	1.2	0.9
\$7,000-\$9,999	1.2	1.2	0.5	1.4	1.2	1.2	1.3	1.3
\$10,000-\$14,999	1.4	1.4	0.4	1.6	1.5	1.4	1.6	1.6
\$15,000 or more	2.0	2.0	0.7	2.6	1.9	2.0	2.2	2.1
\$15,000-\$24,999	1.8	1.8	0.7	2.3	1.7	1.8	2.0	1.9
\$25,000 or more	2.3	2.3	0.7	3.0	2.0	2.1	2.5	2.5
Education of head of family								
Less than 9 years	1.0	1.0	0.4	1.2	1.0	1.1	1.0	0.8
9-12 years	1.5	1.5	0.5	1.9	1.5	1.5	1.7	1.4
9-11 years	1.3	1.3	0.4	1.6	1.3	1.4	1.4	1.3
12 years	1.6	1.6	0.5	2.0	1.6	1.5	1.8	1.4
13 years or more	2.3	2.3	0.7	2.9	2.0	2.2	2.8	2.3
13-15 years	2.0	2.0	0.6	2.5	1.8	2.0	2.4	2.0
16 years or more	2.5	2.5	0.8	3.2	2.2	2.3	3.1	2.6
Education of head of family and family income								
Less than \$10,000								
Less than 9 years	0.8	0.9	*0.4	1.3	0.9	0.9	0.7	0.7
9-12 years	1.2	1.3	0.6	1.4	1.3	1.3	1.5	1.2
9-11 years	1.2	1.2	0.5	1.5	1.3	1.2	1.3	1.0
12 years	1.3	1.3	0.6	1.4	1.3	1.3	1.6	1.3
13 years or more	1.6	1.6	*0.4	1.5	1.7	1.6	1.9	1.8
13-15 years	1.5	1.5	*0.2	1.3	1.7	1.6	1.9	1.5
16 years or more	1.7	1.8	*1.0	*2.2	1.4	1.6	1.8	2.4
\$10,000 or more								
Less than 9 years	1.2	1.2	*0.4	1.3	1.1	1.2	1.4	1.2
9-12 years	1.6	1.6	0.5	2.1	1.6	1.5	1.8	1.7
9-11 years	1.4	1.4	*0.3	1.8	1.3	1.4	1.5	1.7
12 years	1.7	1.7	0.5	2.2	1.7	1.5	1.9	1.7
13 years or more	2.4	2.4	0.8	3.0	2.2	2.3	2.9	2.6
13-15 years	2.1	2.2	0.7	2.6	1.9	2.1	2.4	2.6
16 years or more	2.6	2.6	0.8	3.3	2.4	2.3	3.2	2.6
Place of residence								
All SMSA	1.8	1.8	0.6	2.2	1.6	1.9	2.0	1.5
Outside SMSA:								
Nonfarm	1.3	1.4	0.5	1.8	1.4	1.4	1.4	1.0
Farm	1.2	1.2	*0.4	1.9	1.1	1.3	1.1	*0.6
Geographic region								
Northeast	2.0	1.9	0.6	2.5	2.0	2.0	2.1	1.6
North Central	1.6	1.6	0.5	2.1	1.5	1.7	1.8	1.2
South	1.4	1.4	0.5	1.6	1.3	1.5	1.6	1.2
West	1.8	1.8	0.6	2.5	1.6	1.9	1.9	1.5

¹Adjusted by the direct method to the age distribution of the total civilian noninstitutionalized population of the United States.

²Includes unknown income and education.

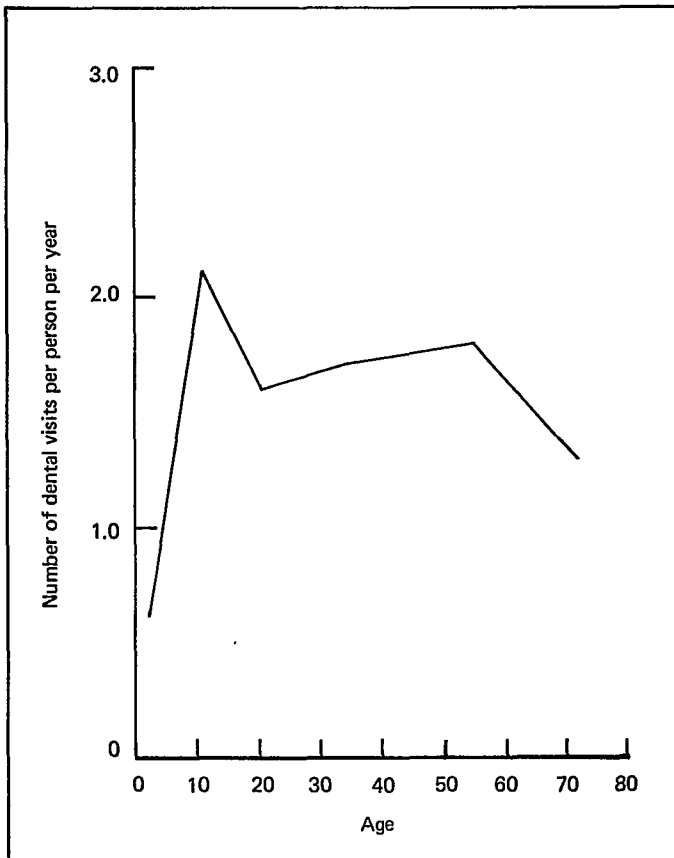


Figure 3. Number of dental visits per person per year, by age: United States, 1978 and 1979

substantially more visits per person per year than persons living outside SMSA's did (table 12). There was little difference in the rates of dental visits among farm and nonfarm residents outside metropolitan areas. Persons living in the Northeast and West Regions reported greater usage of dental services than residents of the North Central and South Regions did (tables 13 and 14). The distribution of rates of dental visits by geographic region conforms well with the distribution of dentists in active civilian practice.³ According to data for December 31, 1976, the number of active civilian dentists per 100,000 civilians by geographic region was as follows:

Region	Dentists per 100,000 civilian population	Dental visits per person per year
Northeast	62	2.0
North Central	49	1.6
South	41	1.4
West	62	1.8

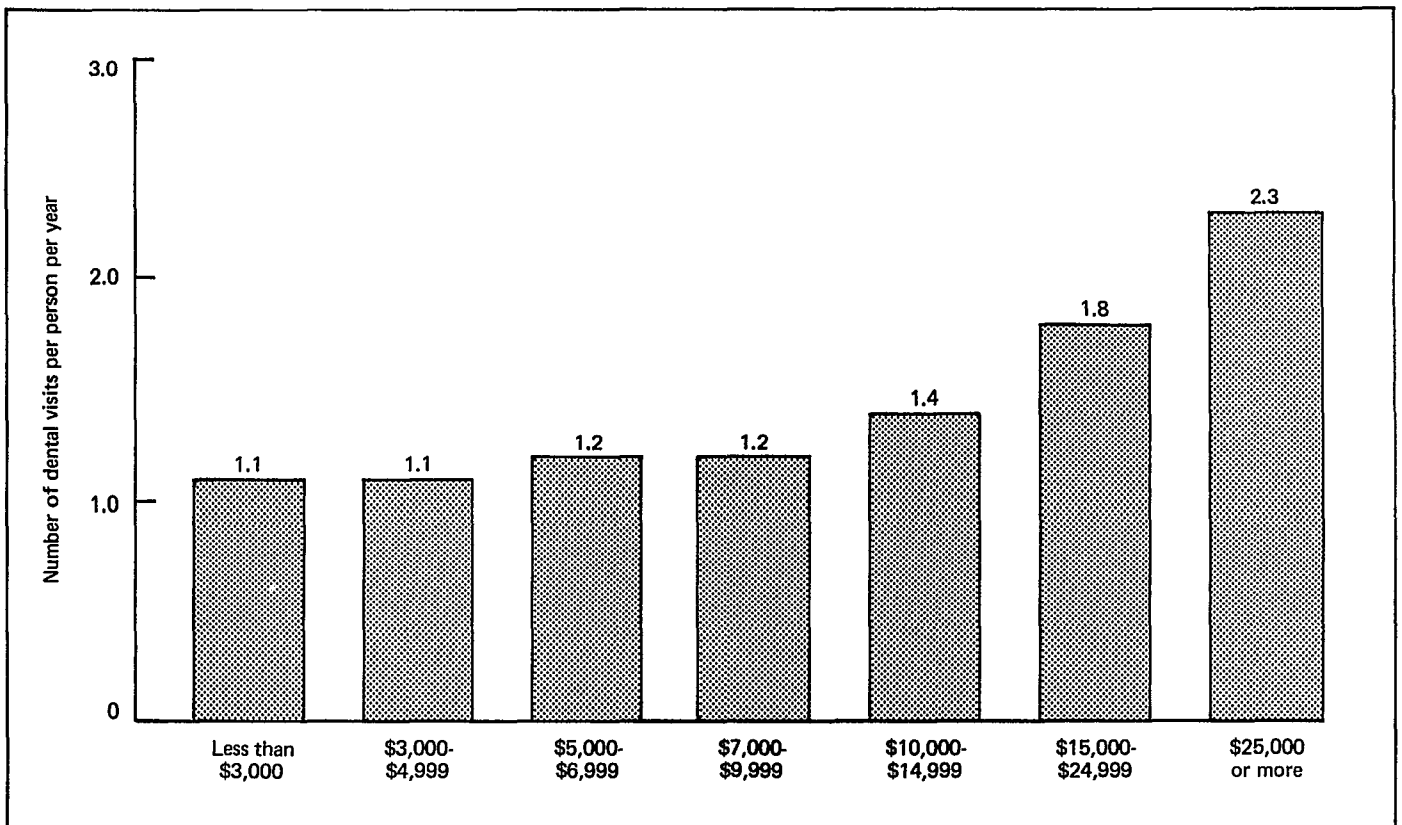


Figure 4. Number of dental visits per person per year, by family income: United States, 1978 and 1979

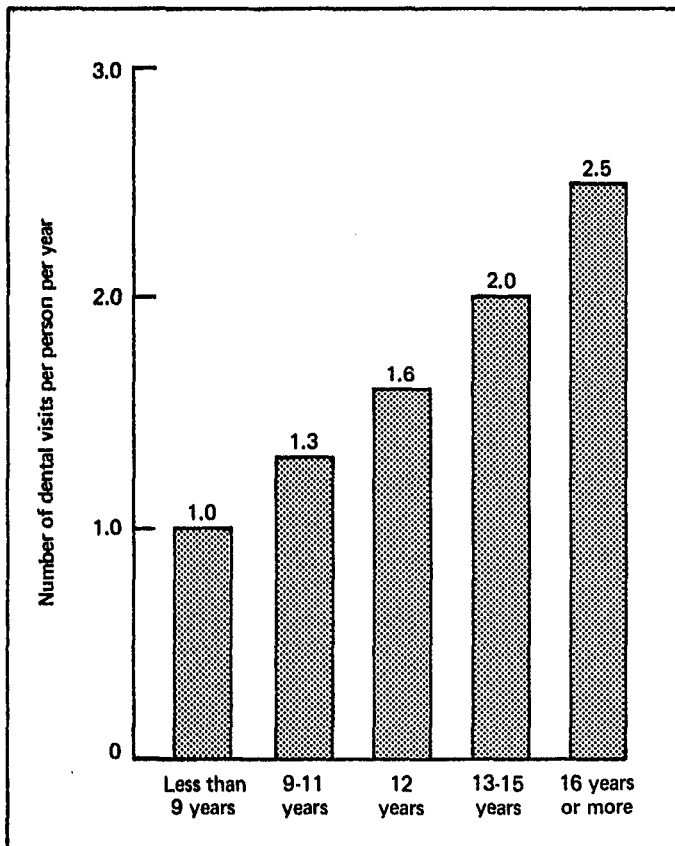


Figure 5. Number of dental visits per person per year, by education of head of family: United States, 1978 and 1979

Out-of-pocket dental expense

As mentioned earlier, following completion of the household interviews during January-March 1978, a mail-in questionnaire was left with each family and/or unrelated individual. The questionnaire was designed to obtain information about direct out-of-pocket health expenditures during 1977 for each person in the family unit, that is, each family of two or more related persons or each unrelated individual in the household. Out-of-pocket expense is defined as the amount paid by the individual or family member exclusive of any part paid by insurance, other person, or agency.

One of the items of expense requested was spending for dental services. Table F presents estimates for 1977 of dental expenses for the civilian noninstitutionalized population of the United States based on the responses to the mail-in questionnaires returned or questionnaires obtained through followup procedures. Among the questionnaires received 85.4 percent of all persons included on these questionnaires had reported known amounts of dental expenses. Known amounts include zero dollars or 1 dollar or more spent during 1977. The estimated dental expenses for the population are based on the responses with known amounts. This procedure imputes to persons with unknown amounts or to persons not responding the same distribution of health expenses as that for persons with known amounts. Thus the reader should be cautious in using these estimates.

During 1977 an estimated annual average of \$47 per person was spent out-of-pocket for dental expenses by members of the civilian noninstitutionalized population. An estimated 58.1 percent of the population had no dental expense. Thus there was an average expense of \$113 per person per year for persons who reported some expense. About 5 percent of the population reported \$250 or more dental expense per person per year. Figure 6 and table F show the distribution of per capita expense and average expense for persons with expense for 6 age

groups. Notable are the average expenses for persons with expense for the age groups 45-64 years and 65 years and over—\$146 and \$144 per person, respectively. Females had slightly higher rates of expense for all ages, but this pattern was not consistent within the age groups.

Comparison between tables A and F of the percent of the population with at least one dental visit within a year of interview and the percent of the population with no dental expense is of interest. For instance, 50.0 percent had a dental visit within a year of interview in 1978 and 1979, while 58.1 percent reported no dental expense. If the 58.1 percent includes persons who had dental service within the year 1977, but did not incur any out-of-pocket expense (say, the employer paid the cost, or some other third party paid) then the correspondence between the 50.0 percent reported in table A and the 58.1 percent in table F may be relatively close. For persons 65 years and over the similarity in the percent is quite striking, about a third had a dental visit (32.5 percent) and two-thirds did not, this agrees quite closely with the 68.8 percent who reported no dental expense. Since most dental expense is out-of-pocket spending, the closeness of these estimates is of interest.

Evidence that most dental expense is out-of-pocket is derived from provisional estimates from the National Medical Care Expenditure Survey (NMCES) for 1977. This survey employed a national sample of households for use as a panel followed throughout 1977 to obtain information about health problems, use of medical and dental services, and the total cost and source of payment of such care.

The NMCES data on dental expenses provide an estimate of \$187 as the mean expense per person with a dental expense during 1977, with an estimated 74.4 percent or \$139 paid out-of-pocket.⁴ This figure (\$139) is approximately 23 percent higher than the estimate (\$113) derived from the 1977 NHIS data.

Table F. Percent distribution of persons in January-March 1978 by intervals of annual out-of-pocket dental expense, average expense for persons with expense, and per capita expense, according to sex and age: United States, 1977

Sex and age	Total population in thousands	No expense	Dental expense					Average for persons with expense	Per capita
			Less than \$50	\$50-\$99	\$100-\$249	\$250-\$499	\$500 or more		
Both sexes			Percent distribution					Expense in dollars	
All ages	213,195	58.1	21.5	8.5	7.0	3.0	2.0	113	47
Under 6 years	18,453	85.2	11.9	1.4	1.1	*0.2	*0.2	45	7
6-16 years	40,896	51.2	28.3	10.0	6.1	2.5	1.9	95	46
17-24 years	31,588	57.1	23.6	8.8	6.6	2.7	*1.2	90	38
25-44 years	56,278	52.7	23.9	10.0	8.0	3.4	2.0	110	52
45-64 years	43,382	55.2	18.9	9.5	9.2	4.1	3.1	146	65
65 years and over	22,598	68.8	13.8	5.5	6.6	3.0	2.3	144	45
Under 5 years	15,336	90.0	7.8	*1.1	*0.8	*0.2	*0.2	49	5
5-14 years	35,728	51.7	29.5	9.4	5.8	2.0	1.6	85	41
15-24 years	39,873	56.1	23.8	9.0	6.6	3.0	1.4	96	42
Male			Percent distribution					Expense in dollars	
All ages	102,870	59.4	21.1	8.2	6.7	2.9	1.8	110	45
Under 6 years	9,485	84.7	13.4	*1.0	*0.7	*0.1	*0.2	37	6
6-16 years	20,781	51.9	28.2	10.3	5.7	2.4	1.5	87	42
17-24 years	15,362	58.8	22.3	7.9	6.8	3.0	1.2	95	39
25-44 years	27,201	54.5	23.3	9.7	7.4	3.2	1.8	107	49
45-64 years	20,721	57.6	17.4	9.0	9.4	3.8	2.8	146	62
65 years and over	9,322	69.3	13.2	5.4	6.3	3.4	2.4	156	48
Under 5 years	7,843	90.5	8.0	*0.8	*0.5	*	*0.2	42	4
5-14 years	18,209	52.0	29.9	9.8	5.2	1.8	1.4	79	38
15-24 years	19,576	57.6	23.0	8.3	6.6	3.3	1.3	98	41
Female			Percent distribution					Expense in dollars	
All ages	110,324	56.9	21.9	8.7	7.2	3.1	2.1	115	50
Under 6 years	8,968	85.7	10.4	*1.8	*1.5	*0.4	*0.2	53	8
6-16 years	20,115	50.5	28.3	9.6	6.6	2.7	2.2	102	50
17-24 years	16,226	55.5	24.9	9.6	6.5	2.4	1.2	85	38
25-44 years	29,077	51.1	24.5	10.2	8.5	3.5	2.1	113	55
45-64 years	22,661	53.0	20.2	9.9	9.0	4.4	3.5	146	69
65 years and over	13,277	68.5	14.3	5.6	6.8	2.7	2.2	135	43
Under 5 years	7,494	89.5	7.6	*1.3	*1.1	*0.3	*0.2	55	6
5-14 years	17,519	51.4	29.1	9.0	6.4	2.3	1.8	92	45
15-24 years	20,297	54.7	24.7	9.8	6.5	2.7	1.6	95	43

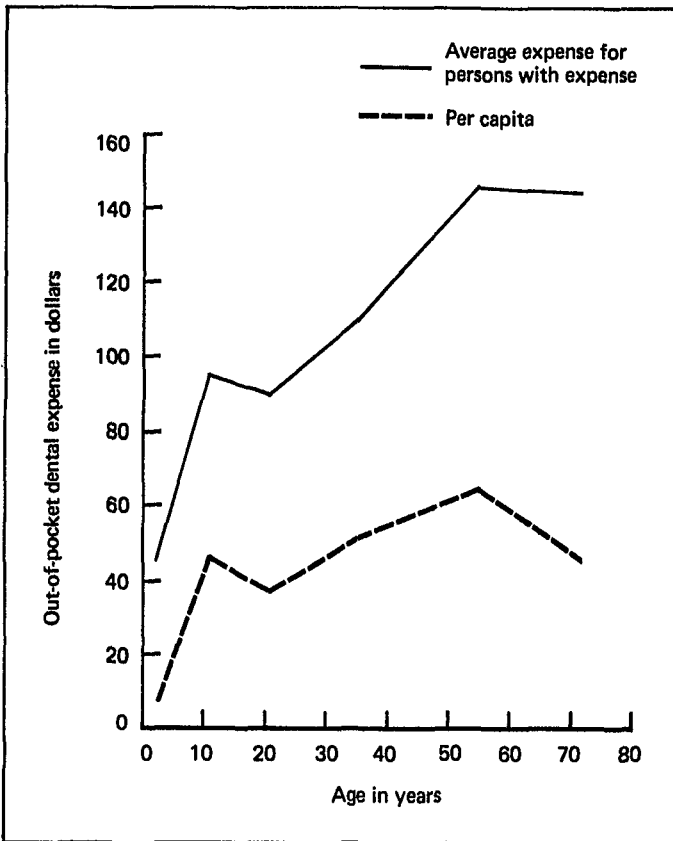


Figure 6. Annual out-of-pocket dental expense per person, per capita expense, and average expense for persons with expense, by age: United States, 1977

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List of detailed tables

1. Number of persons by time interval since last dental visit and selected characteristics: United States, 1978 and 1979	19	10. Number of dental visits per person per year, by education of head of family, family income, and age: United States, 1978 and 1979	28
2. Percent distribution of persons by time interval since last dental visit, according to selected characteristics: United States, 1978 and 1979	20	11. Average annual number of dental visits and number of dental visits per person per year, by sex, usual activity status, and age: United States, 1978 and 1979	29
3. Average annual number of dental visits and number of dental visits per person per year, by race, sex, and age: United States, 1978 and 1979	21	12. Average annual number of dental visits and number of dental visits per person per year, by place of residence, sex, and age: United States, 1978 and 1979	30
4. Average annual number of dental visits and number of dental visits per person per year, by race, family income, and age: United States, 1978 and 1979	22	13. Average annual number of dental visits, by geographic region, sex, and age: United States, 1978 and 1979	31
5. Average annual number of dental visits, by family income, sex, and age: United States, 1978 and 1979	23	14. Number of dental visits per person per year, by geographic region, sex, and age: United States, 1978 and 1979	32
6. Number of dental visits per person per year, by family income, sex, and age: United States, 1978 and 1979	24	15. Population used in obtaining rates shown in this publication, by race, education of head of family, sex, family income, and age: United States, 1978 and 1979	33
7. Average annual number of dental visits, by education of head of family, sex, and age: United States, 1978 and 1979	25	16. Population used in obtaining rates shown in this publication, by family income, sex, and age: United States, 1978 and 1979.	34
8. Number of dental visits per person per year, by education of head of family, sex, and age: United States, 1978 and 1979	26	17. Population used in obtaining rates shown in this publication, by sex, usual activity status, and age: United States, 1978 and 1979	35
9. Average annual number of dental visits, by education of head of family, family income, and age: United States, 1978 and 1979	27	18. Population used in obtaining rates shown in this publication, by place of residence, geographic region, sex, and age: United States, 1978 and 1979	36

Table 1. Number of persons by time interval since last dental visit and selected characteristics: United States, 1978 and 1979

[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]

Selected characteristic	Total population	Time interval since last dental visit						
		Less than 6 months	6-11 months	1 year	2-4 years	5 years or more	Never	Unknown
Number of persons in thousands								
All persons ¹	214,776	76,562	30,852	28,320	27,384	29,130	19,490	3,038
Sex								
Male	103,635	35,438	14,634	13,899	13,692	14,126	10,203	1,643
Female	111,142	41,124	16,218	14,421	13,692	15,005	9,286	1,395
Age								
Under 6 years	18,537	2,915	1,006	579	156	*2	13,768	111
6-16 years	40,094	18,543	7,339	5,656	3,552	928	3,538	537
17-24 years	31,867	11,688	5,814	5,621	4,996	2,132	1,017	598
25-44 years	57,784	22,035	9,332	9,425	9,022	6,380	720	869
45-64 years	43,429	15,770	5,464	5,261	6,473	9,547	297	617
65 years and over	23,066	5,610	1,897	1,777	3,186	10,140	149	306
Under 5 years	15,518	1,674	541	334	67	...	12,824	78
5-14 years	34,947	16,162	6,272	4,666	2,763	564	4,066	454
15-24 years	40,032	15,311	7,345	6,857	5,873	2,499	1,433	714
Race								
White	185,714	69,904	27,132	23,749	22,569	24,971	14,956	2,434
All other	29,062	6,658	3,720	4,571	4,815	4,160	4,533	604
Family income								
Less than \$3,000	9,550	2,276	1,076	1,167	1,424	2,417	1,050	141
\$3,000-\$4,999	12,892	2,902	1,458	1,588	1,999	3,426	1,396	123
\$5,000-\$6,999	14,947	3,722	1,704	1,888	2,364	3,436	1,693	139
\$7,000-\$9,999	19,551	5,119	2,393	2,611	3,174	3,684	2,356	213
\$10,000-\$14,999	35,466	11,081	4,889	4,969	5,214	4,935	3,988	390
\$15,000 or more	101,859	44,789	16,732	13,574	10,638	7,876	6,990	1,261
\$15,000-\$24,999	54,740	21,500	8,672	7,668	6,469	5,087	4,772	572
\$25,000 or more	47,119	23,289	8,060	5,906	4,169	2,789	2,218	689
Education of head of family								
Less than 9 years	36,707	7,385	3,478	4,305	6,067	10,826	4,093	553
9-12 years	105,527	35,796	15,182	14,870	14,447	13,832	9,987	1,412
9-11 years	32,156	9,084	4,042	4,416	4,923	5,790	3,463	468
12 years	73,371	26,742	11,140	10,454	9,524	8,042	6,524	944
13 years or more	68,907	32,472	11,776	8,660	6,436	3,712	5,038	814
13-15 years	32,225	13,447	5,434	4,412	3,649	2,329	2,573	362
16 years or more	36,683	19,026	6,342	4,248	2,787	1,383	2,445	452
Usual activity status								
Preschool (under 6 years)	18,537	2,915	1,006	579	156	*2	13,768	111
School age (6-16 years)	40,094	18,543	7,339	5,656	3,552	928	3,538	537
Usually working (17 years and over)	88,670	33,472	13,400	13,557	13,597	12,125	1,155	1,364
Usually keeping house (female, 17 years and over)	38,104	12,362	4,882	4,825	5,958	9,335	406	337
Retired (45 years and over)	11,403	2,712	954	971	1,668	4,874	91	133
Retired for health reasons (45 years and over)	3,745	745	294	343	596	1,685	45	37
Retired for other reasons (45 years and over)	7,658	1,967	660	628	1,072	3,189	46	96
Other activities (17 years and over)	17,968	6,558	3,272	2,732	2,454	1,866	531	555
Usually going to school (17 years and over)	12,615	5,326	2,655	2,031	1,603	506	316	278
Other (17 years and over)	5,353	1,232	617	701	951	1,360	215	277
Place of residence								
All SMSA	146,971	54,635	21,840	19,771	18,218	17,556	12,725	2,226
Outside SMSA:								
Nonfarm	61,733	19,831	8,156	7,802	8,360	10,532	6,301	751
Farm	6,072	2,096	856	747	806	1,042	464	62
Geographic region								
Northeast	48,042	19,204	7,164	5,920	5,488	6,366	3,238	664
North Central	57,401	20,902	8,825	7,409	6,962	7,948	4,620	735
South	70,043	22,051	8,842	9,325	9,934	10,759	8,023	1,110
West	39,289	14,405	6,022	5,666	5,001	4,058	3,608	530

¹Includes unknown income and education.

NOTES: Relative standard errors of estimates for this table are found in appendix I.

For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States, in Current Population Reports, Series P-20, P-25, and P-60.

Table 2. Percent distribution of persons by time interval since last dental visit, according to selected characteristics: United States, 1978 and 1979

[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]

Selected characteristic	Total population	Time interval since last dental visit						
		Less than 6 months	6-11 months	1 year	2-4 years	5 years or more	Never	Unknown
Percent distribution								
All persons ¹	100.0	35.6	14.4	13.2	12.8	13.6	9.1	1.4
Sex								
Male	100.0	34.2	14.1	13.4	13.2	13.6	9.8	1.6
Female	100.0	37.0	14.6	13.0	12.3	13.5	8.4	1.3
Age								
Under 6 years	100.0	15.7	5.4	3.1	0.8	*0.0	74.3	0.6
6-16 years	100.0	46.2	18.3	14.1	8.9	2.3	8.8	1.3
17-24 years	100.0	36.7	18.2	17.6	15.7	6.7	3.2	1.9
25-44 years	100.0	38.1	16.1	16.3	15.6	11.0	1.2	1.5
45-64 years	100.0	36.3	12.6	12.1	14.9	22.0	0.7	1.4
65 years and over	100.0	24.3	8.2	7.7	13.8	44.0	0.6	1.3
Under 5 years	100.0	10.8	3.5	2.2	0.4	...	82.6	0.5
5-14 years	100.0	46.2	17.9	13.4	7.9	1.6	11.6	1.3
15-24 years	100.0	38.2	18.3	17.1	14.7	6.2	3.6	1.8
Race								
White	100.0	37.6	14.6	12.8	12.2	13.4	8.1	1.3
All other	100.0	22.9	12.8	15.7	16.6	14.3	15.6	2.1
Family income								
Less than \$3,000	100.0	23.8	11.3	12.2	14.9	25.3	11.0	1.5
\$3,000-\$4,999	100.0	22.5	11.3	12.3	15.5	26.6	10.8	1.0
\$5,000-\$6,999	100.0	24.9	11.4	12.6	15.8	23.0	11.3	0.9
\$7,000-\$9,999	100.0	26.2	12.2	13.4	16.2	18.8	12.1	1.1
\$10,000-\$14,999	100.0	31.2	13.8	14.0	14.7	13.9	11.2	1.1
\$15,000 or more	100.0	44.0	16.4	13.3	10.4	7.7	6.9	1.2
\$15,000-\$24,999	100.0	39.3	15.8	14.0	11.8	9.3	8.7	1.0
\$25,000 or more	100.0	49.4	7.1	12.5	8.8	5.9	4.7	1.5
Education of head of family								
Less than 9 years	100.0	20.1	9.5	11.7	16.5	29.5	11.2	1.5
9-12 years	100.0	33.9	14.4	14.1	13.7	13.1	9.5	1.3
9-11 years	100.0	28.2	12.6	13.7	15.3	18.0	10.8	1.5
12 years	100.0	36.4	15.2	14.2	13.0	11.0	8.9	1.3
13 years or more	100.0	47.1	17.1	12.6	9.3	5.4	7.3	1.2
13-15 years	100.0	41.7	16.9	13.7	11.3	7.2	8.0	1.1
16 years or more	100.0	51.9	17.3	11.6	7.6	3.8	6.7	1.2
Usual activity status								
Preschool (under 6 years)	100.0	15.7	5.4	3.1	0.8	*0.0	74.3	0.6
School age (6-16 years)	100.0	46.2	18.3	14.1	8.9	2.3	8.8	1.3
Usually working (17 years and over)	100.0	37.7	15.1	15.3	15.3	13.7	1.3	1.5
Usually keeping house (female, 17 years and over)	100.0	32.4	12.8	12.7	15.6	24.5	1.1	0.9
Retired (45 years and over)	100.0	23.8	8.4	8.5	14.6	42.7	0.8	1.2
Retired for health reasons (45 years and over)	100.0	19.9	7.9	9.2	15.9	45.0	1.2	1.0
Retired for other reasons (45 years and over)	100.0	25.7	8.6	8.2	14.0	41.6	0.6	1.3
Other activity (17 years and over)	100.0	36.5	18.2	15.2	13.7	10.4	3.0	3.1
Usually going to school (17 years and over)	100.0	42.2	21.0	16.1	11.9	4.0	2.5	2.2
Other (17 years and over)	100.0	23.0	11.5	13.1	17.8	25.4	4.0	5.2
Place of residence								
All SMSA	100.0	37.2	14.9	13.5	12.4	11.9	8.7	1.5
Outside SMSA:								
Nonfarm	100.0	32.1	13.2	12.6	13.5	17.1	10.2	1.2
Farm	100.0	34.5	14.1	12.3	13.3	17.2	7.6	1.0
Geographic region								
Northeast	100.0	40.0	14.9	12.3	11.4	13.3	6.7	1.4
North Central	100.0	36.4	15.4	12.9	12.1	13.8	8.0	1.3
South	100.0	31.5	12.6	13.3	14.2	15.4	11.5	1.6
West	100.0	36.7	15.3	14.4	12.7	10.3	9.2	1.3

¹Includes unknown income and education.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 3. Average annual number of dental visits and number of dental visits per person per year, by race, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	Total	White	All other	Total	White	All other
	Average number of visits in thousands			Number of visits per person per year		
Both sexes						
All ages	354,375	322,529	31,845	1.6	1.7	1.1
Under 6 years	10,434	9,004	1,430	0.6	0.6	0.4
6-16 years	84,024	76,141	7,883	2.1	2.3	1.2
17-24 years	50,125	45,646	4,479	1.6	1.7	1.0
25-44 years	99,989	90,131	9,858	1.7	1.8	1.3
45-64 years	79,420	73,433	5,987	1.8	1.9	1.3
65 years and over	30,382	28,174	2,208	1.3	1.4	1.0
Under 5 years	6,129	5,224	906	0.4	0.4	0.3
5-14 years	70,539	63,543	6,996	2.0	2.2	1.2
15-24 years	67,915	62,024	5,891	1.7	1.8	1.0
Male						
All ages	155,581	141,464	14,117	1.5	1.6	1.0
Under 6 years	4,371	3,688	683	0.5	0.5	0.4
6-16 years	39,935	35,804	4,131	2.0	2.1	1.2
17-24 years	20,931	18,985	1,947	1.3	1.4	0.9
25-44 years	43,501	39,646	3,854	1.6	1.6	1.2
45-64 years	35,864	33,229	2,634	1.7	1.8	1.2
65 years and over	10,979	10,111	868	1.2	1.2	0.9
Under 5 years	2,519	2,103	*416	0.3	0.3	*0.3
5-14 years	33,706	30,063	3,643	1.9	2.0	1.2
15-24 years	29,012	26,311	2,701	1.5	1.6	1.0
Female						
All ages	198,793	181,065	17,728	1.8	1.9	1.1
Under 6 years	6,063	5,316	747	0.7	0.7	0.5
6-16 years	44,089	40,337	3,752	2.2	2.5	1.1
17-24 years	29,194	26,661	2,533	1.8	1.9	1.0
25-44 years	56,488	50,485	6,003	1.9	2.0	1.4
45-64 years	43,556	40,203	3,353	1.9	2.0	1.3
65 years and over	19,403	18,063	1,340	1.4	1.5	1.1
Under 5 years	3,610	3,121	*489	0.5	0.5	*0.4
5-14 years	36,833	33,480	3,353	2.1	2.4	1.1
15-24 years	38,903	35,713	3,190	1.9	2.1	1.0

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 4. Average annual number of dental visits and number of dental visits per person per year, by race, family income, and age: United States, 1978 and 1979
 [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>Family income and age</i>	<i>Total</i>	<i>White</i>	<i>All other</i>	<i>Total</i>	<i>White</i>	<i>All other</i>
	Average number of visits in thousands			Number of visits per person per year		
All incomes¹						
All ages	354,375	322,529	31,845	1.6	1.7	1.1
Under 6 years	10,434	9,004	1,430	0.6	0.6	0.4
6-16 years	84,024	76,141	7,883	2.1	2.3	1.2
17-24 years	50,125	45,646	4,479	1.6	1.7	1.0
25-44 years	99,989	90,131	9,858	1.7	1.8	1.3
45-64 years	79,420	73,433	5,987	1.8	1.9	1.3
65 years and over	30,382	28,174	2,208	1.3	1.4	1.0
Under 5 years	6,129	5,224	906	0.4	0.4	0.3
5-14 years	70,539	63,543	6,996	2.0	2.2	1.2
15-24 years	67,915	62,024	5,891	1.7	1.8	1.0
Less than \$10,000						
All ages	66,004	54,595	11,409	1.2	1.2	0.9
Under 6 years	2,575	1,929	646	0.5	0.5	0.4
6-16 years	12,398	9,294	3,104	1.4	1.6	1.0
17-24 years	13,534	11,881	1,853	1.3	1.5	0.9
25-44 years	13,180	10,518	2,663	1.3	1.3	1.1
45-64 years	11,293	9,326	1,967	1.2	1.2	1.1
65 years and over	13,024	11,848	1,176	1.0	1.0	0.8
Under 5 years	1,455	1,046	*409	0.3	0.3	*0.3
5-14 years	11,097	8,413	2,685	1.4	1.6	1.0
15-24 years	15,954	13,444	2,510	1.4	1.5	0.9
\$10,000 and over						
All ages	258,392	241,738	16,655	1.9	1.9	1.4
Under 6 years	7,114	6,515	599	0.6	0.6	0.5
6-16 years	65,247	61,042	4,205	2.4	2.5	1.5
17-24 years	33,100	30,977	2,123	1.7	1.8	1.2
25-44 years	79,626	73,808	6,018	1.8	1.9	1.5
45-64 years	60,328	57,114	3,215	2.1	2.1	1.6
65 years and over	12,977	12,482	*495	1.9	1.9	*1.4
Under 5 years	4,212	3,825	*387	0.4	0.4	*0.4
5-14 years	54,406	50,565	3,841	2.3	2.4	1.6
15-24 years	46,843	44,145	2,699	1.9	2.0	1.2

¹Includes unknown income.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 5. Average annual number of dental visits, by family income, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	All incomes ¹	Family income							
		Less than \$3,000	\$3,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000-\$14,999	\$15,000 or more	\$15,000-\$24,999	\$25,000 or more
Average annual number of visits in thousands									
Both sexes									
All ages	354,375	10,885	14,408	17,405	23,305	49,593	208,800	99,781	109,019
Under 6 years	10,434	*383	715	629	847	1,507	5,607	3,535	2,072
6-16 years	84,024	1,649	2,634	3,509	4,606	10,510	54,737	25,510	29,227
17-24 years	50,125	3,610	2,326	3,561	4,037	7,622	25,478	11,737	13,741
25-44 years	99,989	1,825	2,886	3,501	4,968	14,787	64,838	33,619	31,220
45-64 years	79,420	1,702	1,910	2,992	4,689	10,428	49,900	21,300	28,600
65 years and over	30,382	1,716	3,938	3,212	4,157	4,738	8,239	4,081	4,158
Under 5 years	6,129	*270	*385	*325	*475	946	3,266	1,820	1,446
5-14 years	70,539	1,485	2,423	3,130	4,059	9,322	45,084	22,490	22,594
15-24 years	67,915	3,887	2,866	4,245	4,956	9,372	37,472	16,472	21,000
Male									
All ages	155,581	3,831	5,467	6,220	9,348	20,188	98,294	45,387	52,907
Under 6 years	4,371	*191	*383	*212	*244	*443	2,534	1,578	956
6-16 years	39,935	697	1,331	1,505	2,295	5,166	26,135	12,157	13,978
17-24 years	20,931	1,133	958	1,446	1,568	3,213	10,985	4,695	6,291
25-44 years	43,501	711	1,000	997	2,183	5,920	29,726	15,314	14,411
45-64 years	35,864	554	*498	956	1,418	3,723	25,436	10,055	15,381
65 years and over	10,979	*544	1,297	1,102	1,642	1,723	3,478	1,588	1,891
Under 5 years	2,519	*145	*174	*93	*123	*321	1,492	810	682
5-14 years	33,706	719	1,335	1,301	1,925	4,585	21,449	10,733	10,716
15-24 years	29,012	1,158	1,163	1,770	2,058	3,915	16,713	6,887	9,826
Female									
All ages	198,793	7,054	8,941	11,185	13,957	29,405	110,505	54,394	56,111
Under 6 years	6,063	*192	*332	*417	604	1,065	3,073	1,956	1,116
6-16 years	44,089	952	1,303	2,003	2,311	5,344	28,602	13,353	15,249
17-24 years	29,194	2,476	1,368	2,115	2,470	4,409	14,492	7,042	7,450
25-44 years	56,488	1,114	1,886	2,504	2,786	8,867	35,113	18,304	16,808
45-64 years	43,556	1,148	1,412	2,036	3,271	6,705	24,464	11,245	13,219
65 years and over	19,403	1,172	2,641	2,110	2,515	3,015	4,761	2,493	2,268
Under 5 years	3,610	*125	*211	*232	*352	625	1,774	1,010	764
5-14 years	36,833	767	1,088	1,829	2,134	4,737	23,635	11,758	11,877
15-24 years	38,903	2,729	1,703	2,474	2,898	5,456	20,759	9,585	11,174

¹Includes unknown income.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 6. Number of dental visits per person per year, by family income, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	All incomes ¹	Family income							
		Less than \$3,000	\$3,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000-\$14,999	\$15,000 or more	\$15,000-\$24,999	\$25,000 or more
Both sexes		Number of visits per person per year							
All ages	1.6	1.1	1.1	1.2	1.2	1.4	2.0	1.8	2.3
Under 6 years	0.6	*0.4	0.6	0.5	0.5	0.4	0.7	0.7	0.7
6-16 years	2.1	1.3	1.4	1.5	1.4	1.6	2.6	2.3	3.0
17-24 years	1.6	1.5	1.2	1.5	1.2	1.5	1.9	1.7	2.0
25-44 years	1.7	1.3	1.5	1.3	1.2	1.4	2.0	1.8	2.1
45-64 years	1.8	1.2	1.0	1.2	1.3	1.6	2.2	2.0	2.5
65 years and over	1.3	0.8	1.0	0.9	1.3	1.6	2.1	1.9	2.5
Under 5 years	0.4	*0.4	*0.4	*0.3	*0.3	0.3	0.5	0.4	0.6
5-14 years	2.0	1.4	1.4	1.5	1.4	1.6	2.5	2.2	2.9
15-24 years	1.7	1.5	1.2	1.5	1.3	1.5	2.1	1.8	2.3
Male									
All ages	1.5	1.0	1.0	0.9	1.0	1.2	1.9	1.6	2.2
Under 6 years	0.5	*0.5	*0.6	*0.3	*0.3	*0.2	0.6	0.6	0.7
6-16 years	2.0	1.1	1.3	1.3	1.4	1.6	2.4	2.1	2.8
17-24 years	1.3	1.1	1.1	1.3	1.0	1.3	1.6	1.4	1.7
25-44 years	1.6	1.3	1.3	0.9	1.1	1.2	1.8	1.6	2.0
45-64 years	1.7	1.1	*0.8	1.0	1.0	1.2	2.1	1.8	2.4
65 years and over	1.2	*1.0	1.0	0.7	1.1	1.2	1.9	1.6	2.4
Under 5 years	0.3	*0.4	*0.3	*0.2	*0.2	*0.2	0.4	0.4	0.6
5-14 years	1.9	1.4	1.4	1.2	1.3	1.5	2.3	2.1	2.7
15-24 years	1.5	1.0	1.1	1.3	1.1	1.2	1.8	1.6	2.0
Female									
All ages	1.8	1.2	1.2	1.3	1.3	1.6	2.2	2.0	2.5
Under 6 years	0.7	*0.4	*0.6	*0.6	0.7	0.6	0.8	0.8	0.8
6-16 years	2.2	1.6	1.4	1.7	1.4	1.7	2.8	2.4	3.2
17-24 years	1.8	1.8	1.3	1.8	1.4	1.8	2.1	2.0	2.3
25-44 years	1.9	1.4	1.5	1.6	1.2	1.7	2.1	2.0	2.3
45-64 years	1.9	1.2	1.1	1.3	1.6	1.9	2.4	2.2	2.5
65 years and over	1.4	0.7	1.0	1.1	1.5	2.0	2.3	2.1	2.5
Under 5 years	0.5	*0.3	*0.4	*0.4	*0.5	0.4	0.6	0.5	0.7
5-14 years	2.1	1.5	1.3	1.7	1.4	1.6	2.7	2.4	3.1
15-24 years	1.9	1.8	1.4	1.6	1.4	1.6	2.3	2.1	2.6

¹Includes unknown income.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 7. Average annual number of dental visits, by education of head of family, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	All educational groups ¹	Education of head of family						
		Less than 9 years	9-12 years	9-11 years	12 years	13 years or more	13-15 years	16 years or more
Both sexes		Average number of visits in thousands						
All ages	354,375	35,959	158,804	42,571	116,233	155,164	64,409	90,755
Under 6 years	10,434	783	4,932	1,229	3,703	4,569	1,872	2,696
6-16 years	84,024	7,456	40,324	10,690	29,634	35,376	13,974	21,401
17-24 years	50,125	3,856	25,697	6,650	19,047	20,124	10,922	9,202
25-44 years	99,989	6,002	40,763	9,802	30,961	52,445	21,369	31,076
45-64 years	79,420	9,794	35,332	9,708	25,624	32,813	12,205	20,609
65 years and over	30,382	8,068	11,757	4,493	7,264	9,838	4,067	5,771
Under 5 years	6,129	*356	2,791	707	2,085	2,904	1,206	1,698
5-14 years	70,539	5,807	34,022	8,982	25,041	29,973	12,046	17,926
15-24 years	67,915	5,932	34,139	8,880	25,259	27,191	13,516	13,675
Male								
All ages	155,581	13,867	68,325	18,453	49,872	71,920	28,274	43,646
Under 6 years	4,371	*243	2,089	598	1,491	1,935	699	1,235
6-16 years	39,935	3,451	19,088	5,305	13,783	16,986	6,227	10,759
17-24 years	20,931	1,390	10,916	2,641	8,275	8,510	4,296	4,214
25-44 years	43,501	1,865	16,883	4,072	12,811	24,492	9,435	15,057
45-64 years	35,864	4,154	15,395	4,153	11,242	15,911	5,772	10,139
65 years and over	10,979	2,765	3,953	1,683	2,270	4,085	1,844	2,241
Under 5 years	2,519	*49	1,077	*336	741	1,315	*485	830
5-14 years	33,706	2,723	16,539	4,665	11,874	14,055	5,112	8,944
15-24 years	29,012	2,311	14,478	3,543	10,935	12,061	5,626	6,435
Female								
All ages	198,793	22,092	90,479	24,118	66,361	83,244	36,135	47,109
Under 6 years	6,063	*540	2,843	631	2,212	2,634	1,173	1,461
6-16 years	44,089	4,005	21,235	5,384	15,851	18,390	7,747	10,842
17-24 years	29,184	2,466	14,780	4,008	10,772	11,613	6,626	4,987
25-44 years	56,488	4,138	23,880	5,729	18,151	27,953	11,934	16,018
45-64 years	43,558	5,839	19,937	5,555	14,383	16,902	6,432	10,470
65 years and over	19,403	5,304	7,804	2,810	4,993	5,752	2,223	3,530
Under 5 years	3,610	*307	1,714	*370	1,344	1,589	721	868
5-14 years	36,833	3,083	17,483	4,317	13,167	15,918	6,935	8,983
15-24 years	38,903	3,621	19,661	5,337	14,324	15,130	7,891	7,240

¹Includes unknown education.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 8. Number of dental visits per person per year, by education of head of family, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	All educational groups ¹	Education of head of family						
		Less than 9 years	9-12 years	9-11 years	12 years	13 years or more	13-15 years	16 years or more
Both sexes		Number of visits per person per year						
All ages	1.6	1.0	1.5	1.3	1.6	2.3	2.0	2.5
Under 6 years	0.6	0.4	0.5	0.4	0.5	0.7	0.6	0.8
6-16 years	2.1	1.2	1.9	1.6	2.0	2.9	2.5	3.2
17-24 years	1.6	1.0	1.5	1.3	1.6	2.0	1.8	2.2
25-44 years	1.7	1.1	1.5	1.4	1.5	2.2	2.0	2.3
45-64 years	1.8	1.0	1.7	1.4	1.8	2.8	2.4	3.1
65 years and over	1.3	0.8	1.4	1.3	1.4	2.3	2.0	2.6
Under 5 years	0.4	*0.2	0.3	0.3	0.4	0.5	0.5	0.6
5-14 years	2.0	1.2	1.9	1.6	2.0	2.7	2.4	3.0
15-24 years	1.7	1.1	1.6	1.4	1.7	2.2	1.9	2.6
Male								
All ages	1.5	0.8	1.4	1.2	1.4	2.1	1.8	2.4
Under 6 years	0.5	*0.2	0.4	0.4	0.4	0.6	0.4	0.7
6-16 years	2.0	1.1	1.8	1.6	1.9	2.7	2.2	3.2
17-24 years	1.3	0.7	1.3	1.0	1.4	1.8	1.5	2.2
25-44 years	1.6	0.7	1.3	1.3	1.3	2.0	1.8	2.2
45-64 years	1.7	1.0	1.5	1.3	1.7	2.7	2.3	3.0
65 years and over	1.2	0.7	1.2	1.2	1.2	2.4	2.4	2.4
Under 5 years	0.3	*0.1	0.3	*0.3	0.3	0.5	*0.4	0.6
5-14 years	1.9	1.1	1.8	1.6	1.8	2.5	2.0	2.9
15-24 years	1.5	0.8	1.4	1.1	1.5	2.0	1.7	2.5
Female								
All ages	1.8	1.1	1.6	1.4	1.7	2.4	2.2	2.6
Under 6 years	0.7	*0.5	0.6	0.4	0.7	0.8	0.8	0.9
6-16 years	2.2	1.3	2.1	1.7	2.2	3.0	2.7	3.3
17-24 years	1.8	1.3	1.6	1.5	1.7	2.2	2.2	2.3
25-44 years	1.9	1.4	1.7	1.5	1.7	2.3	2.3	2.3
45-64 years	1.9	1.1	1.8	1.5	1.9	2.9	2.5	3.3
65 years and over	1.4	1.0	1.5	1.3	1.6	2.3	1.8	2.7
Under 5 years	0.5	*0.4	0.4	*0.3	0.5	0.6	0.6	0.6
5-14 years	2.1	1.2	2.0	1.6	2.1	2.9	2.7	3.1
15-24 years	1.9	1.4	1.8	1.6	1.8	2.4	2.2	2.6

¹Includes unknown education.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 9. Average annual number of dental visits, by education of head of family, family income, and age: United States, 1978 and 1979

[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]

Family income and age	All educational groups ¹	Education of head of family						
		Less than 9 years	9-12 years	9-11 years	12 years	13 years or more	13-15 years	16 years or more
All incomes ²		Average number of visits in thousands						
All ages	354,375	35,959	158,804	42,571	116,233	155,164	64,409	90,755
Under 6 years	10,434	783	4,932	1,229	3,703	4,569	1,872	2,696
6-16 years	84,024	7,456	40,324	10,690	29,634	35,376	13,974	21,401
17-24 years	50,125	3,856	25,697	6,650	19,047	20,124	10,922	9,202
25-44 years	99,989	6,002	40,763	9,802	30,961	52,445	21,369	31,076
45-64 years	79,420	9,794	35,332	9,708	25,624	32,813	12,205	20,609
65 years and over	30,382	8,068	11,757	4,493	7,264	9,838	4,067	5,771
Under 5 years	6,129	*356	2,791	707	2,085	2,904	1,206	1,698
5-14 years	70,539	5,807	34,022	8,982	25,041	29,973	12,046	17,926
15-24 years	67,915	5,932	34,139	8,880	25,259	27,191	13,516	13,675
Less than \$10,000								
All ages	66,004	14,886	35,073	14,051	21,021	14,852	9,589	5,263
Under 6 years	2,575	*439	1,845	730	1,116	*290	*100	*191
6-16 years	12,398	3,599	7,119	3,383	3,736	1,463	977	*486
17-24 years	13,534	1,305	7,178	2,548	4,631	4,988	3,987	1,001
25-44 years	13,180	1,885	7,176	2,569	4,607	4,025	2,271	1,754
45-64 years	11,293	2,715	6,450	2,580	3,869	1,647	1,051	596
65 years and over	13,024	4,943	5,304	2,241	3,062	2,439	1,203	1,235
Under 5 years	1,455	*113	1,174	*397	777	*168	*49	*119
5-14 years	11,097	2,879	6,695	3,206	3,489	1,397	893	*504
15-24 years	15,954	2,350	8,273	3,056	5,217	5,176	4,122	1,054
\$10,000 or more								
All ages	258,392	16,811	110,077	24,619	85,458	130,060	50,382	79,678
Under 6 years	7,114	*273	2,657	*358	2,298	4,112	1,653	2,458
6-16 years	65,247	3,251	30,131	6,422	23,709	31,374	11,941	19,433
17-24 years	33,100	2,051	16,838	3,603	13,236	14,101	6,350	7,751
25-44 years	79,626	3,340	29,899	6,174	23,725	46,081	18,162	27,919
45-64 years	60,328	5,848	25,622	6,404	19,217	28,267	9,861	18,406
65 years and over	12,977	1,848	4,930	1,656	3,274	6,125	2,414	3,711
Under 5 years	4,212	*194	1,377	*218	1,159	2,592	1,060	1,531
5-14 years	54,406	2,482	24,878	5,024	19,855	26,598	10,316	16,283
15-24 years	46,843	2,899	23,371	5,142	18,229	20,396	8,569	11,828

¹Includes unknown education.

²Includes unknown income.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 10. Number of dental visits per person per year, by education of head of family, family income, and age: United States, 1978 and 1979

[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.]

Family income and age	All educational groups ¹	Education of head of family						
		Less than 9 years	9-12 years	9-11 years	12 years	13 years or more	13-15 years	16 years or more
All incomes ²		Number of visits per person per year						
All ages	1.6	1.0	1.5	1.3	1.6	2.3	2.0	2.5
Under 6 years	0.6	0.4	0.5	0.4	0.5	0.7	0.6	0.8
6-16 years	2.1	1.2	1.9	1.6	2.0	2.9	2.5	3.2
17-24 years	1.6	1.0	1.5	1.3	1.6	2.0	1.8	2.2
25-44 years	1.7	1.1	1.5	1.4	1.5	2.2	2.0	2.3
45-64 years	1.8	1.0	1.7	1.4	1.8	2.8	2.4	3.1
65 years and over	1.3	0.8	1.4	1.3	1.4	2.3	2.0	2.6
Under 5 years	0.4	*0.2	0.3	0.3	0.4	0.5	0.5	0.6
5-14 years	2.0	1.2	1.9	1.6	2.0	2.7	2.4	3.0
15-24 years	1.7	1.1	1.6	1.4	1.7	2.2	1.9	2.6
Less than \$10,000								
All ages	1.2	0.8	1.2	1.2	1.3	1.6	1.5	1.7
Under 6 years	0.5	*0.4	0.6	0.5	0.6	*0.4	*0.2	*1.0
6-16 years	1.4	1.3	1.4	1.5	1.4	1.5	1.3	*2.2
17-24 years	1.3	0.9	1.3	1.3	1.3	1.7	1.7	1.4
25-44 years	1.3	0.9	1.3	1.2	1.3	1.6	1.6	1.6
45-64 years	1.2	0.7	1.5	1.3	1.6	1.9	1.9	1.8
65 years and over	1.0	0.7	1.2	1.0	1.3	1.8	1.5	2.4
Under 5 years	0.3	*0.1	0.4	*0.3	0.5	*0.3	*0.1	*0.7
5-14 years	1.4	1.2	1.5	1.5	1.4	1.5	1.3	*2.5
15-24 years	1.4	1.1	1.3	1.3	1.3	1.6	1.7	1.4
\$10,000 or more								
All ages	1.9	1.2	1.6	1.4	1.7	2.4	2.1	2.6
Under 6 years	0.6	*0.4	0.5	*0.3	0.5	0.8	0.7	0.8
6-16 years	2.4	1.3	2.1	1.8	2.2	3.0	2.6	3.3
17-24 years	1.7	1.1	1.6	1.3	1.7	2.2	1.9	2.4
25-44 years	1.8	1.2	1.5	1.4	1.5	2.3	2.1	2.3
45-64 years	2.1	1.4	1.8	1.5	1.9	2.9	2.4	3.2
65 years and over	1.9	1.2	1.7	1.7	1.7	2.6	2.6	2.6
Under 5 years	0.4	*0.3	0.3	*0.2	0.3	0.6	0.5	0.6
5-14 years	2.3	1.2	2.0	1.7	2.1	2.8	2.5	3.0
15-24 years	1.9	1.1	1.7	1.5	1.8	2.4	2.1	2.8

¹Includes unknown education.

²Includes unknown income.

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 11. Average annual number of dental visits and number of dental visits per person per year, by sex, usual activity status, and age: United States, 1978 and 1979

[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 11]

Usual activity status and age	Both sexes			Both sexes		
	Male	Female	Both sexes	Male	Female	Female
All activities	Average number of visits in thousands			Number of visits per person per year		
All ages	354,375	155,581	198,793	1.6	1.5	1.8
Under 6 years	10,434	4,371	6,063	0.6	0.5	0.7
6-16 years	84,024	39,935	44,089	2.1	2.0	2.2
17-24 years	50,125	20,931	29,194	1.6	1.3	1.8
25-44 years	99,989	43,501	56,488	1.7	1.6	1.9
45-64 years	79,420	35,864	43,556	1.8	1.7	1.9
65 years and over	30,382	10,979	19,403	1.3	1.2	1.4
Under 5 years	6,129	2,519	3,610	0.4	0.3	0.5
5-14 years	70,539	33,706	36,833	2.0	1.9	2.1
15-24 years	67,915	29,012	38,903	1.7	1.5	1.9
Preschool (under 6 years)	10,434	4,371	6,063	0.6	0.5	0.7
School age (6-16 years)	84,024	39,935	44,089	2.1	2.0	2.2
Usually working (17 years and over)	152,754	84,523	68,231	1.7	1.6	1.9
17-24 years	23,421	10,307	13,115	1.5	1.2	1.8
25-44 years	72,980	40,784	32,196	1.7	1.6	1.9
45-64 years	51,845	30,701	21,144	1.9	1.8	2.0
65 years and over	4,508	2,731	1,777	1.7	1.6	1.9
Usually keeping house (female, 17 years and over)	62,783	...	62,783	1.6	...	1.6
17-24 years	4,055	...	4,055	1.2	...	1.2
25-44 years	22,370	...	22,370	1.8	...	1.8
45-64 years	20,673	...	20,673	1.8	...	1.8
65 years and over	15,685	...	15,686	1.4	...	1.4
Retired (45 years and over)	14,170	11,934	2,236	1.2	1.2	1.8
45-64 years	4,789	3,953	837	1.6	1.5	2.6
65 years and over	9,381	7,982	1,400	1.1	1.1	1.6
Retired for health reasons (45 years and over)	4,112	3,302	810	1.1	1.0	1.9
45-64 years	2,649	2,145	*504	1.5	1.3	*2.7
65 years and over	1,463	1,157	*306	0.8	0.7	*1.3
Retired for other reasons (45 years and over)	10,058	8,633	1,426	1.3	1.3	1.8
45-64 years	2,140	1,808	*332	1.8	1.7	*2.6
65 years and over	7,918	6,825	1,093	1.2	1.2	1.6
Other activity (17 years and over)	30,208	14,818	15,390	1.7	1.5	1.9
17-24 years	22,649	10,624	12,024	1.8	1.6	2.1
25-44 years	4,639	2,717	1,923	1.6	1.4	2.0
45-64 years	2,113	1,210	903	1.4	1.2	1.9
65 years and over	808	*267	*541	0.7	*0.8	*0.7
Usually going to school (17 years and over)	24,212	11,494	12,718	1.9	1.8	2.1
17-24 years	21,157	9,812	11,345	1.9	1.7	2.1
25-44 years	2,586	1,479	1,107	2.1	2.3	1.9
45-64 years	*345	*128	*216	*1.9	*1.8	*2.0
65 years and over	*124	*74	*50	*1.6	*2.2	*1.2
Other (17 years and over)	5,996	3,324	2,672	1.1	1.0	1.4
17-24 years	1,491	812	679	1.1	0.9	1.5
25-44 years	2,053	1,237	816	1.2	0.9	2.2
45-64 years	1,768	1,082	687	1.3	1.1	1.8
65 years and over	684	*193	*491	0.7	*0.6	*0.7

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 12. Average annual number of dental visits and number of dental visits per person per year, by place of residence, sex, and age:
United States, 1978 and 1979

[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.]

Sex and age	All areas	All SMSA	Outside SMSA		All areas	All SMSA	Outside SMSA	
			Nonfarm	Farm			Nonfarm	Farm
Both sexes								
	Average number of visits in thousands				Number of visits per person per year			
All ages	354,375	264,351	82,859	7,165	1.6	1.8	1.3	1.2
Under 6 years	10,434	7,598	2,679	*158	0.6	0.6	0.5	*0.4
6-16 years	84,024	60,095	21,709	2,220	2.1	2.2	1.8	1.9
17-24 years	50,125	36,363	12,894	868	1.6	1.6	1.4	1.1
25-44 years	99,989	76,470	21,768	1,751	1.7	1.9	1.4	1.3
45-64 years	79,420	61,271	16,486	1,662	1.8	2.0	1.4	1.1
65 years and over	30,382	22,554	7,322	*506	1.3	1.5	1.0	*0.6
Under 5 years	6,129	4,201	1,814	*114	0.4	0.4	0.4	*0.3
5-14 years	70,539	50,682	18,204	1,654	2.0	2.2	1.7	1.7
15-24 years	67,915	49,173	17,265	1,477	1.7	1.8	1.5	1.4
Male								
All ages	155,581	116,815	35,558	3,208	1.5	1.7	1.2	1.0
Under 6 years	4,371	3,174	1,132	*66	0.5	0.5	0.4	*0.3
6-16 years	39,935	28,471	10,463	1,001	2.0	2.1	1.7	1.6
17-24 years	20,931	15,171	5,393	*367	1.3	1.4	1.2	*0.8
25-44 years	43,501	33,524	9,291	686	1.6	1.7	1.2	1.0
45-64 years	35,864	28,226	6,858	779	1.7	2.0	1.2	1.0
65 years and over	10,979	8,249	2,422	*309	1.2	1.4	0.8	*0.8
Under 5 years	2,519	1,745	731	*43	0.3	0.3	0.3	*0.2
5-14 years	33,706	24,273	8,739	695	1.9	2.0	1.6	1.4
15-24 years	29,012	20,798	7,517	697	1.5	1.6	1.3	1.2
Female								
All ages	198,793	147,535	47,301	3,957	1.8	1.9	1.5	1.4
Under 6 years	6,063	4,424	1,547	*92	0.7	0.7	0.6	*0.5
6-16 years	44,089	31,624	11,246	1,219	2.2	2.4	1.9	2.1
17-24 years	29,194	21,191	7,501	*501	1.8	1.8	1.7	*1.6
25-44 years	56,488	42,946	12,477	1,066	1.9	2.0	1.5	1.6
45-64 years	43,558	33,045	9,629	883	1.9	2.1	1.5	1.1
65 years and over	19,403	14,306	4,900	*197	1.4	1.6	1.1	*0.5
Under 5 years	3,610	2,455	1,083	*72	0.5	0.5	0.5	*0.5
5-14 years	36,833	26,409	9,465	959	2.1	2.3	1.8	2.1
15-24 years	38,903	28,375	9,747	781	1.9	2.0	1.7	1.7

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 13. Average annual number of dental visits, by geographic region, sex, and age: United States, 1978 and 1979

[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>Sex and age</i>	<i>All regions</i>	<i>Northeast</i>	<i>North Central</i>	<i>South</i>	<i>West</i>
Both sexes					
	Average number of visits in thousands				
All ages	354,375	94,371	92,393	96,652	70,959
Under 6 years	10,434	2,317	2,703	3,114	2,301
6-16 years	84,024	21,672	22,764	21,810	17,778
17-24 years	50,125	13,493	13,734	13,431	9,468
25-44 years	99,989	25,591	26,474	26,887	21,038
45-64 years	79,420	22,753	19,704	22,345	14,618
65 years and over	30,382	8,545	7,015	9,066	5,757
Under 5 years	6,129	1,146	1,552	1,998	1,433
5-14 years	70,539	18,212	19,349	17,970	15,008
15-24 years	67,915	18,123	18,300	18,387	13,105
Male					
All ages	155,581	41,281	41,446	41,408	31,446
Under 6 years	4,371	893	1,227	1,472	779
6-16 years	39,935	10,133	11,001	9,888	8,913
17-24 years	20,931	5,352	6,456	5,733	3,390
25-44 years	43,501	11,014	11,515	11,614	9,357
45-64 years	35,864	10,353	8,880	9,731	6,900
65 years and over	10,979	3,535	2,368	2,970	2,106
Under 5 years	2,519	*483	578	1,066	*393
5-14 years	33,706	8,385	9,685	8,221	7,415
15-24 years	29,012	7,510	8,421	7,806	5,275
Female					
All ages	198,793	53,090	50,947	55,244	39,513
Under 6 years	6,063	1,423	1,476	1,642	1,522
6-16 years	44,089	11,539	11,763	11,922	8,865
17-24 years	29,194	8,140	7,278	7,698	6,078
25-44 years	56,488	14,577	14,959	15,272	11,680
45-64 years	43,556	12,400	10,824	12,614	7,718
65 years and over	19,403	5,010	4,647	6,096	3,651
Under 5 years	3,610	663	974	932	1,040
5-14 years	36,833	9,827	9,664	9,749	7,593
15-24 years	38,903	10,613	9,879	10,581	7,830

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 14. Number of dental visits per person per year, by geographic region, sex, and age: United States, 1978 and 1979

[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>Sex and age</i>	<i>All regions</i>	<i>Northeast</i>	<i>North Central</i>	<i>South</i>	<i>West</i>
Both sexes					
	Number of visits per person per year				
All ages	1.6	2.0	1.6	1.4	1.8
Under 6 years	0.6	0.6	0.5	0.5	0.6
6-16 years	2.1	2.5	2.1	1.6	2.5
17-24 years	1.6	2.0	1.5	1.3	1.6
25-44 years	1.7	2.0	1.7	1.5	1.9
45-64 years	1.8	2.1	1.8	1.6	1.9
65 years and over	1.3	1.6	1.2	1.2	1.5
Under 5 years	0.4	0.4	0.4	0.4	0.5
5-14 years	2.0	2.4	2.1	1.5	2.4
15-24 years	1.7	2.1	1.6	1.4	1.8
Male					
All ages	1.5	1.8	1.5	1.2	1.6
Under 6 years	0.5	0.5	0.5	0.5	0.4
6-16 years	2.0	2.3	2.0	1.4	2.4
17-24 years	1.3	1.6	1.5	1.2	1.2
25-44 years	1.6	1.8	1.5	1.3	1.7
45-64 years	1.7	2.0	1.7	1.5	1.8
65 years and over	1.2	1.6	1.0	0.9	1.3
Under 5 years	0.3	*0.3	0.3	0.4	*0.3
5-14 years	1.9	2.2	2.0	1.4	2.3
15-24 years	1.5	1.8	1.5	1.2	1.5
Female					
All ages	1.8	2.1	1.7	1.5	2.0
Under 6 years	0.7	0.8	0.6	0.6	0.9
6-16 years	2.2	2.7	2.2	1.8	2.5
17-24 years	1.8	2.3	1.6	1.5	2.0
25-44 years	1.9	2.2	1.9	1.6	2.0
45-64 years	1.9	2.2	1.9	1.7	1.9
65 years and over	1.4	1.5	1.3	1.3	1.7
Under 5 years	0.5	0.4	0.5	0.4	0.7
5-14 years	2.1	2.6	2.1	1.7	2.5
15-24 years	1.9	2.5	1.8	1.6	2.1

NOTE: Relative standard errors of estimates for this table are found in appendix I.

Table 15. Population used in obtaining rates shown in this publication, by race, education of head of family, sex, family income, and age:
United States, 1978 and 1979

[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]

Sex, family income, and age	All persons ¹	Race		Education of head of family						
		White	All other	Less than 9 years	9-12 years	9-11 years	12 years	13 years or more	13-15 years	16 years or more
Both sexes										
Population in thousands										
All ages ²	214,776	185,714	29,062	36,707	105,527	32,156	73,371	68,907	32,225	36,683
Under 6 years	18,537	15,215	3,322	2,063	9,761	2,911	6,850	6,446	3,087	3,359
6-16 years	40,094	33,341	6,753	6,097	21,060	6,513	14,547	12,282	5,658	6,624
17-24 years	31,867	27,198	4,669	4,001	17,374	5,110	12,264	10,065	5,935	4,130
25-44 years	57,784	50,370	7,414	5,546	27,349	7,061	20,287	24,161	10,444	13,717
45-64 years	43,429	38,736	4,694	9,504	21,325	6,970	14,355	11,697	5,078	6,619
65 years and over	23,066	20,856	2,210	9,497	8,658	3,590	5,068	4,267	2,024	2,233
Under 5 years	15,518	12,746	2,772	1,726	8,132	2,413	5,719	5,434	2,612	2,822
5-14 years	34,947	28,956	5,992	5,048	18,378	5,586	12,791	11,031	5,101	5,930
15-24 years	40,032	34,052	5,980	5,387	21,685	6,535	15,150	12,327	6,966	5,362
Male										
All ages	103,635	90,053	13,582	17,240	50,552	15,242	35,310	34,069	15,767	18,302
Under 6 years	9,513	7,835	1,678	1,056	5,015	1,457	3,558	3,312	1,564	1,748
6-16 years	20,392	16,996	3,396	3,056	10,762	3,342	7,420	6,219	2,804	3,415
17-24 years	15,522	13,376	2,147	2,079	8,406	2,517	5,889	4,821	2,895	1,926
25-44 years	27,949	24,687	3,262	2,541	12,969	3,249	9,720	12,089	5,247	6,842
45-64 years	20,754	18,599	2,155	4,343	10,065	3,265	6,800	5,912	2,479	3,433
65 years and over	9,505	8,561	944	4,166	3,335	1,412	1,923	1,715	777	938
Under 5 years	7,935	6,533	1,403	890	4,138	1,192	2,946	2,798	1,323	1,476
5-14 years	17,814	14,801	3,013	2,522	9,437	2,886	6,550	5,599	2,532	3,067
15-24 years	19,678	16,873	2,805	2,778	10,608	3,237	7,371	5,955	3,408	2,546
Female										
All ages	111,142	95,662	15,480	19,467	54,975	16,914	38,060	34,839	16,458	18,381
Under 6 years	9,024	7,380	1,644	1,007	4,745	1,454	3,292	3,134	1,523	1,611
6-16 years	19,702	16,345	3,357	3,041	10,298	3,172	7,127	6,063	2,854	3,209
17-24 years	16,344	13,822	2,522	1,922	8,969	2,693	6,376	5,244	3,039	2,204
25-44 years	29,835	25,683	4,152	3,005	14,380	3,812	10,568	12,071	5,196	6,875
45-64 years	22,676	20,137	2,539	5,161	11,269	3,705	7,564	5,784	2,599	3,185
65 years and over	13,581	12,295	1,286	5,330	5,323	2,178	3,145	2,542	1,246	1,296
Under 5 years	7,583	6,213	1,370	836	3,994	1,221	2,773	2,636	1,289	1,348
5-14 years	17,133	14,154	2,979	2,526	8,941	2,700	6,241	5,432	2,569	2,863
15-24 years	20,355	17,180	3,175	2,609	11,077	3,297	7,780	6,373	3,558	2,815
Less than \$10,000										
All ages	56,940	44,220	12,719	18,369	28,272	11,918	16,354	9,409	6,336	3,073
Under 6 years	5,191	3,535	1,656	1,092	3,301	1,419	1,882	732	534	198
6-16 years	8,926	5,859	3,067	2,779	4,989	2,331	2,658	953	732	221
17-24 years	10,059	7,896	2,162	1,507	5,471	1,936	3,535	3,008	2,306	702
25-44 years	10,315	7,819	2,496	2,156	5,537	2,083	3,454	2,501	1,396	1,105
45-64 years	9,501	7,639	1,862	4,040	4,413	1,940	2,474	886	552	334
65 years and over	12,948	11,472	1,476	6,794	4,560	2,210	2,350	1,329	815	514
Under 5 years	4,431	3,044	1,388	916	2,816	1,199	1,617	641	467	174
5-14 years	7,951	5,196	2,755	2,380	4,555	2,100	2,455	904	702	202
15-24 years	11,793	9,050	2,743	2,083	6,389	2,386	4,003	3,147	2,403	744
\$10,000 or more										
All ages	137,326	125,028	12,298	13,725	67,669	17,079	50,590	54,863	23,635	31,228
Under 6 years	11,771	10,553	1,219	714	5,669	1,223	4,446	5,300	2,342	2,959
6-16 years	27,468	24,681	2,787	2,553	14,239	3,546	10,693	10,466	4,521	5,945
17-24 years	19,016	17,224	1,792	1,941	10,439	2,683	7,756	6,487	3,314	3,173
25-44 years	43,348	39,269	4,079	2,718	19,918	4,380	15,538	20,450	8,512	11,939
45-64 years	28,842	26,779	2,063	4,220	14,524	4,298	10,225	9,817	4,035	5,782
65 years and over	6,880	6,522	358	1,579	2,880	948	1,932	2,342	911	1,431
Under 5 years	9,754	8,744	1,011	595	4,655	992	3,662	4,433	1,965	2,468
5-14 years	23,904	21,455	2,449	2,033	12,301	2,963	9,338	9,390	4,049	5,342
15-24 years	24,597	22,259	2,338	2,580	13,392	3,497	9,895	8,430	4,164	4,266

¹Includes unknown education.

²Includes unknown income.

NOTES: Relative standard errors of estimates for this table are found in appendix I.

For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States, in Current Population Reports, Series P-20, P-25, and P-60.

Table 16. Population used in obtaining rates shown in this publication, by family income, sex, and age: United States, 1978 and 1979

[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.]

Sex and age	All incomes ¹	Family income							
		Less than \$3,000	\$3,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000-\$14,999	\$15,000 or more	\$15,000-\$24,999	\$25,000 or more
Both sexes									
Population in thousands									
All ages	214,776	9,550	12,892	14,947	19,551	35,466	101,859	54,740	47,119
Under 6 years	18,537	874	1,151	1,308	1,858	3,724	8,048	5,285	2,763
6-16 years	40,094	1,222	1,940	2,404	3,361	6,520	20,948	11,294	9,654
17-24 years	31,867	2,381	1,980	2,406	3,292	5,246	13,770	6,916	6,854
25-44 years	57,784	1,368	1,972	2,674	4,301	10,381	32,968	18,398	14,570
45-64 years	43,429	1,470	1,969	2,569	3,493	6,611	22,231	10,643	11,588
65 years and over	23,066	2,236	3,880	3,586	3,246	2,985	3,895	2,204	1,691
Under 5 years	15,518	762	979	1,112	1,578	3,144	6,610	4,329	2,281
5-14 years	34,947	1,055	1,772	2,126	2,999	5,900	18,004	10,159	7,845
15-24 years	40,032	2,659	2,320	2,880	3,935	6,446	18,152	9,007	9,114
Male									
All ages	103,635	3,668	5,243	6,624	9,082	17,319	52,049	27,771	24,277
Under 6 years	9,513	412	603	642	952	1,920	4,186	2,759	1,428
6-16 years	20,392	630	1,010	1,203	1,698	3,302	10,703	5,792	4,911
17-24 years	15,522	1,001	912	1,099	1,517	2,537	7,003	3,322	3,680
25-44 years	27,949	564	749	1,125	1,970	5,056	16,508	9,341	7,167
45-64 years	20,754	504	652	964	1,392	3,031	11,849	5,545	6,304
65 years and over	9,505	557	1,317	1,591	1,553	1,474	1,800	1,013	787
Under 5 years	7,935	355	505	545	807	1,616	3,439	2,271	1,168
5-14 years	17,814	529	945	1,060	1,503	3,006	9,212	5,208	4,004
15-24 years	19,678	1,159	1,076	1,339	1,857	3,137	9,241	4,394	4,847
Female									
All ages	111,142	5,882	7,650	8,323	10,469	18,147	49,811	26,968	22,842
Under 6 years	9,024	462	548	666	906	1,804	3,861	2,526	1,335
6-16 years	19,702	592	929	1,201	1,662	3,218	10,245	5,503	4,743
17-24 years	16,344	1,380	1,068	1,307	1,775	2,709	6,767	3,594	3,174
25-44 years	29,835	804	1,224	1,549	2,331	5,324	16,460	9,057	7,403
45-64 years	22,676	966	1,317	1,605	2,101	3,581	10,382	5,098	5,284
65 years and over	13,561	1,679	2,563	1,996	1,693	1,510	2,095	1,191	904
Under 5 years	7,583	407	474	567	770	1,528	3,171	2,058	1,113
5-14 years	17,133	526	827	1,066	1,496	2,894	8,793	4,951	3,842
15-24 years	20,355	1,501	1,244	1,540	2,078	3,309	8,911	4,614	4,297

¹Includes unknown income.

NOTES: Relative standard errors of estimates for this table are found in appendix I.

For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States, in Current Population Reports, Series P-20, P-25, and P-60.

Table 17. Population used in obtaining rates shown in this publication, by sex, usual activity status, and age: United States, 1978 and 1979

[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>Usual activity status and age</i>	<i>Both sexes</i>	<i>Male</i>	<i>Female</i>
All activities			
Population in thousands			
All ages	214,776	103,635	111,142
Under 6 years	18,537	9,513	9,024
6-16 years	40,094	20,392	19,702
17-24 years	31,867	15,522	16,344
25-44 years	57,784	27,949	29,835
45-64 years	43,429	20,754	22,676
65 years and over	23,066	9,505	13,561
Under 5 years	15,518	7,935	7,583
5-14 years	34,947	17,814	17,133
15-24 years	40,032	19,678	20,355
Preschool (under 6 years)	18,537	9,513	9,024
School age (6-16 years)	40,094	20,392	19,702
Usually working (17 years and over)	88,670	53,658	35,012
17-24 years	16,124	8,937	7,187
25-44 years	42,566	26,015	16,551
45-64 years	27,380	17,035	10,345
65 years and over	2,601	1,671	930
Usually keeping house (female 17 years and over)	38,104	...	38,104
17-24 years	3,293	...	3,293
25-44 years	12,325	...	12,235
45-64 years	11,530	...	11,530
65 years and over	10,956	...	10,956
Retired (45 years and over)	11,403	10,182	1,221
45-64 years	3,005	2,686	320
65 years and over	8,398	7,497	901
Retired for health reasons (45 years and over)	3,745	3,323	422
45-64 years	1,818	1,629	190
65 years and over	1,927	1,695	232
Retired for other reasons (45 years and over)	7,658	6,859	799
45-64 years	1,187	1,057	130
65 years and over	6,471	5,802	669
Other activity (17 years and over)	17,968	9,889	8,079
17-24 years	12,451	6,585	5,865
25-44 years	2,892	1,934	959
45-64 years	1,514	1,033	482
65 years and over	1,110	337	773
Usually going to school (17 years and over)	12,615	6,458	6,157
17-24 years	11,141	5,722	5,419
25-44 years	1,217	630	587
45-64 years	181	73	108
65 years and over	76	33	43
Other (17 years and over)	5,353	3,431	1,921
17-24 years	1,310	864	446
25-44 years	1,676	1,304	372
45-64 years	1,333	960	374
65 years and over	1,034	304	730

NOTES: Relative standard errors of estimates for this table are found in appendix I.

For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States, in Current Population Reports, Series P-20, P-25, and P-60.

Table 18. Population used in obtaining rates shown in this publication, by place of residence, geographic region, sex, and age:
United States, 1978 and 1979

[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.]

Sex and age	All areas	Place of residence			Geographic region			
		All SMSA	Outside SMSA		Northeast	North Central	South	West
			Nonfarm	Farm				
Population in thousands								
Both sexes								
All ages	214,776	146,971	61,733	6,072	48,042	57,401	70,043	39,289
Under 6 years	18,537	12,519	5,606	412	3,657	5,132	6,204	3,544
6-16 years	40,094	26,938	11,957	1,198	8,739	10,636	13,543	7,175
17-24 years	31,867	22,125	8,981	760	6,801	8,998	10,260	5,807
25-44 years	57,784	40,600	15,865	1,319	12,665	15,472	18,479	11,167
45-64 years	43,429	30,060	11,791	1,579	10,681	11,168	13,842	7,738
65 years and over	23,066	14,728	7,534	804	5,500	5,995	7,714	3,858
Under 5 years	15,518	10,474	4,705	339	3,052	4,317	5,138	3,010
5-14 years	34,947	23,527	10,452	968	7,538	9,307	11,848	6,254
15-24 years	40,032	27,582	11,387	1,063	8,607	11,141	13,022	7,262
Male								
All ages	103,635	70,613	29,863	3,158	22,954	27,845	33,670	19,165
Under 6 years	9,513	6,456	2,830	228	1,803	2,665	3,224	1,821
6-16 years	20,392	13,674	6,087	631	4,453	5,390	6,886	3,663
17-24 years	15,522	10,640	4,442	440	3,326	4,431	4,966	2,799
25-44 years	27,949	19,514	7,775	659	6,044	7,579	8,864	5,461
45-64 years	20,754	14,423	5,540	791	5,069	5,360	6,552	3,773
65 years and over	9,505	5,907	3,190	408	2,258	2,420	3,178	1,649
Under 5 years	7,935	5,391	2,359	186	1,512	2,213	2,679	1,531
5-14 years	17,814	11,997	5,305	512	3,790	4,775	6,054	3,196
15-24 years	19,678	13,382	5,694	601	4,280	5,499	6,343	3,555
Female								
All ages	111,142	76,357	31,870	2,915	25,088	29,556	36,373	20,124
Under 6 years	9,024	6,064	2,776	184	1,854	2,466	2,980	1,723
6-16 years	19,702	13,264	5,870	567	4,286	5,246	6,658	3,512
17-24 years	16,344	11,485	4,539	320	3,475	4,567	5,294	3,008
25-44 years	29,835	21,086	8,089	660	6,621	7,893	9,615	5,706
45-64 years	22,676	15,637	6,251	788	5,611	5,809	7,290	3,965
65 years and over	13,561	8,821	4,344	396	3,241	3,575	4,536	2,209
Under 5 years	7,583	5,083	2,346	153	1,540	2,105	2,458	1,479
5-14 years	17,133	11,530	5,147	456	3,748	4,532	5,795	3,058
15-24 years	20,355	14,199	5,693	462	4,327	5,642	6,679	3,707

NOTES: Relative standard errors of estimates for this table are found in appendix I.

For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States, in Current Population Reports, Series P-20, P-25, and P-60.

Appendixes

Contents

I.	Technical notes on methods	38
	Background of this report	38
	Statistical design of the National Health Interview Survey	38
	General qualifications	39
	Reliability of estimates	40
II.	Definitions of certain terms used in this report	47
	Terms relating to dental visits	47
	Terms relating to out-of-pocket health expenses	47
	Demographic terms	47
III.	Questionnaire items relating to dental visits	50
	Questions from the 1978 and 1979 questionnaire	50
	Questions from the 1969 and 1963-64 questionnaires	51
IV.	Questionnaire items relating to out-of-pocket health expenses	52
	Health Expenses Questionnaire, 1978: Form A	52
	Health Expenses Questionnaire, 1978: Form B	53
List of appendix figures		
I.	Relative standard errors for population characteristics	42
II.	Relative standard errors for number of physician or dental visits based on a 2-week reference period	43
III.	Relative standard errors of percentages of population characteristics	44
IV.	Relative standard errors for aggregates based on one quarter of data for number of persons (A), individual type of expense (B), and total expense (C)	45
V.	Relative standard errors for percentages based on one quarter of data collection for number of persons (type A data, narrow and medium range)	46
VI.	Geographic regions	49

Appendix I. Technical notes on methods

Background of this report

This report is one of a series of statistical reports prepared by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households in the National Health Interview Survey (NHIS).

The National Health Interview Survey utilizes a questionnaire that obtains information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued that cover one or more of the specific topics.

The population covered by the sample for the National Health Interview Survey is the civilian, noninstitutionalized population of the United States living at the time of the interview. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period since data are not collected in the interview for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers 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 (e.g., 1 year) might be sizable, especially for older persons.

Statistical design of the National Health Interview Survey

General plan.—The sampling plan of the survey follows a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population of the United States. The

sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. This feature of the design permits both continuous measurement of characteristics of samples and more detailed analysis of less common characteristics and smaller categories of health-related items. The continuous collection has administrative and operational advantages as well as technical assets since it permits fieldwork to be handled with an experienced, stable staff.

The overall sample was designed so that tabulations can be provided for each of the four major geographic regions and for selected places of residence in the United States.

The first stage of the sample design consists of drawing a sample of 376 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined in such a manner that each segment contains an expected four households. Three general types of segments are used.

Area segments which are defined geographically.

List segments, using 1970 census registers as the frame.

Permit segments, using updated lists of building permits issued in sample PSU's since 1970.

Census address listings were used for all areas of the country where addresses were well defined and could be used to locate housing units. In general the list frame included the larger urban areas of the United States from which about two-thirds of the NHIS sample was selected.

The usual NHIS sample consists of approximately 12,000 segments containing about 50,000 assigned households, of which 9,000 were vacant, demolished, or occupied by persons not in the scope of the survey. The 41,000 eligible occupied households yield a probability sample of about 110,000 persons.

During 1978 and 1979 the sample comprised about 83,000 eligible occupied households of which about 80,000 were interviewed. The interviewed households contained about 220,500 persons living at the time of the interview. The total noninterview rate was 3.6 percent, of which 2.0 percent was due to respondent refusal.

During the January-March quarter of 1978 the sample contained about 10,300 eligible occupied households of which approximately 9,900 were interviewed. These interviewed households had about 27,200 persons living at the time of the interview.

Descriptive material on data collection, field procedures, and questionnaire development in the NHIS have been published^{5,6} as well as a detailed description of the sample design and a report on the estimation procedure.^{7,8}

Collection of data.—Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census participates in survey planning, selects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

Estimating procedures.—Since the design of the NHIS is a complex multistage probability sample, it is necessary to use complex procedures in the derivation of estimates. Four basic operations are involved.

1. *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. *Nonresponse adjustment.*—The estimates are inflated by a multiplication factor which has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. *First-stage ratio adjustment.*—Sampling theory indicates that the use of auxiliary information that is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1970 populations within 12 race-residence classes.
4. *Poststratification by age-sex-race.*—The estimates are ratio adjusted within each of 60 age-sex-race

cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit (person, household, condition, and hospitalization).

The effect of the ratio-estimating process is to make the sample more closely representative of the civilian noninstitutionalized population by age, sex, race, and residence, which thereby reduces sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period, e.g., a calendar quarter, produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

For prevalence statistics, such as number of persons classified by time interval since last visit, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in the quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures. Similarly an estimate for 2 years is obtained by averaging eight quarterly figures.

For other types of statistics—namely those measuring the number of occurrences during a specified time period—such as number of visits to a dentist, a similar computational procedure is used, but the statistics are interpreted differently. For these items, the questionnaire asks for the respondent's experience over the 2 calendar weeks prior to the week of interview. In such instances the estimated quarterly total for the statistic is 6.5 times the average 2-week estimate produced by the 13 successive samples taken during the period. The annual total is the sum of the four quarters. Thus the experience of persons *interviewed during a year*—experience which actually occurred for each person in a 2-calendar-week interval prior to week of interview—is treated as though it measured the total of such experience *during the year*. Such interpretation leads to no significant bias.

When 2 years of data are used, as in this report, the sum of the annual estimates is divided by 2 to obtain an average annual estimate for the statistic.

General qualifications

Nonresponse.—Data were adjusted for nonresponse by a procedure that imputes to persons in a household who were not interviewed the characteristics of persons in households in the same segment who were interviewed.

NOTE: A list of references follows the text.

The interview process.—The statistics presented in this report are based on replies obtained in interviews with persons in the sample households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

Rounding of numbers.—The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All consolidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables, the figures are rounded to the nearest thousand, although these are not necessarily accurate to that detail. Devised statistics such as rates and percent distributions are computed after the estimates on which these are based have been rounded to the nearest thousand.

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

Reliability of estimates

Since the statistics presented in this report are based on a sample, they will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures.⁹ Although it is very difficult to measure the extent of bias in the National Health Interview Survey, a number of studies have been conducted to study this problem. The results have been published in several reports.¹⁰⁻¹³ The standard errors shown in this report were computed using the balanced half-sample replication procedure.

NOTE: A list of references follows the text.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from 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.

Standard error charts.—The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. For this report, asterisks are shown for any cell with more than a 30-percent relative standard error. Included in this appendix are charts from which the relative standard errors can be determined for estimates shown in the report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage.

Three classes of statistics for the health survey are identified for purposes of estimating variances.

1. *Narrow range.*—This class consists of (1) statistics which estimate a population attribute, e.g., the number of persons in a particular income group, and (2) statistics for which the measure for a single individual during the reference period used in data collection is usually either 0 to 1 and, on occasion, may take on the value 2 or very rarely 3.
2. *Medium range.*—This class consists of other statistics for which the measure for a single individual during the reference period used in data collection will rarely lie outside the range 0 to 5.
3. *Wide range.*—This class consists of statistics for which the measure for a single individual during the reference period used in data collection can range from 0 to a number in excess of 5, e.g., the number of days of bed disability.

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the survey are further classified as to whether they are based on a reference period of 2 weeks, 6 months, or 12 months.

General rules for determining relative standard errors.—The following rules will enable the reader to determine approximate relative standard errors from the charts for estimates presented in this report.

These charts represent standard errors of NHIS data. They should be used in preference to the charts which have appeared in all previous Series 10 publications.

Rule 1. *Estimates of aggregates*: Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from appropriate curves, figures I, II, and IV. The number of persons in the total U.S. population or in an age-sex-race class of the total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

Rule 2. *Estimates of percentages in a percent distribution*: Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves, figures III and V. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

Rule 3. *Estimates of rates where the numerator is a subclass of the denominator*: This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the percentage charts for population estimates. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.

Rule 4. *Estimates of rates where the numerator is not a subclass of the denominator*: This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than

one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:

- (a) Where the denominator is the total U.S. population or includes all persons in one or more of the age-sex-race groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator, which can be obtained directly from the appropriate chart.
- (b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and will overstate the error to the extent that the correlation between numerator and denominator is greater than zero.

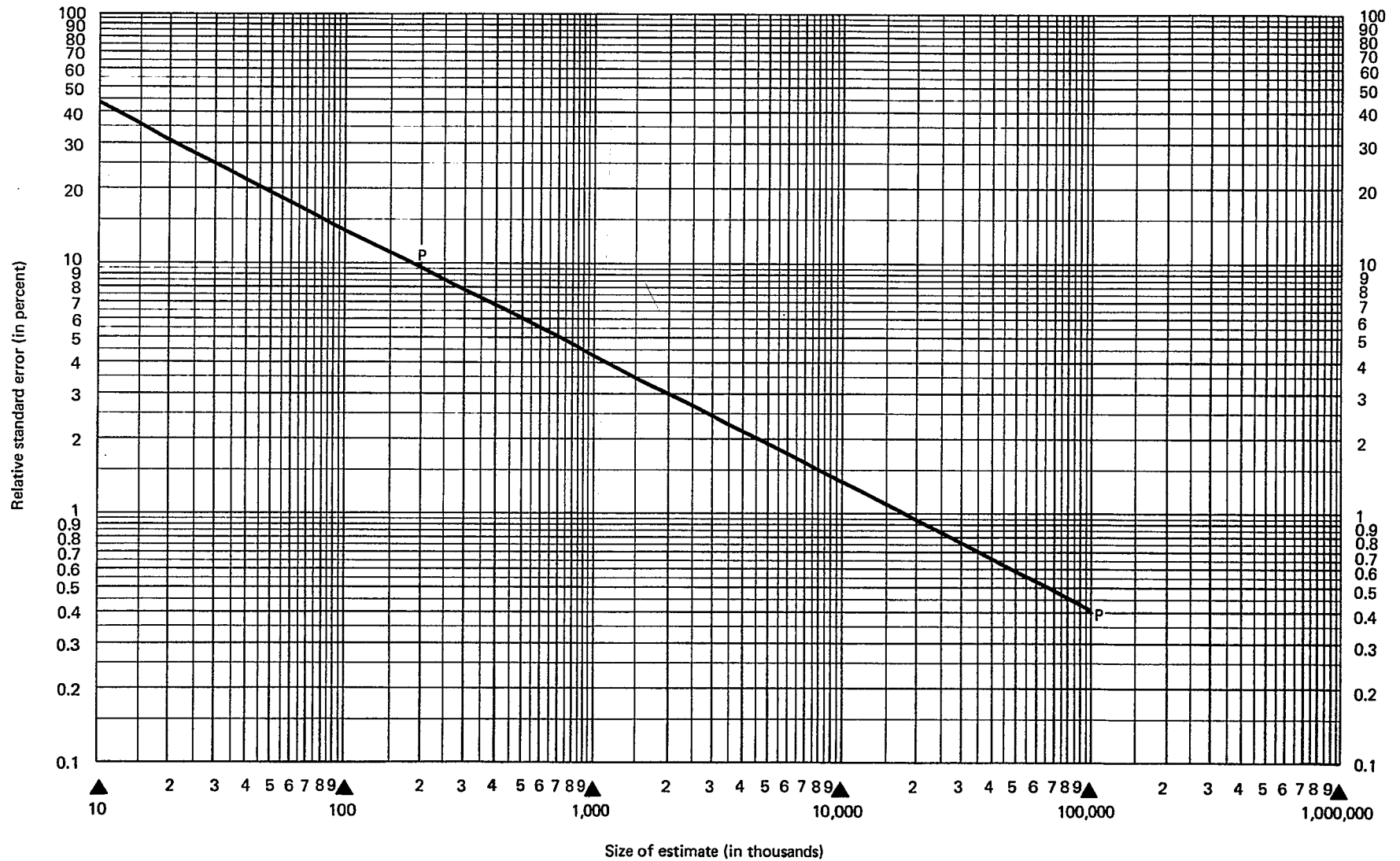
Rule 5. *Estimates of difference between two statistics (mean, rate, total, etc.)*: The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference,

$$d = X_1 - X_2$$

is

$$\sigma_d = \sqrt{(X_1 V_{x_1})^2 + (X_2 V_{x_2})^2}$$

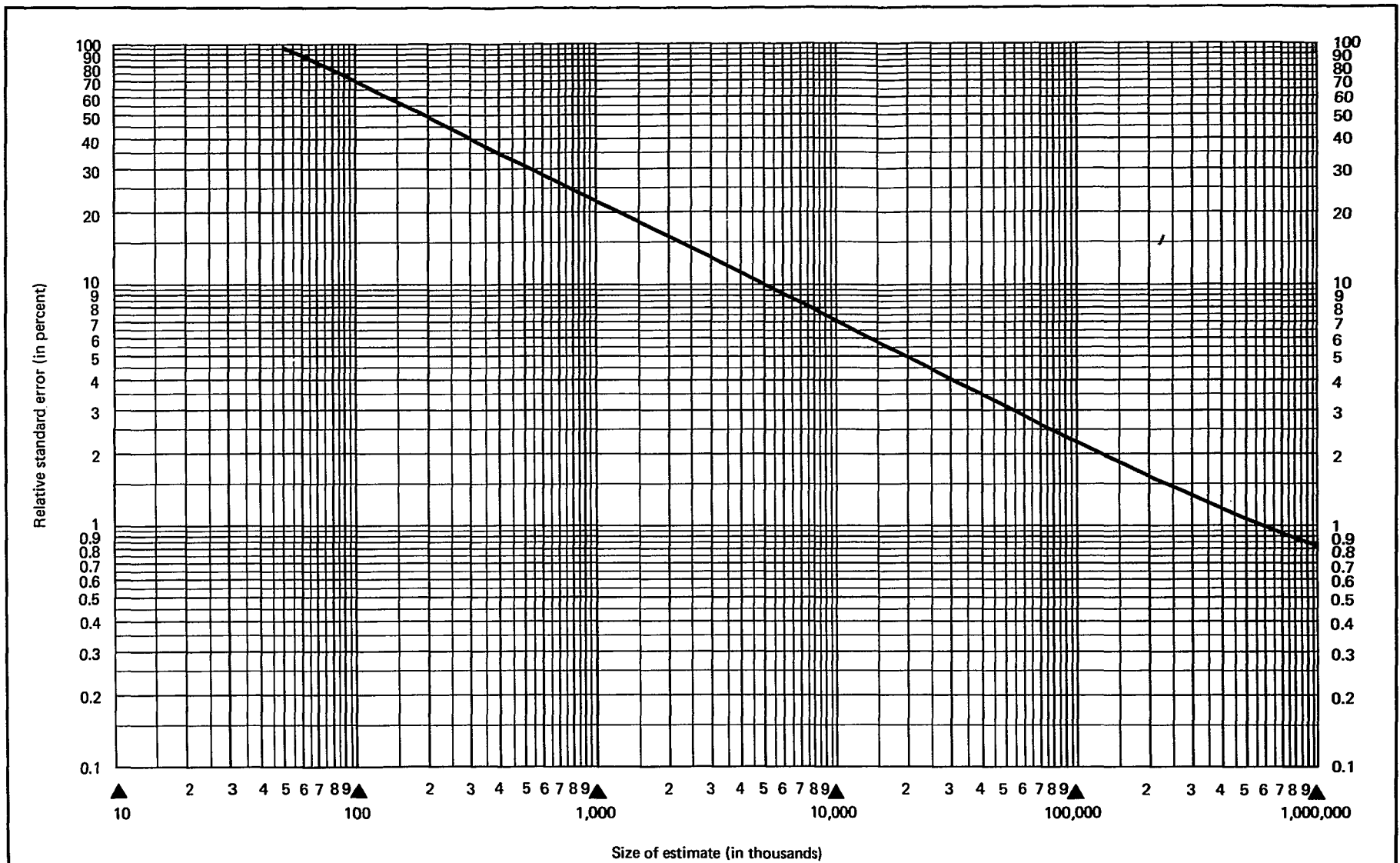
where X_1 is the estimate for class 1, X_2 is the estimate for class 2, and V_{x_1} and V_{x_2} are the relative errors of X_1 and X_2 respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.



¹This curve represents estimates of relative standard errors based on 8 quarters of data collection for narrow range estimates of population characteristics or narrow range estimates of aggregates using a 12-month reference period.

Example of use of chart: An estimate of 10,000,000 persons with annual family income of \$15,000 or more, or 10,000,000 persons who were hospitalized one or more times in the past year (on scale at bottom of chart) has a relative standard error of 1.3 percent (read from scale at left side of chart), or a standard error of 130,000 (1.3 percent of 10,000,000).

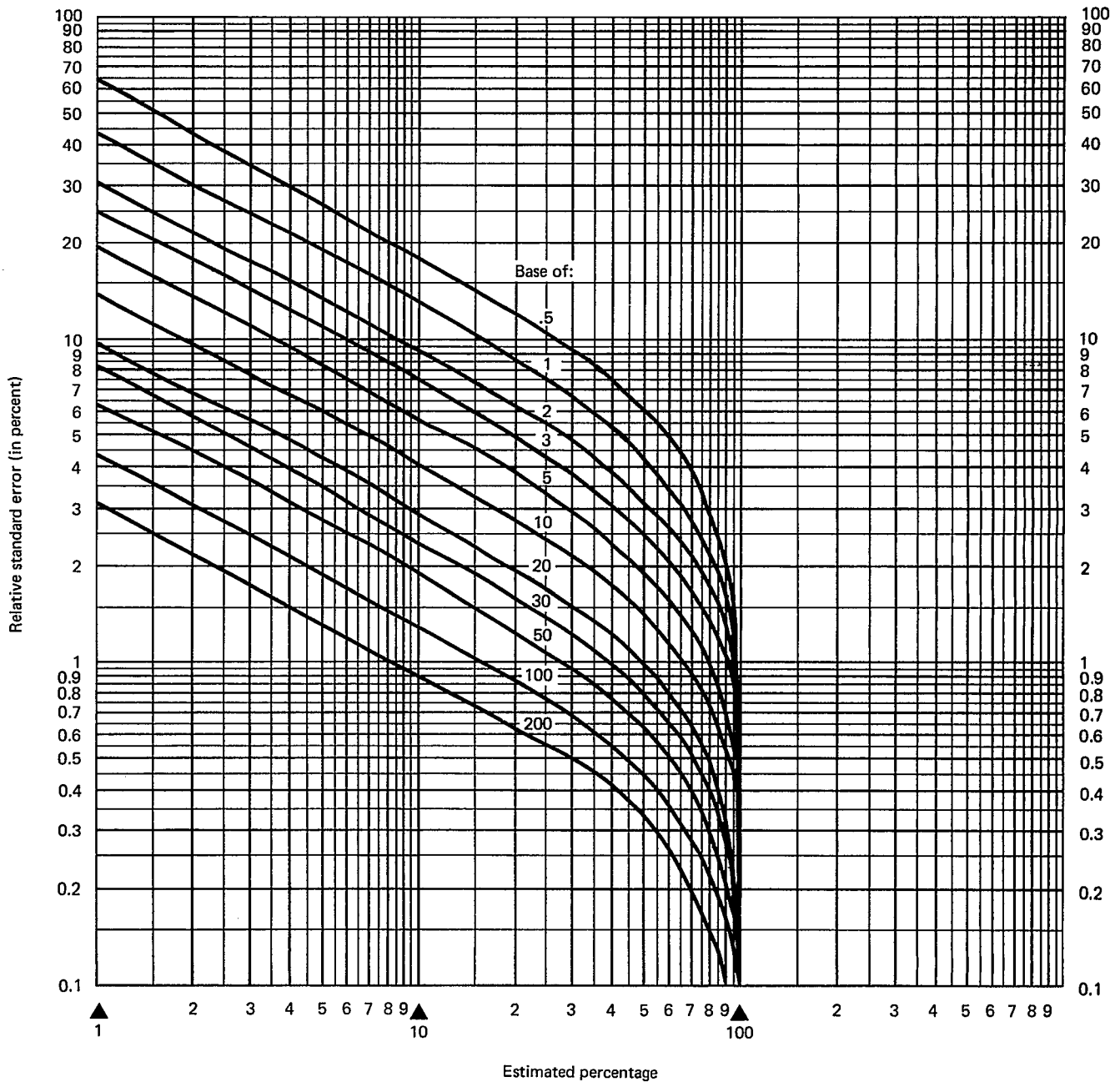
Figure I. Relative standard errors for population characteristics¹



¹The curve related to physician or dental visits is based on 8 quarters of data collection for medium range estimates of aggregates using a 2-week reference period.

Example of use of chart: An estimate of 10,000,000 dental visits (on scale at bottom of chart) has a relative standard error of 7.0 percent (read from scale at left side of chart), or a standard error of 700,000 (7.0 percent of 10,000,000).

Figure II. Relative standard errors for number of physician or dental visits based on a 2-week reference period¹



¹These curves represent estimates of relative standard errors of percentages of population characteristics based on 8 quarters of data collection for narrow range estimates.

Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 2.7 percent (read from the scale at the left side of chart), the point at which the curve for a base of 10,000,000 intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent X 2.7 percent, or 0.54 percentage points.

Figure III. Relative standard errors of percentages of population characteristics¹
 [Base of percentage shown on curves in millions]

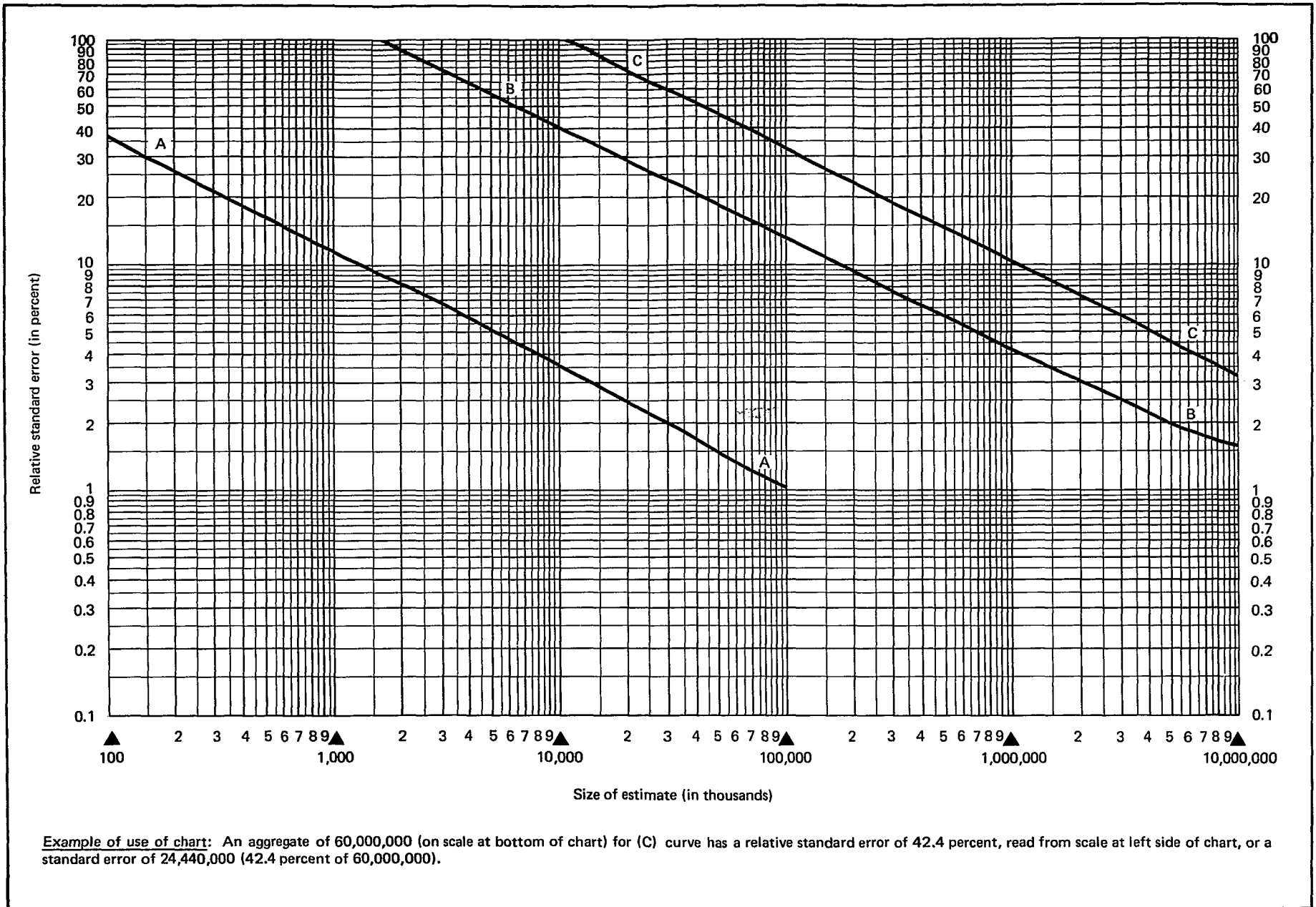
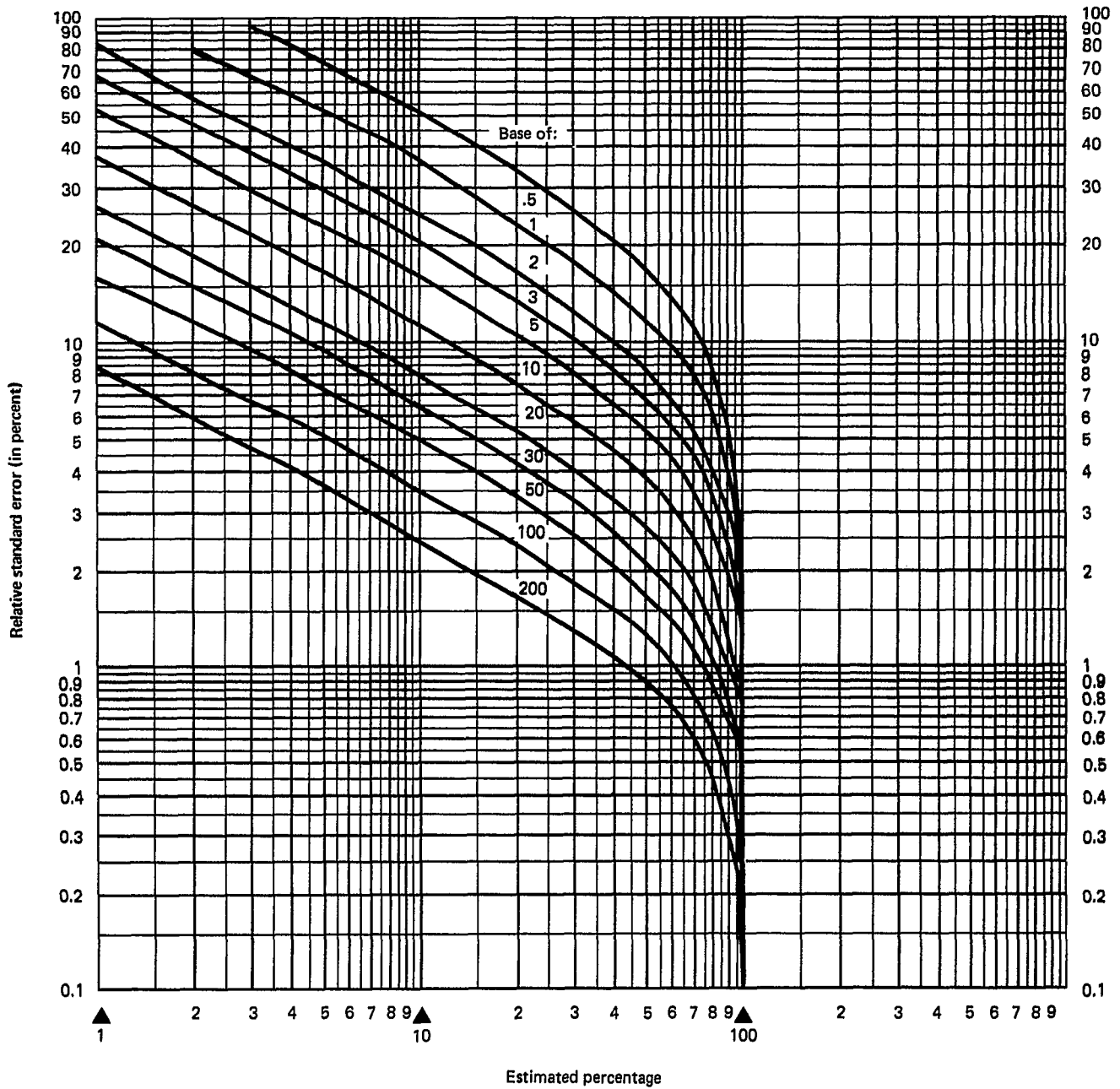


Figure IV. Relative standard errors for aggregates based on one quarter of data for number of persons (A), individual type of expense (B), and total expense (C)



Example of use of chart: An estimate of 50 percent (on scale at bottom of chart) based on an estimate of 1,000,000 has a relative standard error of 11.7 percent (read from the scale at the left side of the chart), the point at which the curve for a base of 1,000,000 intersects the vertical line for 50 percent. The standard error in percentage points is equal to 50 percent X 11.7 percent or 5.9 percentage points.

Figure V. Relative standard errors for percentages based on one quarter of data collection for number of persons (type A data, narrow and medium range)

[Base of percentage shown on curves in millions]

Appendix II. Definitions of certain terms used in this report

Terms relating to dental visits

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.

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.

Terms relating to out-of-pocket dental expenses

Out-of-pocket expense.—The amount paid directly by the individual or family member exclusively of any part paid by insurance, other person, or agency. The following definition pertains only to out-of-pocket expenses.

Dental bills.—The amount spent for cleaning, filling, straightening, bridgework, dental laboratory fees, and other services from a dentist or hygienist.

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.

Race.—The population is divided into two racial groups, "white" and "all other." "All other" includes Negro, American Indian, Chinese, Japanese, and any other race. Mexican persons are included with "white" unless definitely known to be Indian or of another race.

Income of family or of unrelated individuals.—Each member of a family is classified according to the total income of the family of which he or she is a member. Within the household all persons 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 is included, e.g., wages, salaries, rents from property, pensions, and help from relatives.

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.

Education of head of family or of unrelated individuals.—Each member of a family is classified according to the education of the head of the family of which he or she is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own education.

Usual activity.—All persons in the population are classified according to their usual activity during the 12-month period prior to the week of interview. The "usual" activity, in case more than one is reported, is the one at which the person spent the most time during the 12-month period. Children under 6 years of age are classified as "preschool." All persons aged 6-16 years are classified as "school age."

The categories of usual activity used in this report for persons aged 17 years and over are *usually working, usually going to school, usually keeping house, retired, and other activity*. For several reasons these categories are not comparable with somewhat similarly named categories in official Federal labor force statistics. First, the responses concerning usual activity are accepted without detailed questioning since the objective of the question is not to estimate the numbers of persons in labor force categories but

to identify crudely certain population groups which may have differing health problems. Second, the figures represent the usual activity status over the period of an entire year, whereas official labor force statistics relate to a much shorter period, usually 1 week. Third, the minimum age for usually working persons is 17 in the National Health Interview Survey, and the official labor force categories include all persons aged 14 or older. Finally, in the definitions of specific categories which follow, certain marginal groups are classified differently to simplify procedures.

Usually working includes persons 17 years of age or older who are paid employees; self-employed in their own business, profession, or in farming; or unpaid employees in a family business or farm. Work around the house or volunteer or unpaid work such as for a church is not counted as working.

Usually going to school includes persons 17 years of age or older whose major activity is going to school.

Usually keeping house includes female persons 17 years of age or older whose major activity is described as "keeping house" and who cannot be classified as "working."

Retired includes persons 45 years old and over who consider themselves to be retired. In case of doubt, a person 45 years of age or older is counted as retired if he or she has either voluntarily or involuntarily stopped working, is not looking for work, and is not described as "keeping house." A retired person may or may not be able to work.

Other activity includes all persons 17 years of age or older not classified as "working," "retired," or "going to school," and females 17 years of age or older not classified as "keeping house."

Place of residence.—The place of residence of a member of the civilian noninstitutionalized population is classified as inside a standard metropolitan statistical area (SMSA) or outside an SMSA and either farm or nonfarm.

Standard metropolitan statistical areas.—The definitions and titles of SMSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Standard Metropolitan Statistical Areas.

The definition of an individual SMSA involves two considerations: first, a city or cities of specified population that constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with contiguous counties (except in New

England) that are metropolitan in character so that the periphery of the specific metropolitan area may be determined. SMSA's are not limited by State boundaries. In New England SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1970 census and does not include any subsequent additions or changes.

Central cities.—Each SMSA must include at least one central city. The complete title of an SMSA identifies the central city or cities. If only one central city is designated, then it must have 50,000 inhabitants or more. The area title may include, in addition to the largest city, up to two city names on the basis and in the order of the following criteria: (1) the additional city has at least 250,000 inhabitants or (2) the additional city has a population of one-third or more of that of the largest city and a minimum population of 25,000. An exception occurs where two cities have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000, the smaller of which must have a population of at least 15,000.

Farm and nonfarm residence.—The population residing outside SMSA's is subdivided into the farm population, which comprises all non-SMSA residents living on farms, and the nonfarm population, which comprises the remaining outside SMSA population. The farm population includes persons living on places of 10 acres or more from which sales of farm products amounted to \$50 or more during the previous 12 months or on places of less than 10 acres from which sales of farm products amounted to \$250 or more during the preceding 12 months. Other persons living outside an SMSA were classified as nonfarm if their household paid rent for the house but their rent did not include any land used for farming.

Sales of farm products refer to the gross receipts from the sale of field crops, vegetables, fruits, nuts, livestock and livestock products (milk, wool, etc.), poultry and poultry products, and nursery and forest products produced on the place and sold at any time during the preceding 12 months.

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 shown in figure VI.

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

Figure VI. Geographic regions

Appendix III. Questionnaire items relating to dental visits

Questions from the 1978 and 1979 questionnaires

<p>12a. During the past 2 weeks, did anyone in the family go to the dentist? Y N (13)</p>		
<p>b. Who was this? – Mark "Dental visit" box in person's column.</p>	12b.	<input type="checkbox"/> Dental visit
<p>c. During the past 2 weeks, did anyone else in the family go to a dentist? Y (Reask 12b and c) N</p>		
<p>If "Dental visit," ask: d. During the past 2 weeks, how many times did -- go to a dentist?</p>	d.	<input type="text"/> No. of dental visits (NP)
<p>Do not ask for children 1 yr. old and under.</p>		
<p>Mark box or ask: 13. ABOUT how long has it been since -- LAST went to a dentist?</p>	13.	<input type="checkbox"/> 2-week dental visit <input type="checkbox"/> Past 2 weeks not reported (12) <input type="checkbox"/> 2 weeks–6months <input type="checkbox"/> Over 6–12 months <input type="checkbox"/> 1 year <input type="checkbox"/> 2–4 years <input type="checkbox"/> 5+ years <input type="checkbox"/> Never/age 1 or under

Questions from the 1969 and 1963-64 questionnaires

Questions from the 1969 questionnaire

<p>7a. During the past 2 weeks, did anyone in the family, (that is you, your ---, etc.) go to a dentist? <input type="checkbox"/> Yes (7b and c) <input type="checkbox"/> No (9)</p>	
<p>b. Who was this? -- Mark "Dental visit," box in person's column.</p>	<p>7b. <input type="checkbox"/> Dental visit</p>
<p>c. During the past 2 weeks, did anyone else in the family go to a dentist? <input type="checkbox"/> Yes (Reask 7b and c) <input type="checkbox"/> No</p>	
<p>For each person with "Dental visit," ask: d. During the past 2 weeks, how many times did --- go to dentist?</p>	<p>d. ___ No. of dental visits (NP)</p>
<p>If "Dental visit," ask: 8a. For what (other) condition did --- see the dentist? -- Enter condition in 8a.</p>	<p>8a. <input type="checkbox"/> Exam. or cleaning } (8b) _____ }</p>
<p>b. Did --- see the dentist for any { other specific condition?</p>	<p>b. <input type="checkbox"/> Yes (8a) <input type="checkbox"/> No other (8c) <input type="checkbox"/> No specific (NP)</p>
<p>For each condition in 8a, ask: c. During the past 2 weeks was --- sick because of his . . . ?</p>	<p>c. <input type="checkbox"/> Yes (Enter condition in item C) } (NP or 8c) <input type="checkbox"/> No }</p>
	<p>1 <input type="checkbox"/> 2 week dental visit (9b) <input type="checkbox"/> No dental visit (9a)</p>
<p>9a. ABOUT how long has it been since --- went to a dentist? Estimate is acceptable. If less than 1 year, mark appropriate box.</p>	<p>9a. 2 <input type="checkbox"/> Past 2 weeks not reported (Q's 7 and 8) 3 <input type="checkbox"/> 2 weeks - 6 months 4 <input type="checkbox"/> Over 6 - 12 months ___ Years (NP) 0 <input type="checkbox"/> Never (NP)</p>
<p>b. During the past 12 months, about how many times did --- go to a dentist?</p>	<p>b. ___ Number of visits (NP)</p>

Questions from the July 1963-June 1964 questionnaire

<p>18. LAST WEEK OR THE WEEK BEFORE did anyone in the family go to a dentist?</p> <p>If "Yes," ask:</p> <p>(a) Who was this?</p> <p>(b) Anyone else?</p> <p>For each person with "Yes" checked, ask:</p> <p>(c) How many times did you visit the dentist LAST WEEK OR THE WEEK BEFORE?</p> <p>(d) What did you have done (the last time, the time before, etc.)?</p> <p>(e) Anything else?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>___ No. of times</p> <p>(1) (2) (3)</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fillings</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Extractions or other surgery</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Straightening (Orthodontia)</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Treatment for gums</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Cleaning teeth</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Examination</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Denture work</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other (Specify) _____</p>
<p>If "No" to Question 18, ask: 19. ABOUT how long has it been since you went to a dentist?</p>	<p><input type="checkbox"/> Under 6 mos. <input type="checkbox"/> 6-12 mos.</p> <p>No. of years _____ <input type="checkbox"/> Never</p>

Appendix IV. Questionnaire items relating to out-of-pocket health expenses

Health Expenses Questionnaire, 1978: Form A

Please answer the following questions for _____ Person No.

DENTAL BILLS PAID

1. How much did THIS FAMILY spend on dental bills for this person during the past 12 months, that is, from January 1, 1977 to December 31, 1977?

INCLUDE amounts spent for:
 Cleanings Straightening Dental surgery Bridgework Other services from a
 Fillings X-rays Extractions Dental laboratory fees dentist or hygienist

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No dental bills paid for this person	

DOCTORS' BILLS PAID

2. How much did THIS FAMILY spend on doctor bills for this person during the past 12 months?

INCLUDE amounts spent for:
 Routine doctor visits Doctor fees while a Deliveries Shots
 Treatments patient in a hospital Pregnancy care Other services by a
 Check-ups Operations Laboratory fees medical doctor

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No doctor bills paid for this person	

HOSPITAL BILLS PAID

3. How much did THIS FAMILY spend on hospital bills for this person during the past 12 months?

INCLUDE amounts spent for:
 Room and board Anesthesia Special treatments
 Operating and Tests Any other hospital services
 delivery rooms X-rays

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No hospital bills paid for this person	

PAYMENTS MADE FOR PRESCRIPTION MEDICINE

4. About how much did THIS FAMILY spend on medicine for this person during the past 12 months that was purchased on a DOCTOR'S OR DENTIST'S PRESCRIPTION?

INCLUDE amounts spent for:
 Medicines ONLY if they were prescribed by a doctor or dentist

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No prescribed medicines bought for this person	

PAYMENTS MADE FOR EYEGLASSES, CONTACT LENSES OR OPTOMETRIST'S BILLS

5. During the past 12 months, how much did THIS FAMILY spend on eyeglasses, contact lenses, or optometrists' fees for this person?

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No amount paid for these items	

PAYMENTS MADE FOR "OTHER" MEDICAL BILLS

6a. How much did THIS FAMILY spend on other medical expenses for this person during the past 12 months?

DO NOT INCLUDE any expenses which you have already recorded. DO NOT INCLUDE amounts spent for medicines of any kind.

INCLUDE amounts spent for such expenses as:
 Chiropractors' or Podiatrists' fees Physical or Speech Therapy
 Hearing aid Special nursing care
 Special braces, trusses, wheelchair Nursing Home or Convalescent
 or artificial limbs Home care

DOLLARS	CENTS
\$	
or	
<input type="checkbox"/> No amount paid for these items	

6b. What type of medical expenses did this person have?

Type of Medical Expense

REFERRED TO RECORDS

7. Check one of the following boxes:

- 1 Referred to records for ALL dollar amounts entered on this page.
- 2 Referred to records for SOME but not all dollar amounts entered on this page.
- 3 Did NOT refer to ANY records.

1 <input type="checkbox"/> All
2 <input type="checkbox"/> Some
3 <input type="checkbox"/> None

Health Expense Questionnaire, 1978:

Form B

Health care expenses paid for persons in this family

- For each person listed please enter the amount you or this family paid for that person's medical care. Subtract any amount you got back from health insurance.
- Count only the amount you paid between January 1, 1977 and December 31, 1977. Subtract any amount you got back from health insurance during this period.
- Please check your bills, receipts or checkstubs.
- If you do not have bills, receipts or checkstubs, please enter your **best estimate**.
- If the person did not have any expenses, mark the "none" box with an "X."

1

first name

last name

1. AMOUNT PAID FOR DOCTOR EXPENSES

Include all expenses related to doctor office visits and the amounts paid for doctors and surgeons while this person was a patient in the hospital.

\$

or: none

2. AMOUNT PAID FOR HOSPITAL EXPENSES

Include all hospital charges except doctor and surgeon fees while this person was a patient in the hospital.

\$

or: none

3. AMOUNT PAID FOR DENTAL EXPENSES

Include all expenses related to dental office visits for this person.

\$

or: none

4. AMOUNT PAID FOR OPTICAL EXPENSES

Include all expenses for having this person's eyes examined for glasses plus the cost of eyeglasses or contact lenses.

\$

or: none

5. AMOUNT PAID FOR PRESCRIPTION MEDICINES

Include all expenses for medicine obtained with a doctor's or dentist's prescription for this person.

\$

or: none

6. AMOUNT PAID FOR OTHER MEDICAL EXPENSES

Include any other medical expenses which are not included above.
Do this for each person.

\$

or: none

7. HOW MUCH DID THIS FAMILY SPEND ON HEALTH INSURANCE in 1977 for persons listed on page 2?

Include:

- paycheck deductions for health insurance
- Social Security check deductions for Medicare
- amounts paid directly to health insurance plans or to Social Security for Medicare

Do not include:

- accident insurance
- amounts your employer or union pays for your health insurance

\$

or: none

8. DURING 1977 DID THIS FAMILY PAY ANY MEDICAL EXPENSES FOR PERSONS NOT LISTED ON PAGE 2?

Some examples:

- persons living here now, but not listed on page 2
- anyone who lived here in 1977, but does not live here now
- children now away at school or elsewhere
- parents, other relatives, or friends in nursing homes or elsewhere
- parents, other relatives, or friends now deceased

YES

➔ Please go to question 9.

NO

➔ Please go to question 10.

9. PLEASE ENTER THE TOTAL AMOUNT THIS FAMILY PAID DURING 1977 FOR ALL TYPES OF MEDICAL EXPENSES FOR PERSONS NOT LISTED ON PAGE 2.

(Remember to subtract amounts you get back from health insurance.)

\$

or: none

10. MARK ONE BOX WITH AN "X."

- Checked records for all dollar amounts entered on this form.
- Checked records for some amounts.
- Did not check records.

11. ENTER YOUR NAME AND THE NAMES OF ALL PERSONS WHO HELPED YOU ANSWER THE QUESTIONS ON THIS FORM.

If any of these persons are not listed on page 2, do not write their names. Instead, write "friend," "sister," "doctor," and so forth.

_____ your name

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