
Vital and Health Statistics

Advance Data From Vital and Health Statistics: Numbers 111–120

Series 16:
Compilations of Advance Data From Vital
and Health Statistics
No. 12

Data in this report from health and demographic surveys present statistics by age and other variables on ambulatory medical care; nursing and related care homes; health promotion and disease prevention; aging in the eighties; and trends in smoking, alcohol consumption, and other health practices. Estimates are based on the civilian noninstitutionalized population of the United States. These reports were originally published in 1985 and 1986.

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

Hyattsville, Maryland
December 1993
DHHS Publication No. (PHS) 94-1871

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Suggested citation

National Center for Health Statistics. Advance data from vital and health statistics: numbers 111-120. National Center for Health Statistics. Vital Health Stat 16(12). 1993.

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An Overview of the 1982 National Master Facility Inventory Survey of Nursing and Related Care Homes

by Al Sirrocco, Division of Health Care Statistics

Introduction

This report describes the 1982 National Master Facility Inventory Survey of nursing and related care homes. The numbers of homes, beds, residents, and employees are distributed by such characteristics as ownership groups, bed size groups, and geographic regions. Additional topics covered in this report include survey procedures, imputation procedures, and definitions.

The National Center for Health Statistics (NCHS) first conducted the National Master Facility Inventory (NMFI) Survey in 1963 and continued it in 1967, 1969, 1971, 1973, 1976, 1978, 1980, and 1982. Prior to 1978, the survey included hospitals, nursing and related care homes, and other types of inpatient health facilities including, for example, homes for the blind, deaf, mentally retarded, and mentally ill. The 1978, 1980, and 1982 NMFI surveys collected data only on nursing and related care homes. Data for hospitals are now obtained directly from the American Hospital Association. For convenience, this report will use the terms "nursing and related care homes" and "nursing homes" interchangeably.

The NCHS definition of nursing homes has remained the same for each of the NMFI surveys. Basically, the definition states that a home must maintain three or more inpatient beds, and, at a minimum, must provide one or more personal care services (such as help with eating, walking, bathing, dressing, or shopping) and/or supervisory services to adults.

While this definition has remained unchanged, other factors have made it difficult, if not impossible, to stay within its boundaries. For example, thousands of board and care homes and residential care homes have emerged over the past 5 years primarily because of changes in Federal and State programs. These facilities vary from State to State not only by name, but also by services offered and people served. The individual State laws and regulations (or the absence of such) determine whether

the State surveys these facilities and, therefore, whether the State includes them on the nursing home file that is sent to NCHS.

The NMFI included many of California's residential community care facilities (RCCF's) prior to 1980, but California was able to identify an additional 1,000 such homes in 1980 and 2,000 more in 1982, bringing the RCCF total to nearly 5,000. None of Michigan's adult foster care homes (AFCH's) was on the NMFI file prior to 1980, but in 1980 Michigan furnished NCHS with a file containing over 2,500 AFCH's. In 1982, NCHS attempted to survey these Michigan AFCH's, but of the nearly 2,250 still in business, approximately one-third did not respond and many others were found to be serving the mentally ill or the mentally retarded. It has also been discovered that many of the California RCCF's serve the mentally ill and mentally retarded. A facility that accepts only these types of residents is considered by NCHS to be out of scope for the nursing and related care home category, but a facility that accepts all types of residents (elderly, disabled, and so forth), but which currently only has mentally ill or mentally retarded residents, is considered to be a nursing or related care home (that is, in scope).

Because there was very little information available for the RCCF's and AFCH's, and because no accurate count can be made of the number actually out of scope, all 7,228 of these facilities are presented in this report. In all cases, they are shown separately.

The 1982 NMFI also included, for the first time, residential care homes in Florida and Kentucky. The 429 Florida adult congregate living facilities and the 373 Kentucky family care homes are defined in the Technical notes section. Because of the impact these figures have on the total number of homes in Florida and Kentucky, they have been combined with the residential facilities in Michigan and California so that they can be counted separately from the Florida and Kentucky nursing

homes. Facilities meeting these definitions also exist in the other 46 States, but because they cannot be identified precisely as residential, they appear in the counts of nursing homes.

Starting in 1980, all identifiable hospital-based nursing homes were excluded from the survey. For the 1982 NMFI, the Health Care Financing Administration file of these hospital-based facilities was obtained to more effectively remove these facilities from the NMFI file. At the same time, NCHS was able to get a more accurate count of these facilities. Some of the hospital-based facilities were out of scope for the NMFI (because residents were mentally ill or mentally retarded) and were, therefore, removed. The counts of hospital-based facilities that appear in this report reflect the deletion of these out-of-scope facilities.

The Health Care Financing Administration and the NMFI files both exclude those hospital-based facilities operated by the Veterans Administration. According to the Veterans Administration, there were approximately 100 such facilities with about 9,000 beds at the end of fiscal year 1981.¹ These counts do not appear in the tables of this report.

Finally, the tables also exclude the 238 nonresponding homes for which imputations from data of previous years were not possible. (There were 159 nonresponding homes for which imputations were made.)

Discussion

Facility characteristics

If the hospital-based facilities; the Michigan, California, Florida, and Kentucky residential care homes; and the nonresponding nursing homes are all added to the basic nursing home file, the 1982 number of nursing and related care homes totaled 26,817 (table 1). However, for purposes of this 1982 NMFI report, the discussion of facility, resident, and employee characteristics will exclude the hospital-based facilities and the nonresponding homes. It will center on the basic nursing home file and the four State residential files, which will be called "nursing homes" and "residential facilities," respectively.

Table 1 shows there were 17,819 nursing homes; their 1,508,732 beds were occupied by 1,378,702 residents at the time of the survey. The 8,030 residential facilities had an estimated 133,335 beds and 114,704 residents.

Table 2 shows that only 18 percent of the nursing homes had less than 25 beds, but an estimated 89 percent of the residential facilities had less than 25 beds. On the other hand, 76 percent of the nursing homes had between 25 and 199 beds, while only 10 percent of the residential facilities were in this group.

The remainder of table 2 shows distributions by ownership, region, and certification. Three-fourths of the nursing homes were under proprietary ownership. (Ownership information for the California and Michigan residential facilities was not generally available, so these facilities were imputed as proprietary). The West Region had less than half as many nursing homes and beds as either the North Central or the South Regions.

Table 1. Number of nursing and related care homes, beds, and residents, by type of facility: United States, 1982

Type of facility	Facilities	Beds	Residents
Number			
All facilities	26,817	1,700,744	1,546,406
Nursing homes	17,819	1,508,732	1,378,702
Hospital-based facilities	1,730	58,677	253,000
Residential facilities	8,030	133,335	114,704
Nonresponding homes	238	---	---

¹Those skilled nursing facilities serving only the mentally ill or mentally retarded were removed from this file, which was furnished by the Health Care Financing Administration.

²Estimated.

³Includes California (4,985), Michigan (2,243), Florida (429), and Kentucky (373).

⁴Data were imputed for California (103,275 beds; 88,600 residents) and Michigan (16,725 beds; 13,950 residents).

⁵Includes only those nonresponding homes for which imputations could not be made (152 of these were Florida residential homes).

Regarding certification, about 40 percent of the nursing homes were certified as skilled (SNF), with the total beds in these SNF's representing nearly 57 percent of all nursing home beds. However, noncertified homes, which represented 27 percent of the nursing homes, had only 13 percent of the beds. This points to a tendency toward skilled homes being large and noncertified homes being small, as can be seen more clearly in table 3, which shows that skilled homes had an average bed size of about 122 beds, whereas the noncertified homes averaged about 31 beds.

The average bed size for all nursing homes was 84.7 (up from 83.1 in 1980); the occupancy rate was 91 percent, and the turnover rate was 7.7 admissions per 10 beds (both about the same as in 1980). Table 3 shows the average bed size, occupancy rates, and turnover rates in nursing homes by various characteristics of the home.

Not only did 76 percent of the homes have between 25 and 199 beds (table 2), but also the highest occupancy rates occurred for homes within this bed size range (table 3). The turnover rates in table 3 are highest in those homes with 50 to 299 beds, in those run for profit, and in those located in the West Region.

Figure 1 shows the number of nursing home beds per 1,000 population 65 years and over. The extended bars above the basic rates represent beds in residential facilities. The figure shows the strong impact the California residential care homes had on data for the West Region. The estimated 103,275 beds in these homes elevated the beds per 1,000 population figure more than 22 points.

Resident characteristics

Of the 1,378,702 nursing home residents in 1982, 990,601 (72 percent) could be put into age and sex groups. The remaining 388,101 residents were either in States for which age and sex information could not be obtained (Florida, Indiana, Michigan, Mississippi, and Missouri) or were in homes that did not furnish this information.

For those 990,601 homes with age and sex reported, 703,016 (71 percent) were female, 701,775 (71 percent) were 75 years and over, and 356,069 (36 percent) were 85 years and over (table 4). Table 4 also shows that the ratio of women

¹Office of Reports and Statistics: 1981 Annual Report. Veterans Administration. Washington, D.C.

Table 2. Number of total homes, nursing homes, and residential facilities and their beds, by selected characteristics: United States, 1982

Characteristic	Total homes ¹		Nursing homes		Residential facilities	
	Homes	Beds	Homes	Beds	Homes	Beds
Total homes	25,849	1,642,067	17,819	1,508,732	8,030	133,335
Bed size						
3-9 beds	6,955	40,294	1,399	7,568	5,556	32,726
10-24 beds	3,450	58,104	1,855	31,807	1,595	26,297
25-49 beds	3,083	113,357	2,718	100,900	365	12,457
50-74 beds	3,465	207,608	3,332	199,915	133	7,693
75-99 beds	2,472	216,483	2,366	208,074	106	8,409
100-199 beds	5,293	690,262	5,094	665,769	199	24,493
200-299 beds	832	192,439	788	182,729	44	9,710
300-499 beds	241	86,560	212	76,618	29	9,942
500 or more beds	58	36,960	55	35,352	3	1,608
Type of ownership						
Government	1,111	112,553	916	110,964	195	1,589
Proprietary	21,132	1,194,000	13,410	1,066,181	7,722	127,819
Nonprofit	3,606	335,514	3,493	331,587	113	3,927
Geographic region						
Northeast	3,866	329,684	3,866	329,684	-	-
North Central	8,137	539,631	5,894	522,906	2,243	16,725
South	6,225	463,298	5,423	449,963	802	13,335
West	7,621	309,454	2,636	206,179	4,985	103,275
Certification ²						
Medicare or Medicaid (skilled nursing facility)	7,032	855,096	7,032	855,096	-	-
Medicaid (intermediate care facility)	5,564	442,277	5,564	442,277	-	-
Not certified	5,643	212,881	4,841	199,546	802	13,335
Unknown	7,610	131,813	382	11,813	7,228	120,000

¹Excludes hospital-based facilities and nonresponding homes.

²Facilities certified as skilled nursing facilities and intermediate care facilities have been classified as skilled nursing facilities.

to men increases with age. Nursing homes had about the same number of men as women in the under 65 years age group, but more than 1½ times as many women as men in the age group 65-74 years. This increase accelerated to almost three times as many women in the 75 to 84 year age group, and to almost four times as many women in the 85 years and over age group.

When age and sex were imputed for residents with unknown age and sex, an estimated 1,204,356 (87.4 percent) of the 1,378,702 residents in nursing homes were 65 years and over (see Technical notes). Of these 1.2 million residents, almost 34 percent were in the North Central Region; by comparison, of the 26.8 million people in the United States who were 65 years and over, 26 percent lived in the North Central Region (table 5). The most striking comparison is probably between the North Central and South Regions. Despite having 2 million more people 65 years and over, the South had 55,000 fewer residents 65 years and over in nursing homes than did the North Central Region.

When these figures are expressed as rates (number of residents 65 years and over per 1,000 population 65 years and over), the North Central Region had a much higher rate (58.6) than any of the other regions (Northeast = 44.0; South = 39.5; West = 35.9). These rates were for nursing homes only; however, considering the large number of Michigan residential facilities, the difference between the North Central rate and the

rates for the Northeast and South would be even greater if the residential facilities were included. The differences between the North Central and West Regions would be less because there were more residential facilities in California than in Michigan.

Employee characteristics

This section deals solely with full-time equivalent (FTE) registered nurses (RN's) and licensed practical nurses (LPN's). In computing the FTE's, the sum of the full-time employees was added to one-half the sum of the part-time employees. Because employee data were not available from all States, it was necessary to impute for missing data (see Technical notes).

In 1982 there were an estimated 64,315 FTE RN's and 86,044 FTE LPN's employed in nursing homes in the United States. The NMFII Surveys include in their counts only those employees who were on the staff payroll; they exclude those employed under contract. This must be taken into account when using these figures.

The rates per home, as expected, increase as the bed size groups get larger for both FTE RN's and LPN's (table 6). The government-operated homes had the highest RN and LPN rates, while the proprietary homes, in general, had the lowest such rates. Perhaps the main reason for this was that the government homes were the largest (121-bed average, 24 homes having

Table 3. Average bed size, occupancy rate, and admissions per 10 beds (turnover rate) for nursing homes,¹ by selected characteristics: United States, 1982

Characteristic	Average bed size	Occupancy rate ²	Admissions per 10 beds ³
	Number	Percent	Number
All nursing homes	84.7	91	7.7
Bed size			
3-9 beds	5.4	88	4.7
10-24 beds	17.1	88	5.4
25-49 beds	37.1	91	5.9
50-74 beds	60.0	93	7.0
75-99 beds	87.9	93	8.4
100-199 beds	130.7	91	8.2
200-299 beds	231.9	91	8.1
300-499 beds	361.4	89	6.2
500 or more beds	642.8	87	4.9
Type of ownership			
Government	121.1	93	5.0
Proprietary	79.5	92	8.4
Nonprofit	94.9	90	6.2
Geographic region			
Northeast	85.3	94	7.1
North Central	88.7	91	6.8
South	83.0	90	7.2
West	78.2	92	11.5
Certification ⁴			
Skilled nursing facility	121.6	93	9.4
Intermediate care facility	79.5	90	5.8
Not certified	30.9	86	0.5
Unknown	41.2	92	5.8

¹Excludes the 8,030 residential facilities, the 730 hospital-based facilities, and the 238 nonresponding homes.

²Number of residents divided by number of beds set up and staffed × 100.

³Includes those nursing homes that reported admissions (14,518); excludes those that did not (3,301).

⁴Facilities certified as skilled nursing facilities and intermediate care facilities have been classified as skilled nursing facilities.

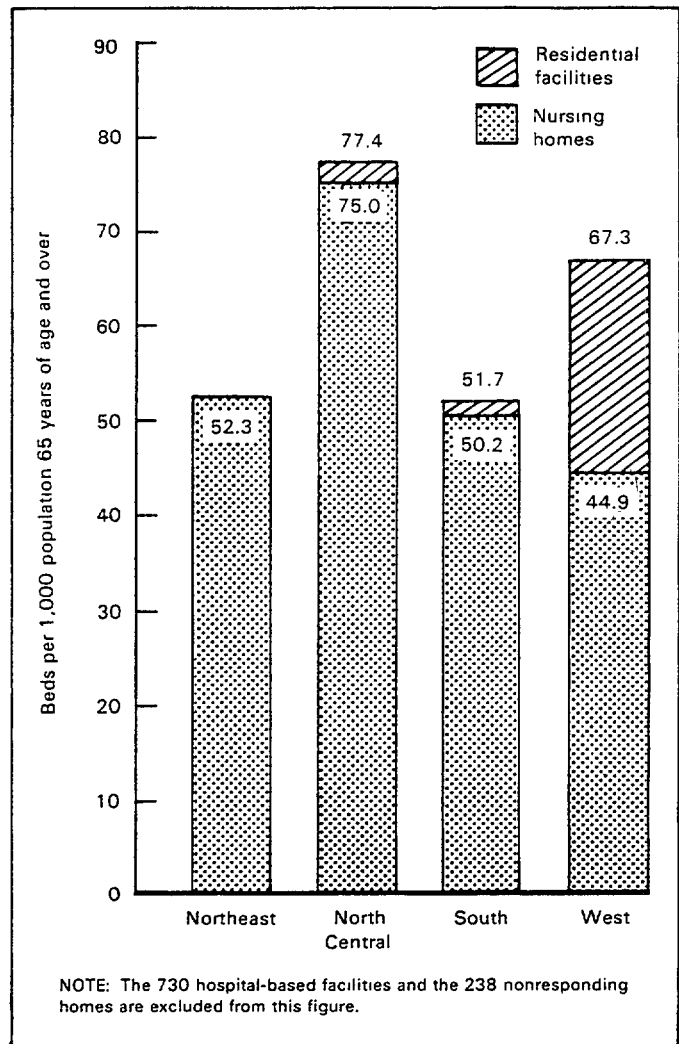


Figure 1. Beds in nursing homes and residential facilities per 1,000 population 65 years of age and over by region: United States, 1982

Table 4. Number of nursing home residents in homes¹ reporting age and sex of residents by age-sex groups and geographic region: United States, 1982

Sex and age	All nursing homes	Geographic region			
		Northeast	North Central	South	West
Residents ²	990,601	200,554	324,211	291,672	174,164
Males					
Under 65 years	287,585	54,172	99,754	82,529	51,130
65-74 years	61,328	10,760	22,542	16,121	11,905
75-84 years ³	62,359	11,713	19,944	19,751	10,951
85 years and over ³	91,126	17,700	30,611	26,929	15,886
85 years and over ³	72,772	13,999	26,657	19,728	12,388
Females					
Under 65 years	703,016	146,382	224,457	209,143	123,034
65-74 years	63,343	11,189	22,866	17,925	11,363
75-84 years ³	101,796	19,413	30,555	35,208	16,620
85 years and over ³	254,580	52,422	79,127	80,302	42,729
85 years and over ³	283,297	63,358	91,909	75,708	52,322

¹Excludes the 8,030 residential facilities, the 730 hospital-based facilities, and the 238 nonresponding homes.

²Excludes residents in Florida, Indiana, Michigan, Mississippi, Missouri, and homes in any other States for which complete age and sex data were not available.

³Adjusted for States whose highest age group was 75 years and over. See Technical notes.

Table 5. Estimated number and percent distribution of resident population 65 years and over in general population and in nursing homes¹ by geographic region: United States, 1982

Region	Total population 65 years and over		Estimated number ² of nursing home residents 65 years and over	
	Number in thousands	Percent	Number in thousands	Percent
United States	26,826	100.0	1,204	100.0
Northeast	6,299	23.5	277	23.0
North Central	6,970	26.0	409	33.9
South	8,963	33.4	354	29.4
West	4,595	17.1	165	13.7

¹Excludes the 8,030 residential facilities, the 730 hospital-based facilities, and the 238 nonresponding homes.

²See Technical notes for estimation procedures.

500 or more beds) and the proprietary homes were the smallest (79-bed average, 9 homes having 500 or more beds).

Although the Northeast had fewer nursing homes than the South, it had a much higher number of FTE RN's, resulting in RN rates nearly 2½ times higher than those for the South. On

the other hand, the Northeast had far fewer FTE LPN's than the South, resulting in lower LPN rates. There are nearly twice as many large (200 beds or more) SNF homes in the Northeast (Northeast = 271; South = 143) and a much higher number of less intensive (non-SNF) types of homes in the South (South = 3,789; Northeast = 2,151), facts that may explain the differences in the numbers of FTE RN's and LPN's in these regions.

When the FTE RN's were combined with the FTE LPN's, the Northeast was found to have a rate of 12.0 nurses per 100 beds (derived from table 6). The West was second with a rate of 11.5, followed by the South with 9.3 and North Central with 8.6. The North Central Region's low rate cannot be explained by a lack of SNF's or a lack of large SNF's, as was the case in the South and West. The North Central Region not only had more total SNF homes than the Northeast, 2,014 to 1,715, it also had more large (200 or more beds) SNF's, 312 to 271. Furthermore, it also had nearly four times as many intermediate care facilities as the Northeast, 2,437 to 645. Because these intermediate care facilities also require nurses, there appears to be either a lower ratio of nurses in the North Central Region or a higher reliance upon contracted nurses to fill nursing home needs.

Table 6. Estimated number¹ of full-time equivalent RN's and LPN's in nursing homes,² number of FTE employees per home, and number of FTE employees per 100 beds, by bed size, type of ownership, geographic region, and certification: United States, 1982

Characteristic	Estimated number of FTE RN's			Estimated number of FTE LPN's		
	Total	Per home	Per 100 beds	Total	Per home	Per 100 beds
All nursing homes	64,315	3.6	4.3	86,044	4.8	5.7
Bed size						
3-9 beds	63	0.0	0.8	114	0.1	1.5
10-24 beds	876	0.5	2.8	1,208	0.7	3.8
25-49 beds	3,767	1.4	3.7	5,332	2.0	5.3
50-74 beds	7,673	2.3	3.8	10,967	3.3	5.5
75-99 beds	8,687	3.7	4.2	12,750	5.4	6.1
100-199 beds	28,832	5.7	4.3	39,147	7.7	5.9
200-299 beds	8,371	10.6	4.6	10,529	13.4	5.8
300-499 beds	3,696	17.4	4.8	3,846	18.1	5.0
500 or more beds	2,350	42.7	6.6	2,153	39.1	6.1
Type of ownership						
Government	5,958	6.5	5.4	7,558	8.3	6.8
Proprietary	41,176	3.1	3.9	60,760	4.5	5.7
Nonprofit	17,181	4.9	5.2	17,726	5.1	5.3
Geographic region						
Northeast	21,215	5.5	6.4	18,626	4.8	5.6
North Central	19,751	3.4	3.8	25,315	4.3	4.8
South	12,253	2.3	2.7	29,567	5.5	6.6
West	11,096	4.2	5.4	12,536	4.8	6.1
Certification ³						
Skilled nursing facility	48,990	7.0	5.7	55,051	7.8	6.4
Intermediate care facility	10,909	2.0	2.5	25,312	4.5	5.7
Not certified	4,211	0.9	2.1	5,401	1.1	2.7
Unknown	205	0.5	1.7	280	0.7	2.4

¹See Technical notes.

²Excludes the 8,030 residential facilities, the 730 hospital-based facilities, and the 238 nonresponding homes.

³Facilities certified as skilled nursing facilities and intermediate care facilities have been classified as skilled nursing facilities.

Technical notes

All National Master Facility Inventory (NMFI) Surveys (of nonhospitals) through 1973 were conducted directly by the National Center for Health Statistics (NCHS) with the assistance of the U.S. Bureau of the Census. From 1976 through 1980 the Cooperative Health Statistics System (CHSS) was active. This system decentralized the responsibility for collecting data from the Federal to the State level. In 1976, 16 States within CHSS collected some or all of the NMFI data; in 1978, 26 States collected NMFI data; and in 1980, 38 States collected NMFI data. In each of these years, NCHS conducted surveys in non-CHSS States.

Although CHSS was not active in 1982, arrangements were continued with 35 States for obtaining their data. A number of these 35 States did not survey every type of nursing and related care home that NCHS includes in its universe. Where this occurred, NCHS surveyed the homes excluded from the State's survey.

The agency within the CHSS States that collected the NMFI data for NCHS was usually the licensing agency. Because their surveys were tied into licensing laws, there were differences in definitions, scope, and timing of the surveys among the CHSS States. Although NCHS included personal care homes, homes for the aged, rest homes, and so forth, some States did not license these types of homes and did not survey them.

The following imputations were made to the 1982 NMFI data:

- 1980 data were used for approximately 500 nursing homes in New York State.
- Little or no data were available for the 4,985 California residential community care facilities (RCCF's) and the 2,243 Michigan adult foster care homes (AFCH's). Although a number of these facilities served only the mentally ill or mentally retarded, there was not enough information available to identify and remove them. As a result, all RCCF's and AFCH's were kept, and beds and residents were imputed using 1980 averages.
- No resident or employee data were available for the 429 Florida adult congregate living facilities or the 373 Kentucky family care homes. Total residents were imputed by multiplying beds by 0.90 (the average occupancy rate for nursing homes).
- Registered nurse and licensed practical nurse data were imputed for Florida and Connecticut using 1980 data.
- In four States (Alaska, Minnesota, Montana, and Texas)

the highest resident age group was 75 years and over. Estimates for residents 85 years and over were obtained by subtracting 50 percent from the 75 year and over age group and adding the result to the 85 year and over group.

- The estimate of 1,204,356 nursing home residents 65 years and over was derived from known age distributions within each region, and from applying those percents to the residents in each region whose ages were unknown. Almost 866,000 residents were actual counts, while the remaining 338,000 were imputed.
- Some States issue a nursing home license and a residential license for the same facility. Whenever this occurred, it created duplicate homes but not duplicate beds. Every effort has been made to eliminate this duplication of the homes.

The final paragraphs of this report provide definitions of the terms used.

Nursing homes—These facilities have three or more beds and provide to adults who require it either (a) nursing care or (b) personal care (such as help with bathing, eating, using toilet facilities, or dressing) and/or supervision over such activities as money management, walking, and shopping.

Residential facilities—These facilities offer no nursing services and provide only personal care or supervisory care. For purposes of this report, only those residential facilities in Florida, Michigan, Kentucky, and California are included in this category. (Note: Facilities meeting this definition also exist in the other 46 States, but because they cannot be identified precisely as residential, they appear in the counts of nursing homes.)

Adult congregate living facilities (Florida)—These facilities provide housing, food services, and one or more personal services to four or more adults who are not related to the owner.

Adult foster care homes (AFCH's) (Michigan)—These facilities provide ongoing supervision, but not continuous nursing care, to adults who are aged, emotionally disturbed, developmentally disabled, or physically handicapped.

Residential community care facilities (RCCF's) (California)—These facilities provide nonmedical care and supervision to the elderly, and to children who are either mentally disordered, developmentally disabled, or physically handicapped.

Family care homes (Kentucky)—These facilities are licensed but not certified. They generally have either two or three beds. (Those with two beds are out of scope for the NMFI and are not included in the survey.)

Symbols

- - - Data not available
 - . . . Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standard of reliability or precision
 - # Figure suppressed to comply with confidentiality requirements
-

1984 Summary: National Hospital Discharge Survey

by Charles F. Dennison, Division of Health Care Statistics

Introduction

During 1984 an estimated 37.2 million inpatients, excluding newborn infants, were discharged from short-stay non-Federal hospitals in the United States. These patients were hospitalized an average of 6.6 days and used 244.7 million days of inpatient hospital care. Patients hospitalized during 1984 accounted for 159 discharges and 1,044 days of care per 1,000 civilian population.

These and other statistics presented in this report are based on data collected by means of the National Hospital Discharge Survey, a continuous survey that has been conducted by the National Center for Health Statistics since 1965. In 1984, data were abstracted from the face sheets of medical records of approximately 192,000 patients discharged from 407 short-stay non-Federal hospitals. A brief description of the sample design, data collection procedures, and estimation process, and definition of terms used in this report can be found in the section entitled "Technical notes." A detailed discussion of these items, as well as the survey form used to collect the data, have been published.^{1,2}

Coding of medical data for patients hospitalized is done according to the *International Classification of Diseases, 9th Revision, Clinical Modification*³ (ICD-9-CM). Up to seven diagnoses and four procedures are coded for each discharge. Although diagnoses included in the ICD-9-CM section entitled "Supplementary classification of external causes of injury and poisoning" (codes E800-E999) are used by the National Hospital Discharge Survey, these diagnoses are excluded from this report. The conditions diagnosed and procedures performed are presented here by chapter of ICD-9-CM. Within these chapters, a few diagnoses and procedures or groups thereof also are shown. These specific categories were selected primarily because of large numbers of occurrences or because they are of special interest. Residual categories of the diagnostic and procedure classes, however, are not included in the tables. More

detailed analyses of these data will be presented in later reports in Series 13 of *Vital and Health Statistics*.

Data highlights

Utilization by patient and hospital characteristics

The number, rate, and average length of stay of patients discharged from short-stay non-Federal hospitals are shown by selected patient and hospital characteristics in tables 1-3. The 37.2 million patients discharged from short-stay hospitals during 1984 included an estimated 14.9 million males and 22.3 million females. The rates per 1,000 population were 132 for males and 184 for females, making the rate for females about 39 percent higher than the rate for males. The number and rate of discharges are always higher for females than for males because of the large number of women in their childbearing years (15-44 years of age) who are hospitalized for deliveries and other obstetrical conditions. Excluding deliveries, the rate for females discharged was 152, or only about 15 percent higher than the rate for males.

The average length of stay was 7.0 days for males and 6.3 days for females during 1984. The length of stay for females was shorter than that for males primarily because the average length of stay of the 3.9 million women who were hospitalized for deliveries was only 3.4 days. The average length of stay for females who were not hospitalized for deliveries during 1984 was 6.9 days.

The number of discharges from short-stay hospitals by geographic region during 1984 ranged from 13.5 million in the South Region to 6.4 million in the West Region, and the rates per 1,000 population ranged from 169 in the South Region to 139 in the West Region. Regional differences in the number of discharges are accounted for mainly by variations in population sizes and to a lesser extent by variations in the

discharge rates. This is apparent when number of discharges and rate of discharges are compared among the regions. Although the rate of discharges per 1,000 population was highest in the North Central and South Regions with no significant difference between them, the number of discharges and the civilian population in the South Region was about 35 percent higher than the North Central Region.

Average lengths of stay by geographic region were 5.7 days in the West, 6.1 days in the South, 6.9 days in the North Central, and 7.8 days in the Northeast.

Discharges from short-stay hospitals were about 40 percent male and 60 percent female in every hospital bed-size group; females with deliveries accounted for about 10.4 percent of all discharges regardless of hospital size. The average length of stay increased steadily from 5.3 days in the smallest hospitals (6–99 beds) to 7.5 days in the largest hospitals (500 beds or more) for all patients.

During 1984, voluntary nonprofit hospitals provided medical care to an estimated 25.7 million patients, or 69 percent of all patients hospitalized. Hospitals operated by State and local governments cared for 7.8 million patients, or 21 percent of all discharges, and proprietary hospitals operated for profit cared for 3.7 million patients or 10 percent of all discharges. Average lengths of stay were 6.8 days in voluntary nonprofit hospitals, 6.1 days in State and local government hospitals, and 6.2 days in proprietary hospitals.

Utilization by diagnosis

Diseases of the circulatory system ranked first in 1984 among the ICD–9–CM diagnostic chapters as a principal or first-listed diagnosis among patients discharged from non-Federal short-stay hospitals. These conditions accounted for an estimated 5.6 million discharges. Other leading ICD–9–CM diagnostic chapters were diseases of the digestive system (4.3 million discharges) and supplementary classifications (including females with deliveries) (4.3 million discharges). Over 38 percent of the patients discharged from non-Federal short-stay hospitals were included in these three ICD–9–CM diagnostic chapters.

The diagnostic categories presented in this report were selected either because they appear as principal or first-listed diagnoses with great frequency or because the conditions are of special interest. Although many of these categories (such as malignant neoplasms; psychoses; and fractures, all sites) are groupings of more detailed diagnoses, they are presented as single categories without showing all of the specific diagnostic inclusions.

The number and rate of discharges and average length of stay for each ICD–9–CM diagnostic chapter and selected categories are shown by sex and age in tables 4–6. The most common diagnostic category for all patients was females with deliveries. This was followed by the diagnostic categories heart disease and malignant neoplasms. Excluding females with deliveries, these last two non-sex-specific diagnostic categories were also the most common first-listed diagnoses for each sex.

The most frequent first-listed diagnoses for 1984 varied for the different age groups. For patients under 15 years of age, the most frequent diagnoses were acute respiratory infections,

except influenza, and chronic disease of tonsils and adenoids. Excluding females with deliveries, the two most frequent diagnoses for patients 15–44 years of age were abortions and ectopic and molar pregnancies, and fractures, all sites. Patients 45–64 years of age were hospitalized most frequently for heart disease. The most common diagnoses for patients 65 years of age and over were heart disease and malignant neoplasms.

The average length of stay for all patients ranged from a low of 1.7 day for the diagnostic category chronic disease of tonsils and adenoids, 1.8 days for patients admitted for sterilization, and 2.3 days for the diagnostic category abortions and ectopic and molar pregnancies to a high of 15.8 days for the diagnostic category fracture of neck of femur. Although the overall average length of stay for females was shorter than that for males, females stayed in the hospital longer than males for many of the specific diagnostic categories shown in this report.

The average length of stay increased with increasing age for most categories of diagnoses shown. Overall, the average length of stay ranged from 4.5 days for patients under 15 years of age to 8.9 days for patients 65 and over. By diagnosis, stays were highest (when compared with the average length of stay) for patients with fracture of neck of femur (15.8 days) and psychoses (14.5 days).

Utilization by procedures

One or more surgical or nonsurgical procedures were performed for an estimated 20.9 million of the 37.2 million inpatients discharged from short-stay hospitals during 1984. A total of 36.2 million procedures, or an average of 1.7 per patient who underwent at least one procedure, were recorded in 1984.

Procedures are grouped in the tables of this report by the ICD–9–CM procedure chapters. Selected procedures within these chapters also are presented by specific categories. Some of these categories (such as extraction of lens, open heart surgery, and hysterectomy) are presented as single categories although they may be divided into more precise subgroups.

When grouped by chapters, miscellaneous diagnostic and therapeutic procedures with 7.2 million procedures ranked first among the surgical and nonsurgical procedures performed during 1984. These were followed by operations on the digestive system with 5.9 million procedures performed. Other leading procedures were obstetrical procedures with 3.9 million procedures, operations on the musculoskeletal system with 3.7 million procedures and operations on female genital organs with 3.5 million procedures. Approximately two-thirds of all procedures performed in 1984 were included in these five ICD–9–CM procedure chapters.

The number and rate of all-listed procedures in 1984 for each ICD–9–CM procedure chapter and selected procedure categories are shown by sex and age in tables 7 and 8. Of the 36.2 million procedures performed during 1984, 14.4 million were for males and 21.8 million were for females. The corresponding rates per 1,000 population were 154 for both sexes, 127 for males, and 180 for females. Of the procedures shown in table 7, some common ones for males were endoscopies on the urinary system (natural orifice) and repair of inguinal hernia; the most frequently performed procedures for females were episiotomy and cesarean section.

The rate of procedures per 1,000 population increased with advancing age from 39 for patients under 15 years to 378 for patients 65 years of age and over. The most frequently performed procedures for patients under 15 years of age were tonsillectomy with or without adenoidectomy; for patients 15-44

years of age, episiotomy and cesarean section; for patients 45-64 years of age, arteriography and angiocardiology, and cardiac catheterization; and for patients 65 years of age and over, extraction of lens, computerized axial tomography, and endoscopies of the urinary system (natural orifice).

TABLE 1. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1984
(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS			
TOTAL.....	37,162	14,899	22,263
AGE			
UNDER 15 YEARS.....	3,208	1,831	1,377
15-44 YEARS.....	14,533	4,305	10,228
45-64 YEARS.....	8,195	3,964	4,231
65 YEARS AND OVER.....	11,226	4,799	6,427
REGION			
NORTHEAST.....	7,408	3,086	4,321
NORTH CENTRAL.....	9,899	4,042	5,857
SOUTH.....	13,451	5,261	8,190
WEST.....	6,405	2,510	3,895
BED SIZE			
6-99 BEDS.....	5,972	2,352	3,621
100-199 BEDS.....	6,624	2,605	4,019
200-299 BEDS.....	6,361	2,614	3,747
300-499 BEDS.....	10,139	4,055	6,084
500 BEDS OR MORE.....	8,066	3,273	4,793
OWNERSHIP			
NONPROFIT.....	25,651	10,208	15,443
STATE AND LOCAL GOVERNMENT.....	7,849	3,218	4,631
PROPRIETARY.....	3,662	1,473	2,189

TABLE 2. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, GEOGRAPHIC REGION, AND SEX: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

AGE AND REGION	BOTH SEXES	MALE	FEMALE
RATE OF PATIENTS DISCHARGED PER 1,000 POPULATION			
TOTAL.....	158.5	131.6	183.6
AGE			
UNDER 15 YEARS.....	62.0	69.2	54.5
15-44 YEARS.....	132.2	79.6	183.1
45-64 YEARS.....	183.3	185.8	180.9
65 YEARS AND OVER.....	400.4	424.8	383.9
REGION			
NORTHEAST.....	149.3	130.5	166.4
NORTH CENTRAL.....	167.9	141.4	192.8
SOUTH.....	168.8	137.3	198.0
WEST.....	138.7	110.8	165.5

TABLE 3. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
AVERAGE LENGTH OF STAY IN DAYS			
TOTAL.....	6.6	7.0	6.3
AGE			
UNDER 15 YEARS.....	4.5	4.4	4.6
15-44 YEARS.....	4.9	6.0	4.0
45-64 YEARS.....	7.2	7.1	7.2
65 YEARS AND OVER.....	8.9	8.8	9.0
REGION			
NORTHEAST.....	7.8	8.1	7.6
NORTH CENTRAL.....	6.9	7.3	6.6
SOUTH.....	6.1	6.5	5.9
WEST.....	5.7	6.3	5.3
BED SIZE			
6-99 BEDS.....	5.3	5.5	5.3
100-199 BEDS.....	6.0	6.6	5.7
200-299 BEDS.....	6.6	6.8	6.4
300-499 BEDS.....	6.9	7.3	6.7
500 BEDS OR MORE.....	7.5	8.3	7.0
OWNERSHIP			
NONPROFIT.....	6.8	7.2	6.5
STATE AND LOCAL GOVERNMENT.....	6.1	6.6	5.7
PROPRIETARY.....	6.2	6.5	6.1

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

TABLE 4. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1984
 (DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS							
ALL CONDITIONS.....	37,162	14,899	22,263	3,208	14,533	8,195	11,226
INFECTIOUS AND PARASITIC DISEASES.....001-139	658	301	357	185	217	89	166
NEOPLASMS.....140-239	2,576	1,060	1,516	62	456	884	1,174
MALIGNANT NEOPLASMS.....140-208,230-234	2,059	943	1,117	36	227	727	1,070
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	340	214	126	*	13	155	172
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	234	*	231	*	33	101	100
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,139	427	712	78	273	314	474
DIABETES MELLITUS.....250	593	238	354	23	143	199	227
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	354	152	202	57	86	58	153
MENTAL DISORDERS.....290-319	1,690	875	815	50	966	413	261
PSYCHOSES.....290-299	625	283	341	*7	329	155	133
NEUROTIC AND PERSONALITY DISORDERS.....300-301	228	77	151	*7	134	58	28
ALCOHOL DEPENDENCE SYNDROME.....303	392	288	104	*	232	128	31
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	1,669	709	960	257	349	345	718
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	441	211	230	58	157	92	134
CATARACT.....366	481	165	316	*	10	74	395
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	321	158	162	152	60	56	53
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,593	2,856	2,737	35	531	1,762	3,265
ESSENTIAL HYPERTENSION.....401	266	110	155	*	48	115	102
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	3,599	1,905	1,694	20	266	1,203	2,110
ACUTE MYOCARDIAL INFARCTION.....410	700	435	266	*	42	257	401
ATHEROSCLEROTIC HEART DISEASE.....414.0	365	225	140	*	18	135	212
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	969	535	434	*	74	422	471
CONGESTIVE HEART FAILURE.....428.0	531	228	303	*	11	92	425
CEREBROVASCULAR DISEASE.....430-438	896	420	476	*5	32	192	667
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	3,365	1,654	1,711	877	708	642	1,137
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	449	207	243	199	86	65	99
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	327	142	185	27.8	105	*	*
PNEUMONIA, ALL FORMS.....480-486	837	424	413	207	114	136	380
ASTHMA.....493	465	197	268	150	109	102	105
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	4,305	2,013	2,292	409	1,365	1,169	1,361
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	327	179	148	*	81	98	146
GASTRITIS AND DUODENITIS.....535	266	108	158	17	103	85	61
APPENDICITIS.....540-543	270	154	116	69	158	28	15
INGUINAL HERNIA.....550	440	390	50	58	125	131	125
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	540	213	327	171	175	88	106
CHOLELITHIASIS.....574	488	141	347	*	177	155	155
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	3,116	1,043	2,073	134	1,460	753	769
CALCULUS OF KIDNEY AND URETER.....592	328	222	106	*	149	126	52
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	254	...	254	*	191	59	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	969	...	969	*6	960	*	...
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	418	...	418	*	413	*	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	568	263	305	60	205	147	156
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	2,375	1,007	1,368	68	925	755	627
ARTHROPATHIES AND RELATED DISORDERS.....710-719	536	207	329	19	161	161	196
INTERVERTEBRAL DISC DISORDERS.....722	509	288	221	*	271	183	53
CONGENITAL ANOMALIES.....740-759	317	174	143	166	81	43	26
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	167	88	79	166	*	-	*
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	520	245	276	93	209	140	79
INJURY AND POISONING.....800-999	3,472	1,892	1,580	438	1,622	596	816
FRACTURES, ALL SITES.....800-829	1,114	541	573	146	387	161	420
FRACTURE OF NECK OF FEMUR.....820	244	64	179	*	11	25	205
SPRAINS AND STRAINS OF BACK (INCLUDING NECK) INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	269	128	142	*	168	70	28
LACERATIONS AND OPEN WOUNDS.....870-904	315	157	158	68	141	25	35
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,308	141	4,167	66	4,119	81	42
PERSONS ADMITTED FOR STERILIZATION.....V25.2	113	*	111	-	111	*	-
FEMALES WITH DELIVERIES.....V27	3,853	...	3,853	13	3,836	*	...

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 5. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
RATE OF INPATIENTS DISCHARGED PER 10,000 POPULATION							
ALL CONDITIONS.....	1,585.1	1,316.2	1,836.2	620.1	1,321.7	1,832.8	4,003.6
INFECTIOUS AND PARASITIC DISEASES.....001-139	28.1	26.6	29.4	35.9	19.8	19.9	59.2
NEOPLASMS.....140-239	109.9	93.7	125.1	12.1	41.5	197.7	418.6
MALIGNANT NEOPLASMS.....140-208,230-234	87.8	83.3	92.1	7.0	20.6	162.6	381.5
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	14.5	18.9	10.4	*	1.2	34.7	61.2
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	10.0	*	19.1	*	3.0	22.5	35.7
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	48.6	37.7	58.8	15.0	24.8	70.3	149.2
DIABETES MELLITUS.....250	25.3	21.0	29.2	4.5	13.0	44.5	81.0
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	15.1	13.4	16.7	11.0	7.8	13.1	54.6
MENTAL DISORDERS.....290-319	72.1	77.3	67.3	9.6	87.8	92.4	93.2
PSYCHOSES.....290-299	26.6	25.0	28.2	*1.4	29.9	34.6	47.5
NEUROTIC AND PERSONALITY DISORDERS.....300-301	9.7	6.8	12.4	*1.4	12.2	13.0	10.0
ALCOHOL DEPENDENCE SYNDROME.....303	16.7	25.5	8.6	*	21.1	28.6	11.1
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	71.2	62.6	79.2	49.7	31.7	77.2	256.1
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	18.8	18.6	19.0	11.1	14.3	20.7	47.9
CATARACT.....366	20.5	14.6	26.1	*	0.9	16.6	140.7
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	13.7	14.0	13.4	29.4	5.4	12.5	18.9
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	238.6	252.3	225.8	6.7	48.3	394.1	1,164.5
ESSENTIAL HYPERTENSION.....401	11.3	9.8	12.8	*	4.4	25.6	36.3
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	153.5	168.3	139.7	3.8	24.2	269.1	752.4
ACUTE MYOCARDIAL INFARCTION.....410	29.9	38.4	21.9	*	3.8	57.5	142.9
ATHEROSCLEROTIC HEART DISEASE.....414.0	15.6	19.9	11.5	*	1.6	30.1	75.6
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	41.3	47.3	35.8	*	6.7	94.3	168.0
CONGESTIVE HEART FAILURE.....428.0	22.6	20.1	25.0	*	1.0	20.6	151.7
CEREBROVASCULAR DISEASE.....430-438	38.2	37.1	39.3	*0.9	3.0	42.9	237.9
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	143.5	146.1	141.1	169.6	64.4	143.6	405.4
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	19.2	18.2	20.0	38.5	7.8	14.5	35.4
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	14.0	12.5	15.3	42.2	9.6	*	*
PNEUMONIA, ALL FORMS.....480-486	35.7	37.4	34.1	39.9	10.3	30.5	135.6
ASTHMA.....493	19.8	17.4	22.1	28.9	9.9	22.8	37.3
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	183.6	177.8	189.0	79.1	124.2	261.5	485.5
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	13.9	15.8	12.2	*	7.3	21.8	51.9
GASTRITIS AND DUODENITIS.....535	11.3	9.5	13.0	3.2	9.4	19.0	21.7
APPENDICITIS.....540-543	11.5	13.6	9.6	13.4	14.4	6.3	5.2
INGUINAL HERNIA.....550	18.8	34.4	4.1	11.3	29.4	44.5	44.5
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	23.0	18.8	27.0	33.0	15.9	19.7	37.9
CHOLELITHIASIS.....574	20.8	12.5	28.6	*	16.1	34.7	55.2
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	132.9	92.1	171.0	26.0	132.8	168.3	274.1
CALCULUS OF KIDNEY AND URETER.....592	14.0	19.6	8.7	*	13.5	28.2	18.5
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	10.8	...	21.0	*	17.3	13.3	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	41.3	...	79.9	*1.2	87.3	*	...
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	17.8	...	34.5	*	37.5	*	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	24.2	23.2	25.1	11.6	18.7	32.8	55.7
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	101.3	89.0	112.8	13.1	84.1	169.0	223.6
ARTHROPATHIES AND RELATED DISORDERS.....710-719	22.9	18.3	27.1	3.7	14.6	35.9	69.8
INTERVERTEBRAL DISC DISORDERS.....722	21.7	25.4	18.2	*	24.6	41.0	19.0
CONGENITAL ANOMALIES.....740-759	13.5	15.4	11.8	32.1	7.4	9.7	9.4
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	7.1	7.8	6.5	32.1	*	-	*
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	22.2	21.6	22.7	17.9	19.0	31.4	28.0
INJURY AND POISONING.....800-999	148.1	167.2	130.3	84.7	147.5	133.3	291.1
FRACTURES, ALL SITES.....800-829	47.5	47.8	47.2	28.3	35.2	36.0	149.6
FRACTURE OF NECK OF FEMUR.....820	10.4	5.7	14.8	*	1.0	5.5	73.2
SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	11.5	11.3	11.7	*	15.3	15.7	9.9
INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	11.5	13.9	9.3	13.1	12.9	5.6	12.6
LACERATIONS AND OPEN WOUNDS.....870-904	13.5	20.3	7.1	8.7	18.5	9.3	9.0
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	183.8	12.5	343.7	12.8	374.6	18.2	15.0
PERSONS ADMITTED FOR STERILIZATION.....V25.2	4.8	*	9.2	-	10.1	*	-
FEMALES WITH DELIVERIES.....V27	164.4	...	317.8	2.6	348.9	*	...

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 6. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE				
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER	
		AVERAGE LENGTH OF STAY IN DAYS						
ALL CONDITIONS.....	6.6	7.0	6.3	4.5	4.9	7.2	8.9	
INFECTIOUS AND PARASITIC DISEASES.....001-139	6.6	6.9	6.4	4.0	5.7	8.1	10.1	
NEOPLASMS.....140-239	9.0	9.6	8.5	5.1	6.4	8.7	10.4	
MALIGNANT NEOPLASMS.....140-208,230-234	9.8	10.1	9.5	6.6	7.9	9.1	10.7	
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	9.5	9.4	9.8	*	7.6	8.7	10.4	
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	8.3	*	8.3	*	6.9	7.7	9.4	
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	7.6	7.5	7.7	4.7	5.7	7.4	9.4	
DIABETES MELLITUS.....250	8.2	7.8	8.5	5.8	5.9	8.2	9.9	
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	6.2	5.7	6.5	3.7	5.1	6.7	7.4	
MENTAL DISORDERS.....290-319	11.9	11.5	12.4	16.7	11.8	11.4	12.2	
PSYCHOSES.....290-299	14.5	14.0	14.9	*26.5	14.5	14.3	14.1	
NEUROTIC AND PERSONALITY DISORDERS.....300-301	11.2	10.1	11.7	*22.2	11.7	10.0	8.4	
ALCOHOL DEPENDENCE SYNDROME.....303	10.6	10.4	11.2	*	10.6	10.0	13.3	
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	4.8	5.1	4.5	3.6	5.0	5.1	5.0	
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	9.3	9.9	8.8	6.9	7.1	9.6	12.9	
CATARACT.....366	2.4	2.2	2.5	*	2.8	2.5	2.4	
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	3.2	3.2	3.1	2.6	2.7	3.5	4.9	
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	8.2	7.9	8.6	6.3	6.2	7.5	9.0	
ESSENTIAL HYPERTENSION.....401	5.6	5.4	5.8	*	4.4	5.1	6.8	
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	7.8	7.5	8.1	6.1	6.1	7.1	8.4	
ACUTE MYOCARDIAL INFARCTION.....410	10.0	9.5	10.8	*	8.3	9.5	10.4	
ATHEROSCLEROTIC HEART DISEASE.....414.0	7.2	7.2	7.3	*	5.4	6.4	7.9	
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	6.0	5.8	6.3	*	5.0	5.7	6.4	
CONGESTIVE HEART FAILURE.....428.0	8.6	8.2	8.9	*	6.1	8.3	8.7	
CEREBROVASCULAR DISEASE.....430-438	10.4	9.8	10.8	*8.5	11.1	10.3	10.4	
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	6.0	5.9	6.1	3.4	3.9	6.8	8.9	
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	4.6	4.3	4.8	3.2	3.9	5.8	7.1	
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	1.7	1.6	1.7	1.6	1.7	*	*	
PNEUMONIA, ALL FORMS.....480-486	7.8	7.3	8.2	4.8	5.9	8.1	9.8	
ASTHMA.....493	5.2	4.6	5.6	3.6	4.5	5.7	7.6	
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	6.3	6.0	6.6	3.6	4.9	6.6	8.2	
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	7.4	7.5	7.3	*	5.2	7.1	8.8	
GASTRITIS AND DUODENITIS.....535	4.7	4.5	4.8	2.9	4.0	5.2	5.6	
APPENDICITIS.....540-543	5.1	4.9	5.4	4.6	4.7	6.8	9.0	
INGUINAL HERNIA.....550	3.8	3.7	3.9	1.9	2.9	4.0	5.2	
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	4.9	4.7	5.0	3.4	4.9	6.0	6.4	
CHOLELITHIASIS.....574	7.6	8.1	7.4	*	6.2	7.3	9.7	
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	5.4	5.9	5.2	3.6	4.4	5.2	7.7	
CALCULUS OF KIDNEY AND URETER.....592	4.2	4.0	4.7	*	3.3	4.2	6.7	
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	3.5	...	3.5	*	3.4	3.9	*	
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	2.6	...	2.6	*6.2	2.6	*	...	
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	2.3	...	2.3	*	2.3	*	...	
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	8.0	7.8	8.1	4.0	6.0	8.5	11.7	
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	7.0	6.5	7.3	5.5	5.6	6.9	9.3	
ARTHROPATHIES AND RELATED DISORDERS.....710-719	8.1	7.0	8.8	6.1	4.7	8.3	10.9	
INTERVERTEBRAL DISC DISORDERS.....722	7.6	7.0	8.3	*	7.1	7.9	9.0	
CONGENITAL ANOMALIES.....740-759	6.0	5.9	6.2	5.7	4.4	8.3	9.6	
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	12.2	11.1	13.4	12.2	*	-	*	
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	4.1	4.0	4.3	3.1	3.6	4.7	5.6	
INJURY AND POISONING.....800-999	6.8	6.3	7.5	3.9	5.4	7.2	11.0	
FRACTURES, ALL SITES.....800-829	9.3	8.2	10.3	4.7	7.0	8.7	13.3	
FRACTURE OF NECK OF FEMUR.....820	15.8	16.1	15.6	*	17.5	13.6	15.9	
SPRAINS AND STRAINS OF BACK (INCLUDING NECK) INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	6.4	6.0	6.8	*	6.1	7.1	7.5	
LACERATIONS AND OPEN WOUNDS.....870-904	4.5	4.4	4.9	3.8	4.2	5.5	6.9	
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	3.4	3.7	3.4	3.3	3.4	4.0	5.0	
PERSONS ADMITTED FOR STERILIZATION.....V25.2	1.8	*	1.8	-	1.9	*	-	
FEMALES WITH DELIVERIES.....V27	3.4	...	3.4	3.2	3.4	*	...	

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 7. NUMBER OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. PROCEDURE GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS							
ALL PROCEDURES.....	36,155	14,359	21,796	2,024	14,757	8,762	10,612
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	895	460	435	133	317	249	196
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	111	26	84	*5	45	43	18
OPERATIONS ON THE EYE.....08-16	1,347	518	829	59	116	258	914
EXTRACTION OF LENS.....13.1-13.6	506	175	331	*5	11	81	409
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	455	159	296	*	*5	73	375
OPERATIONS ON THE EAR.....18-20	326	180	146	168	83	46	29
MYRINGOTOMY.....20.0	138	79	58	121	11	*	*
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	1,331	658	674	351	618	231	131
RHINOPLASTY AND REPAIR OF NOSE.....21.8	235	111	124	*9	163	46	17
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	348	148	200	224	118	*6	*
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	989	587	402	61	174	336	418
BRONCHOSCOPY.....33.21-33.23	214	127	87	16	30	71	97
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	2,101	1,248	853	91	303	832	875
OPEN HEART SURGERY.....35.1-35.51, 35.53-36.2, 36.9, 37.10-37.11, 37.32-37.33, 37.5	314	218	96	13	39	160	102
DIRECT HEART REVASCULARIZATION.....36.1	202	156	46	*	15	115	71
CARDIAC CATHETERIZATION.....37.21-37.23	570	372	198	27	85	288	171
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR.....37.7-37.8	208	110	98	*	*7	35	164
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	367	182	185	18	81	109	159
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,930	2,581	3,350	264	1,994	1,591	2,081
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23, 44.13	230	114	117	*8	45	75	102
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8, 45.6-45.8	257	118	138	*	37	76	139
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	294	160	134	70	177	30	16
HEMORRHOIDECTOMY.....49.43-49.46	131	69	62	-	62	49	21
CHOLECYSTECTOMY.....51.2	485	145	339	*	183	155	145
REPAIR OF INGUINAL HERNIA.....53.0-53.1	469	411	57	65	130	136	138
DIVISION OF PERITONEAL ADHESIONS.....54.5	308	40	268	*	185	56	64
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,886	1,149	737	89	392	530	875
ENDOSCOPIES (NATURAL ORIFICE).....55.21-55.22, 56.31, 57.32, 58.22	774	536	238	26	123	208	416
DILATION OF URETHRA.....58.6	164	91	74	14	34	45	71
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	822	822	...	103	113	195	410
PROSTATECTOMY.....60.2-60.6	361	361	...	...	*	83	275
CIRCUMCISION.....64.0	71	71	...	42	*10	11	*8
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	3,532	...	3,532	14	2,616	641	261
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	498	...	498	*	298	155	44
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	488	...	488	-	484	*	-
HYSTERECTOMY.....68.3-68.7	664	...	664	*	416	188	60
CURETTAGE OF UTERUS TO TERMINATE PREGNANCY.....69.01, 69.51	67	...	67	*	66	*	...
DILATION AND CURETTAGE OF UTERUS AFTER DELIVERY OR ABORTION.....69.02	251	...	251	*	249	*	...
DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS.....69.09	470	...	470	*	317	115	38
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	172	...	172	-	59	67	46
OBSTETRICAL PROCEDURES.....72-75	3,872	...	3,872	11	3,858	*	...
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1, 72.21, 72.31, 72.71, 73.6	1,861	...	1,861	*5	1,855	*	...
CESAREAN SECTION.....74.0-74.2, 74.4, 74.99	813	...	813	*	810	*	...
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	483	...	483	*	481	*	...
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,698	1,793	1,905	249	1,594	980	874
OPEN REDUCTION OF FRACTURE.....76.72, 76.74, 76.76-76.77, 76.79, 79.2-79.3, 79.5-79.6	436	234	202	32	190	70	143
OTHER REDUCTION OF FRACTURE.....76.70-76.71, 76.73, 76.75, 76.78, 79.0-79.1, 79.4	241	131	109	71	82	35	52
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5, 81.0	277	163	114	*	152	102	19
EXCISION OF SEMILUNAR CARTILAGE OF KNEE.....80.6	136	91	45	*	82	36	15
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	164	85	79	*	70	35	56
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5-81.6	184	53	130	*	*8	34	141
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,785	681	1,103	112	743	501	428
MASTECTOMY.....85.4	121	*6	116	*	16	50	54
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	161	101	60	15	68	37	40
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	7,163	3,474	3,689	294	1,710	2,216	2,942
COMPUTERIZED AXIAL TOMOGRAPHY.....87.03, 87.41, 87.71, 88.01, 88.38	1,091	530	561	46	247	297	502
PYELOGRAM.....87.73-87.75	421	230	191	14	126	136	145
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	972	587	385	14	134	431	392
DIAGNOSTIC ULTRASOUND.....88.7	836	317	519	32	260	211	353
RADIOISOTOPE SCAN.....92.0-92.1	764	349	414	13	142	230	379

TABLE 8. RATE OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. PROCEDURE GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
RATE OF ALL-LISTED PROCEDURES PER 100,000 POPULATION							
ALL PROCEDURES.....	15,421.7	12,684.7	17,977.1	3,912.9	13,420.4	19,597.5	37,844.7
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	381.8	406.2	359.0	257.3	288.4	557.4	697.3
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	47.2	23.2	69.7	*9.3	40.8	96.4	64.2
OPERATIONS ON THE EYE.....08-16	574.8	457.9	683.9	114.8	105.4	576.3	3,261.3
EXTRACTION OF LENS.....13.1-13.6	215.8	154.6	273.0	*9.6	10.4	180.2	1,458.5
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	194.0	140.2	244.2	*	*4.4	164.3	1,338.9
OPERATIONS ON THE EAR.....18-20	139.0	159.1	120.2	325.2	75.4	102.7	102.5
MYRINGOTOMY.....20.0	58.7	70.1	48.1	233.4	10.2	*	*
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	567.8	581.1	555.5	678.9	562.5	516.3	466.3
RHINOPLASTY AND REPAIR OF NOSE.....21.8	100.3	98.1	102.3	*18.0	148.6	101.8	60.1
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	148.5	130.7	165.0	433.8	107.0	*12.3	*
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	421.7	518.5	331.4	118.5	157.9	751.2	1,490.3
BRONCHOSCOPY.....33.21-33.23	91.3	112.5	71.6	31.8	27.2	157.8	346.5
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	896.3	1,102.7	703.6	176.8	275.6	1,861.3	3,119.0
OPEN HEART SURGERY.....35.1-35.51,							
35.53-36.2,36.9,37.10-37.11,37.32-37.33,37.5	134.0	192.7	79.3	24.3	35.8	358.9	363.0
DIRECT HEART REVASCLARIZATION.....36.1	86.3	137.7	38.2	*	13.9	257.7	254.5
CARDIAC CATHETERIZATION.....37.21-37.23	242.9	328.6	162.9	51.7	76.9	643.6	608.2
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR..37.7-37.8	88.8	97.1	81.1	*	*6.8	77.8	586.0
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	156.4	160.9	152.3	34.1	73.4	243.7	568.6
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	2,529.6	2,279.8	2,762.8	511.0	1,813.3	3,558.4	7,422.2
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	98.3	100.3	96.4	*16.4	40.7	168.4	363.3
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	109.4	104.4	114.1	*	33.6	171.1	494.7
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	125.5	141.8	110.3	135.4	161.4	68.1	58.0
HEMORRHOIDECTOMY.....49.43-49.46	56.0	61.1	51.2	-	56.0	108.7	75.0
CHOLECYSTECTOMY.....51.2	206.7	128.5	279.7	*	166.5	346.2	518.4
REPAIR OF INGUINAL HERNIA.....53.0-53.1	199.9	363.3	47.4	125.0	118.2	304.8	491.1
DIVISION OF PERITONEAL ADHESIONS.....54.5	131.3	35.6	220.7	*	168.7	124.6	226.6
OPERATIONS ON THE URINARY SYSTEM.....55-59	804.5	1,015.0	608.0	172.4	356.4	1,185.7	3,120.1
ENDOSCOPIES (NATURAL ORIFICE).....55.21-55.22,56.31,57.32,58.22	329.9	473.1	196.3	51.0	111.5	466.0	1,484.4
DILATION OF URETHRA.....58.6	70.1	80.3	60.6	27.4	30.7	101.5	253.5
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	350.5	726.0	...	199.7	102.7	436.5	1,463.4
PROSTATECTOMY.....60.2-60.6	154.0	319.0	...	...	*	185.7	980.5
CIRCUMCISION.....64.0	30.1	62.3	...	81.1	*8.7	24.8	*28.1
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	1,506.7	...	2,913.4	27.2	2,378.9	1,434.4	931.5
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	212.5	...	410.9	*	270.9	347.2	158.5
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	208.0	...	402.1	-	439.8	*	-
HYSTERECTOMY.....68.3-68.7	283.4	...	548.1	*	378.3	421.4	213.8
CURETTAGE OF UTERUS TO TERMINATE PREGNANCY.....69.01,69.51	28.6	...	55.3	*	59.9	*	...
DILATION AND CURETTAGE OF UTERUS AFTER DELIVERY OR ABORTION.....69.02	107.0	...	206.9	*	226.2	*	...
DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS.....69.09	200.4	...	387.5	*	288.1	257.1	134.4
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	73.5	...	142.2	-	53.7	149.6	165.6
OBSTETRICAL PROCEDURES.....72-75	1,651.7	...	3,193.7	20.4	3,508.8	*	...
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	793.8	...	1,534.8	*10.0	1,687.1	*	...
CESAREAN SECTION.....74.0-74.2,74.4,74.99	346.6	...	670.3	*	736.5	*	...
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	206.1	...	398.5	*	437.2	*	...
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	1,577.2	1,584.0	1,570.9	482.2	1,449.8	2,192.0	3,116.8
OPEN REDUCTION OF FRACTURE.....76.72,							
76.74,76.76-76.77,76.79,79.2-79.3,79.5-79.6	185.9	206.6	166.6	61.8	173.2	157.6	510.0
OTHER REDUCTION OF FRACTURE.....76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4	102.7	116.1	90.2	138.1	74.4	78.6	186.7
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	118.1	143.8	94.2	*	138.4	228.7	67.4
EXCISION OF SEMILUNAR CARTILAGE OF KNEE.....80.6	57.9	80.5	36.8	*	75.0	81.1	54.2
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	69.9	75.0	65.0	*	63.7	78.9	198.0
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5-81.6	78.3	47.1	107.5	*	*6.9	77.0	501.6
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	761.3	601.9	910.1	216.9	675.5	1,121.5	1,527.6
MASTECTOMY.....85.4	51.6	*4.9	95.3	*	14.9	112.6	193.1
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	68.7	89.5	49.2	29.9	61.7	83.8	143.4
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	3,055.2	3,068.6	3,042.7	568.4	1,555.5	4,956.7	10,492.4
COMPUTERIZED AXIAL TOMOGRAPHY.....87.03,87.41,87.71,88.01,88.38	465.5	468.6	462.6	89.5	224.5	663.5	1,788.5
PYEOGRAM.....87.73-87.75	179.6	203.0	157.8	27.7	114.5	303.9	517.2
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	414.6	518.7	317.5	26.9	122.3	964.8	1,399.0
DIAGNOSTIC ULTRASOUND.....88.7	356.5	280.3	427.7	61.8	236.5	472.0	1,186.9
RADIOISOTOPE SCAN.....92.0-92.1	325.8	308.7	341.8	26.1	129.0	513.8	1,351.2

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³U.S. Public Health Service and Health Care Financing Administration: *International Classification of Diseases, 9th Revision, Clinical Modification*. DHHS Pub. No. (PHS) 80-1260. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1980.

⁴Data from the American Hospital Association 1983 Annual Survey: American Hospital Association, Chicago, Illinois.

⁵National Center for Health Statistics, M. G. Sirken: Utilization of short-stay hospitals, summary of nonmedical statistics, United States, 1965. *Vital and Health Statistics*. Series 13, No. 2. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1967.

⁶National Center for Health Statistics, M. J. Witkin: Utilization of short-stay hospitals by characteristics of discharged patients, United States, 1965. *Vital and Health Statistics*. Series 13, No. 3. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1967.

Technical notes

Survey methodology

Source of data

The National Hospital Discharge Survey (NHDS) encompasses patients discharged from short-stay hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals with six or more beds and an average length of stay of less than 30 days for all patients are included in the survey. Discharges of newborn infants are excluded from this report.

The original universe for the survey consisted of 6,965 hospitals contained in the 1963 National Master Facility Inventory. New hospitals were sampled for inclusion in the survey in 1972, 1975, 1977, 1979, 1981, and 1983. In all, 553 hospitals were sampled in 1984. Of these hospitals, 86 refused to participate, and 60 were out of scope. The 407 participating hospitals provided approximately 192,000 abstracts of medical records. Table I provides a distribution of the current hospitals in the universe⁴ and NHDS sample of in-scope hospitals for 1984.

Sample design and data collection

All hospitals with 1,000 or more beds in the universe of short-stay hospitals were selected with certainty in the sample. All hospitals with fewer than 1,000 beds were stratified, the primary strata being 24 size-by-region classes. Within each of these 24 primary strata, the allocation of the hospitals was made through a controlled selection technique so that hospitals in the sample would be properly distributed with regard to type ownership and geographic division. Sample hospitals were drawn with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals.

Table I. Distribution of non-Federal short-stay hospitals in the universe and National Hospital Discharge Survey in-scope sample by geographic region and bed size of hospital: United States, 1984

<i>Bed size of hospital</i>	<i>All regions</i>	<i>Northeast</i>	<i>North Central</i>	<i>South</i>	<i>West</i>
Number of hospitals					
All sizes					
Universe.....	6,023	902	1,704	2,291	1,126
Sample.....	493	115	140	164	74
6-49 beds					
Universe.....	1,372	78	415	535	344
Sample.....	39	6	11	13	9
50-99 beds					
Universe.....	1,467	160	427	611	269
Sample.....	62	10	14	30	8
100-199 beds					
Universe.....	1,398	203	373	571	251
Sample.....	93	16	22	43	12
200-299 beds					
Universe.....	733	196	177	237	123
Sample.....	72	18	21	20	13
300-499 beds					
Universe.....	715	176	202	224	113
Sample.....	119	37	35	25	22
500-999 beds					
Universe.....	309	78	101	105	25
Sample.....	95	23	34	29	9
1,000 beds or more					
Universe.....	29	11	9	8	1
Sample.....	13	5	3	4	1

NOTE: A list of references follows the text.

Sample discharges were selected within the hospitals using the daily listing sheet of discharges as the sampling frame. These discharges were selected by a random technique, usually on the basis of the terminal digit or digits of the patient's medical record number, a number assigned when the patient was admitted to the hospital. The within-hospital sampling ratio for selecting sample discharges varied inversely with the probability of selection of the hospital.

The sample selection and the transcription of information from the hospital records to abstract forms were performed by the hospital staff or by representatives of the National Center for Health Statistics or by both. The data were abstracted from the face sheets of the medical records. All discharge diagnoses and procedures were listed on the abstract in the order of the principal one, or the first-listed one if the principal one was not identified, followed by the order in which all other diagnoses or procedures were entered on the face sheet of the medical record.

Presentation of estimates

Statistics produced by NHDS are derived by a complex estimating procedure. The basic unit of estimation is the sample inpatient discharge abstract. The estimating procedure used to produce essentially unbiased national estimates in NHDS has three principal components: Inflation by reciprocals of the probabilities of sample selection, adjustment for nonresponse, and ratio adjustment to fixed totals. These components of estimation are described in appendix I of two earlier publications.^{5,6}

Based on consideration of the complex sample design of NHDS, the following guidelines are used for presenting NHDS estimates in this report:

- If the sample size is less than 30, the value of the estimate is not reported. Only an asterisk (*) is shown in the tables.
- If the sample size is 30–59, the value of the estimate is reported but should be used with caution. The estimate is preceded by an asterisk (*) in the tables.

Sampling errors and rounding of numbers

The standard error is a measure of the sampling variability that occurs by chance because only a sample, rather than an entire universe, is surveyed. The relative standard error of the estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. Relative standard errors for first-listed diagnoses and all-listed procedures are shown in table II. The relative standard errors for region and ownership of hospital are approximately 1½ times larger. The standard errors for average lengths of stay are shown in table III.

Estimates have been rounded to the nearest thousand. For this reason detailed figures within tables do not always add to the totals. Rates and average lengths of stay were calculated from original, unrounded figures and will not necessarily agree precisely with rates or average lengths of stay calculated from rounded data.

Table II. Approximate relative standard errors of estimated numbers of first-listed discharges and all-listed procedures: United States, 1984

Size of estimate	First-listed diagnosis	All-listed procedures
5,000	16.0	17.1
10,000	12.8	14.0
50,000	8.1	9.2
100,000	6.8	7.8
500,000	4.8	5.7
1,000,000	4.2	5.1
3,000,000	3.5	4.3
5,000,000	3.2	4.0
10,000,000	2.9	3.6
20,000,000	2.7	3.3
30,000,000	2.5	...
40,000,000	2.5	...

Table III. Approximate standard errors of average lengths of stay by number of discharges: United States, 1984

Number of discharges	Average length of stay in days			
	2	6	10	20
	Standard error in days			
10,000	0.7	1.2	1.7	2.2
50,000	0.3	0.7	1.0	1.4
100,000	0.3	0.6	0.9	1.2
500,000	0.2	0.5	0.8	0.9
1,000,000	0.2	0.5	0.8	0.7
5,000,000	0.2	0.5	0.8	...

Tests of significance

In this report, the determination of statistical inference is based on the two-tailed Bonferroni test for multiple comparisons. Terms relating to differences such as "higher" and "less" indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistically significant difference exists between the estimates being compared. A lack of comment on the difference between any two estimates does not mean that the difference was tested and found to be not significant.

Definition of terms

Hospitals and hospital characteristics

Hospitals—Short-stay special and general hospitals have six or more beds for inpatient use and an average length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included.

Bed size of hospital—Measured by the number of beds, cribs, and pediatric bassinets regularly maintained (set up and staffed for use) for patients; bassinets for newborn infants are not included. In this report the classification of hospitals by bed size reported by the hospitals is based on the number of beds at or near midyear.

Type of ownership of hospital—Determined by the organization that controls and operates the hospital. Hospitals are

grouped as follows:

- *Voluntary nonprofit*—Hospitals operated by a church or another nonprofit organization.
- *Government*—Hospitals operated by a State or local government.
- *Proprietary*—Hospitals operated by individuals, partnerships, or corporations for profit.

Terms relating to hospitalization

Patient—A person who is formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment. In this report the number of patients refers to the number of discharges during the year including any multiple discharges of the same individual from one or more short-stay hospitals. Infants admitted on the day of birth, directly or by transfer from another medical facility, with or without mention of disease, disorder, or immaturity, are included. All newborn infants, defined as those admitted by birth to the hospital, are excluded from this report. The terms “patient” and “inpatient” are used synonymously.

Discharge—The formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death or by disposition to place of residence, nursing home, or another hospital. The terms “discharges” and “patients discharged” are used synonymously.

Discharge rate—The ratio of the number of hospital discharges during a year to the number of persons in the civilian population on July 1 of that year.

Days of care—The total number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year. A stay of less than 1 day (patient admission and discharge on the same day) is counted as 1 day in the summation of total days of care. For patients admitted and discharged on different days, the number of days of care is computed by counting all days from (and including) the date of admission to (but not including) the date of discharge.

Rate of days of care—The ratio of the number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year to the number of persons in the civilian population on July 1 of that year.

Average length of stay—The total number of patient days accumulated at time of discharge by patients discharged during the year, divided by the number of patients discharged.

Terms relating to diagnoses

Discharge diagnoses—One or more diseases or injuries (or some factor that influences health status and contact with health services which is not itself a current illness or injury) listed by the attending physician or the medical record of a patient. In the NHDS all discharge (or final) diagnoses listed on the face sheet (summary sheet) of the medical record for

patients discharged from the inpatient service of short-stay hospitals are transcribed in the order listed. Each sample discharge is assigned a maximum of seven five-digit codes according to ICD-9-CM.³ The number of principal or first-listed diagnoses is equivalent to the number of discharges.

Principal diagnosis—The condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.

First-listed diagnosis—The coded diagnosis identified as the principal diagnosis or listed first on the face sheet of the medical record if the principal diagnosis cannot be identified. The number of first-listed diagnoses is equivalent to the number of discharges.

Procedure—One or more surgical or nonsurgical operations, procedures, or special treatments assigned by the physician to patients discharged from the inpatient service of short-stay hospitals. In the NHDS all terms listed on the face sheet (summary sheet) of the medical record under the captions “operation,” “operative procedures,” “operations and/or special treatment,” and the like are transcribed in the order listed. A maximum of four procedures is coded.

Rate of procedures—The ratio of the number of all-listed procedures during a year to the number of persons in the civilian population on July 1 of that year.

Demographic terms

Age—Refers to the age of the patient on the birthday prior to admission to the hospital inpatient service.

Population—Civilian population is the resident population excluding members of the Armed Forces.

Geographic regions—One of the four geographic regions of the United States corresponding to those used by the U.S. Bureau of the Census:

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

NOTE: A list of references follows the text.

Provisional Data from the Health Promotion and Disease Prevention Supplement to the National Health Interview Survey: United States, January–March 1985

The National Center for Health Statistics included a special supplement on health promotion and disease prevention as part of the 1985 National Health Interview Survey questionnaire. This report presents provisional findings from the first three months of data collection with that supplement.

The 1985 Health Promotion and Disease Prevention Supplement is designed to monitor progress toward one of the major initiatives of the Department of Health and Human Services. This initiative is described in the 1979 Surgeon General's Report on Health Promotion and Disease Prevention, *Healthy People*.¹ In that report, broad goals were established for the improvement of the health of Americans. The 1980 Public Health Service report, *Promoting Health/Preventing Disease: Objectives for the Nation*,² details specific objectives necessary for attainment of those goals in each of fifteen priority areas. The target date for achieving the objectives is 1990. This 1985 supplement will be used for data collection again in 1990 for the purpose of monitoring progress achieved in the intervening five years.

The 1985 Health Promotion and Disease Prevention Supplement is devoted primarily to the collection of baseline data on the following topics: general health (including nutrition), injury control and child health, high blood pressure, stress, exercise, smoking, alcohol use, dental care, and occupational safety and health. Those topics were selected after consultation with the Office of Disease Prevention and Health Promotion

(Assistant Secretary for Health) as well as with the agencies designated by the Assistant Secretary for Health as having "lead" responsibility for implementing and monitoring progress toward achieving the 1990 objectives. Within each agency, subject matter experts also were consulted during the development of the questionnaire for the supplement.

This report presents provisional data, based on the first quarter of data collection, for selected items in the supplement. In most cases, the actual question asked of the respondent is shown on the table along with the response categories. In a few cases, there has been minor paraphrasing or combining of questions. Each question is referenced to the actual item number on the questionnaire.

In general, the items in the supplement are of the following two types: those related to individual health behaviors and those related to knowledge of health practices. Most of the questions on knowledge of health practices have answers that are currently presumed to be correct and are indicated in bold type in table 1. For some questions, references are provided for selected publications that present related data from previous data collection by the National Center for Health Statistics.

Estimated percents or percentage distributions are presented (table 1) for all persons 18 years of age and over and for four age groups and both sexes. Generally, except for the questions on knowledge of health practices where "don't know" is a legitimate response, "don't know" and other inappropriate responses were excluded from the denominator in the calculation of the estimates. The estimated population for each of the demographic categories is shown in table I to allow readers to derive a provisional estimate of the number of people in the United States with a given characteristic. However, the estimates presented in this report are provisional and will differ to some degree from estimates made using the final data file for the following reasons: (a) this report is based on data collected

¹Office of the Assistant Secretary for Health and Surgeon General: *Healthy People—The Surgeon General's Report on Health Promotion and Disease Prevention—Background Papers, 1979*. DHEW Pub. No. (PHS) 79-55071A.

U.S. Department of Health and Human Services, Public Health Service: *Promoting Health/Preventing Disease: Objectives for the Nation*. Washington. U.S. Government Printing Office, 1980.

during the first three months of 1985 rather than the entire calendar year and those items affected by seasonality (exercise, for example) are subject to significant change; (b) the data file was edited internally, but it was not edited with respect to the National Health Interview Survey (NHIS) core demographic variables (such as age, sex, and employment status); (c) the simplified weighting procedure used was not adjusted to all factors normally used in the NHIS weighting procedure. A final weighted data file covering the entire calendar year of data collection will be available during 1986.

The following Federal agencies provided partial funding for the 1985 Health Promotion and Disease Prevention Supplement:

Office of the Assistant Secretary for Health
Office of Disease Prevention and Health Promotion

Alcohol, Drug Abuse, and Mental Health Administration
National Institute of Alcohol Abuse and Alcoholism
National Institutes of Health
National Heart, Lung, and Blood Institute
National Cancer Institute
National Institute of Dental Research
National Institute of Child Health and Human Development
Health Resources and Services Administration
Centers for Disease Control
Center for Prevention Services
Center for Infectious Diseases
Center for Environmental Health
Center for Health Promotion and Education
National Institute for Occupational Safety and Health

Symbols

... Category not applicable
0 Quantity more than zero but 0.5 or less

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985

(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 technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
	Total...	100	100	100	100	100	100	100
	Percent of population							
	GENERAL HEALTH HABITS							
1.	How often do you eat breakfast? ¹							
	Almost every day.....	55	42	46	62	87	55	56
	Sometimes.....	19	27	22	16	6	20	19
	Rarely or never.....	25	31	32	22	8	26	25
N.2.	Including evening snacks, how often do you eat between meals? ¹							
	Almost every day.....	39	42	42	37	32	40	38
	Sometimes.....	31	37	32	29	24	28	34
	Rarely or never.....	30	21	26	35	45	32	28
N.3.	When you visit a doctor or other health professional for routine care, is eating proper foods discussed?							
	Often.....	10	7	8	13	11	8	11
	Sometimes.....	16	18	15	16	15	14	18
	Rarely or never.....	66	67	69	62	66	66	66
	Don't visit for routine care.....	8	7	8	9	9	12	5
N.5.	In your opinion which of these are the two best ways to lose weight?							
	Don't eat at bedtime.....	28	29	25	29	30	30	27
	Eat fewer calories.....	75	70	77	79	73	70	79
	Take diet pills.....	1	2	1	1	1	1	1
	Increase physical activity.....	73	84	81	66	53	74	73
	Eat no fat.....	10	6	8	12	20	11	10
	Eat grapefruit with each meal.....	5	5	3	0	7	5	4
	Don't know.....	7	3	5	7	15	8	6
N.6.	Are you now trying to lose weight? ² (Yes).....	37	35	41	41	25	27	46
N.7.	Are you eating fewer calories to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	82	77	84	87	77	77	85
N.8.	Have you increased your physical activity to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	57	72	59	49	38	58	57
N.9.	Do you consider yourself overweight, underweight, or just about right? (If overweight) Would you say you are very overweight, somewhat overweight, or only a little overweight? ^{2,3}							
	Very overweight.....	8	5	9	12	7	4	12
	Somewhat overweight.....	17	13	19	22	14	13	21
	Only a little overweight.....	20	18	22	21	20	19	21
	About right.....	48	56	45	41	52	56	42
	Underweight.....	6	8	5	4	8	8	4
N.10.	On the average, how many hours of sleep do you get in a 24-hour period? ¹							
	Less than 7 hours.....	22	21	24	22	19	22	22
	7-8 hours.....	66	65	69	68	59	67	65
	9 or more hours.....	12	14	7	10	21	11	13
N.11.	Is there a particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health? ⁴ (Yes).....	78	70	75	82	88	72	82
N.15.	About how long has it been since you had a Pap smear test? ⁵ (Females only)							
	Less than 1 year.....	44	59	47	36	23	...	44
	1 year.....	18	16	22	19	14	...	18
	2 years.....	10	7	11	12	12	...	10
	3-4 years.....	8	4	9	10	11	...	8
	5 or more years.....	12	3	9	19	25	...	12
	Never.....	7	12	2	5	15	...	7

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
GENERAL HEALTH HABITS--Con.		Percent of population						
N.16a.	About how long has it been since you had a breast examination by a doctor or other health professional? ⁵ (Females only)							
	Less than 1 year.....	49	59	50	45	39	...	49
	1 year.....	18	17	22	18	14	...	
	2 years.....	10	7	11	10	11	...	
	3-4 years.....	7	4	8	8	7	...	
	5 or more years.....	8	3	7	12	15	...	0
	Never.....	8	10	2	6	15	...	8
N.16b.	Do you know how to examine your own breasts for lumps? (Females only) (Yes).....	88	87	92	90	80	...	88
N.16c.	About how many times a year do you examine your own breasts for lumps? (Females only)							
	12 or more times.....	32	26	35	34	31	...	32
	7-11 times.....	3	2	3	3	2	...	3
	2-6 times.....	36	37	39	35	27	...	36
	Once a year.....	4	5	4	4	4	...	4
	Never.....	14	16	11	13	15	...	14
	Don't know how to examine own breast.....	12	13	8	10	20	...	12
INJURY CONTROL AND CHILD SAFETY AND HEALTH								
0.1a.	Have you ever heard about Poison Control Centers? (Persons in families with children under 10 years of age) (Yes).....	91	89	93	80	68	88	
0.1b.	Do you have the telephone number for a Poison Control Center in your area? (Persons in families with children under 10 years of age) (Yes).....	61	57	66	48	13	58	63
0.3.	Have you heard about child safety seats, sometimes called car safety carriers, which are designed to carry children while they are riding in a car? (Persons in families with children under 5 years of age) (Yes).....	98	98	98	100	100	98	99
0.4.	Did a doctor or other health professional ever tell you about the importance of using car safety seats for your children? (Persons in families with children under 5 years of age) (Yes)....	45	50	41	33	18	37	51
0.10.	When driving or riding in a car, do you wear a seat belt ³ --							
	All or most of the time.....	30	30	34	29	26	29	31
	Some of the time.....	18	19	18	18	14	16	19
	Once in awhile.....	16	16	15	16	15	16	15
	Never.....	36	34	32	36	42	37	34
	Don't ride in car.....	1	0	1	1	2	1	1
	Does this home have any working smoke detectors? (Based on Items 0.11a.-c.) (Yes).....	58	54	62	59	54	58	57
0.12a.	Do you know about what the hot water temperature is in this home? (Yes).....	35	25	39	43	34	46	25
0.13.	In the past 12 months, have you (or has anyone in your household) used a thermometer to test the temperature of the hot water here? (Yes).....	4	4	5	4	3	4	
0.14.	Above what temperature will hot water cause scald injuries?							
	127 degrees or less.....	14	20	16	11	6	16	14
	128-139 degrees (can produce burns in less than a minute).....	2	3	3	2	1	3	2
	140 degrees or above (can produce burns in 5 seconds or less)...	21	16	20	27	20	31	12
	Don't know.....	63	61	61	60	74	49	74

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
	HIGH BLOOD PRESSURE	Percent of population						
P.1.	I am going to read a list of things which may or may not affect a person's chances of getting heart disease. After I read each one, tell me if you think it definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting heart disease.							
	Cigarette smoking							
	Increases.....	91	94	93	91	83	91	92
	Does not increase.....	3	3	3	3	5	4	3
	Don't know/No opinion.....	5	3	4	6	12	5	5
	Worry or anxiety							
	Increases.....	85	84	87	86	80	84	86
	Does not increase.....	8	11	8	7	6	9	8
	Don't know/No opinion.....	7	5	5	7	14	7	7
	High blood pressure							
	Increases.....	92	93	94	92	83	91	92
	Does not increase.....	3	3	2	3	4	3	2
	Don't know/No opinion.....	6	4	4	5	13	6	6
	Diabetes							
	Increases.....	60	65	64	58	48	60	60
	Does not increase.....	11	11	11	10	10	11	11
	Don't know/No opinion.....	29	24	25	32	42	29	29
	Being very overweight							
	Increases.....	94	95	96	95	87	94	94
	Does not increase.....	2	2	2	2	3	2	2
	Don't know/No opinion.....	4	2	2	3	10	4	4
	Overwork							
	Increases.....	72	78	78	67	59	69	75
	Does not increase.....	19	16	15	23	22	22	16
	Don't know/No opinion.....	9	6	7	10	19	9	9
	Drinking coffee with caffeine							
	Increases.....	50	53	52	49	42	47	52
	Does not increase.....	29	31	29	29	27	32	27
	Don't know/No opinion.....	21	16	19	22	31	21	21
	Eating a diet high in animal fat							
	Increases.....	80	77	82	83	75	77	82
	Does not increase.....	8	9	8	7	7	10	6
	Don't know/No opinion.....	13	13	11	10	18	14	12
	Family history of heart disease							
	Increases.....	82	87	85	82	69	79	85
	Does not increase.....	8	6	7	9	12	10	6
	Don't know/No opinion.....	10	7	7	9	19	10	9
	High cholesterol							
	Increases.....	86	89	89	87	76	85	87
	Does not increase.....	4	5	4	4	5	5	4
	Don't know/No opinion.....	9	6	7	9	19	9	9
P.2.	The following conditions are related to having a stroke. In your opinion, which of these conditions most increases a person's chances of having a stroke?							
	Diabetes.....	5	6	4	4	3	5	4
	High blood pressure.....	78	74	80	81	75	76	79
	High cholesterol.....	12	15	12	10	9	13	11
	Don't know.....	6	4	5	6	12	6	6
P.3.	Which one of the following substances in food is most often associated with high blood pressure?							
	Sodium (or salt).....	59	59	64	60	48	57	61
	Cholesterol.....	24	27	22	25	23	24	24
	Sugar.....	9	10	7	7	14	11	7
	Don't know.....	8	5	6	8	16	8	7

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
HIGH BLOOD PRESSURE- Con.		Percent of population						
P.12a.	About how long has it been since you last had your blood pressure taken by a doctor or other health professional? ^{2,3}							
	Less than 6 months.....	54	50	48	57	70	49	60
	6-11 months.....	19	21	21	16	14	18	16
	12 months to 23 months.....	14	16	15	14	7	16	16
	24 months and over.....	13	13	15	13	9	17	17
P.12b.	Blood pressure is usually given as one number over another. Were you told what your blood pressure was, in numbers? (Persons with blood pressure checked within 24 months in 12a) (Yes).....	70	67	71	72	68	72	68
P.14.	Have you ever been told by a doctor or other health professional that you had high cholesterol? (Yes).....	5	1	3	9	11	5	5
STRESS								
Q.1.	During the past 2 weeks, would you say that you experienced a lot of stress, a moderate amount of stress, relatively little stress, or almost no stress at all?							
	A lot of stress.....	20	23	24	18	12	18	22
	A moderate amount of stress.....	32	36	37	30	16	33	30
	Relatively little stress.....	22	23	20	22	22	21	22
	Almost none.....	25	17	18	28	46	26	24
	Don't know what stress is.....	2	1	1	2	5	2	2
Q.2.	In the past year, how much effect has stress had on your health?							
	A lot.....	13	12	15	14	9	10	16
	Some.....	31	33	35	29	21	28	33
	Hardly any or none.....	54	53	49	55	65	61	49
	Don't know what stress is.....	2	1	1	2	5	2	2
Q.3a.	In the past year, did you think about seeking help for any personal or emotional problems from family or friends? (Yes).....	17	25	21	11	4	12	20
Q.3b.	In the past year, did you think about seeking help for any personal or emotional problems from a helping professional or a self-help group? (Yes).....	12	14	17	9	4	10	14
Q.4.	Did you actually seek any help? (Yes) From whom did you seek help?							
	Family or friends.....	8	14	9	4	2	5	10
	Professional or self help group.....	7	8	11	6	3	6	9
EXERCISE								
R.2a.	In the past 2 weeks, have you done any of the following exercises, sports, or physically active hobbies ⁶ --							
	Walking for exercise.....	40	43	39	39	41	38	43
	Jogging or running.....	11	24	12	4	1	15	8
	Calisthenics or general exercise.....	26	39	28	18	12	26	26
	Biking.....	9	11	9	8	5	9	9
	Swimming or water exercises.....	5	7	5	3	1	5	4
R.3.	Do you exercise or play sports regularly? (Yes).....	41	55	44	31	27	44	38
R.4.	For how long have you exercised or played sports regularly?							
	Less than 1 year.....	5	8	6	4	2	3	3
	1-2 years.....	6	7	7	4	3	4	7
	3-4 years.....	3	4	4	3	3	3	4
	5 or more years.....	25	34	25	18	17	31	19
	Do not exercise regularly.....	59	45	56	69	73	56	62

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
EXERCISE- Con.		Percent of population						
R.5a.	Would you say that you are physically more active, less active, or about as active as other persons your age? ^{1,3} Is that (a lot more or a little more/a lot less or a little less) active?							
	A lot more.....	18	16	17	18	23	22	15
	A little more.....	15	13	15	15	17	16	13
	About as active.....	49	50	48	49	47	48	49
	A lot less.....	6	5	6	8	7	4	8
	A little less.....	12	16	14	10	7	10	14
R.7a.	How many days a week do you think a person should exercise to strengthen the heart and lungs?							
	Less than 3 days.....	6	8	7	5	3	6	6
	3-4 days.....	40	54	48	32	16	41	40
	5 days or more.....	38	32	34	44	45	38	38
	Don't know.....	16	6	10	20	36	15	16
R.7b.	For how many minutes do you think a person should exercise on each occasion so that the heart and lungs are strengthened?							
	Less than 15 minutes.....	6	4	5	8	10	5	7
	15 to 25 minutes.....	24	23	27	25	19	23	25
	More than 25 minutes.....	50	66	56	42	26	54	47
	Don't know.....	19	7	12	26	45	18	20
R.7c.	During those (number in 7b) minutes, how fast do you think a person's heart rate and breathing should be to strengthen the heart and lungs? Do you think that the heart and breathing rate should be--							
	No faster than usual.....	4	3	2	4	8	3	4
	A little faster than usual.....	44	45	43	44	45	43	45
	A lot faster but talking is possible.....	36	46	44	30	11	38	33
	So fast that talking is not possible.....	1	1	1	1	0	1	1
	Don't know.....	16	5	10	21	36	15	17
SMOKING								
Cigarette smoking status (Based on Items S.1-3)								
	Never.....	45	56	41	37	48	36	54
	Former.....	25	14	23	32	36	32	18
	Current (Includes unknown amount smoked).....	30	30	36	31	16	33	28
	Less than 15.....	9	12	10	7	6	9	10
	15-24.....	12	13	14	13	7	13	12
	25 and over.....	8	5	12	10	3	10	6
S.3.	On the average, about how many cigarettes a day do you now smoke? ⁷ (Current smokers)							
	Less than 15.....	31	41	28	24	37	28	35
	15-24.....	41	42	39	42	46	41	42
	25 and over.....	27	17	33	34	17	31	23
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?							
	Emphysema							
	Increases.....	92	91	94	92	88	92	91
	Does not increase.....	2	2	2	2	1	2	2
	Don't know/No opinion.....	7	7	4	6	11	6	7
	Bladder cancer							
	Increases.....	35	41	33	34	31	37	34*
	Does not increase.....	25	30	30	21	14	24	25
	Don't know/No opinion.....	40	28	37	45	55	39	40

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
SMOKING--Con.		Percent of population						
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?-- Con.							
	Cancer of the larynx or voice box							
	Increases.....	88	92	92	86	77	87	8
	Does not increase.....	3	3	3	3	4	4	3
	Don't know/No opinion.....	9	5	6	10	19	9	8
	Cataracts							
	Increases.....	16	21	14	14	11	17	14
	Does not increase.....	41	46	47	37	27	41	41
	Don't know/No opinion.....	43	33	38	49	61	42	44
	Cancer of the esophagus							
	Increases.....	80	85	83	78	70	79	81
	Does not increase.....	6	5	7	6	6	7	5
	Don't know/No opinion.....	14	9	10	16	24	14	14
	Chronic bronchitis							
	Increases.....	87	90	89	86	77	86	87
	Does not increase.....	4	4	5	4	5	5	4
	Don't know/No opinion.....	9	6	6	9	18	9	9
	Gallstones							
	Increases.....	11	14	9	9	9	11	1
	Does not increase.....	45	51	51	41	31	46	
	Don't know/No opinion.....	44	35	40	49	60	43	
	Lung cancer							
	Increases.....	95	98	97	94	88	95	95
	Does not increase.....	1	1	1	2	2	1	1
	Don't know/No opinion.....	4	1	2	5	9	4	4
S.4.	Does cigarette smoking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)							
	Miscarriage							
	Increases.....	74	79	70	...	...	74	75
	Does not increase.....	12	10	13	...	...	10	14
	Don't know/No opinion.....	14	10	17	...	...	16	12
	Stillbirth							
	Increases.....	65	71	60	...	...	64	67
	Does not increase.....	15	13	16	...	...	13	16
	Don't know/No opinion.....	20	16	23	...	...	23	17
	Premature birth							
	Increases.....	70	75	66	...	...	65	75
	Does not increase.....	13	11	14	...	...	13	12
	Don't know/No opinion.....	17	14	20	...	...	22	13
	Low birth weight of the newborn							
	Increases.....	80	83	76	...	...	74	85
	Does not increase.....	7	6	9	...	...	8	7
	Don't know/No opinion.....	13	11	15	...	...	18	9
S.5a:	If a woman takes birth control pills, is she more likely to have a stroke if she smokes than if she does not smoke? (Persons under 45 years of age)							
	More likely.....	65	67	63	...	...	56	74
	Not likely.....	6	6	6	...	...	7	6
	Don't know.....	29	27	31	...	...	38	21

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
ALCOHOL USE		Percent of population						
T.1c.	Have you had at least one drink of beer, wine or liquor during the past year? ¹ (Yes).....	66	76	74	62	41	77	57
T.2.	In the past 2 weeks, on how many days did you drink any alcoholic beverages, such as beer, wine, or liquor? ^{1,3}							
	Did not drink in past year.....	34	24	26	38	59	23	43
	None.....	14	14	15	14	11	13	14
	1-4 days.....	32	43	37	26	15	35	30
	5-9 days.....	9	12	10	8	3	13	5
	10-14 days.....	11	7	11	14	11	15	7
T.3.	In the past 2 weeks, on the days that you drank alcoholic beverages, how many drinks did you have per day, on the average? ^{1,3}							
	Did not drink in past year.....	34	24	26	38	59	23	43
	None.....	14	14	15	14	11	13	14
	1 drink.....	16	11	18	18	16	15	16
	2 drinks.....	16	17	18	15	8	18	13
	3-4 drinks.....	13	19	14	10	3	17	9
	5 or more drinks.....	8	14	8	5	2	13	4
	Drinking Index (2-week daily drinking, based on items T.1-3) ⁷							
	Did not drink in past year.....	34	24	26	38	59	23	43
	None.....	14	14	15	14	11	13	14
	Light (.01 to .21 ounce absolute alcohol).....	24	27	28	22	14	23	24
	Moderate (.22 to .99 ounce absolute alcohol).....	20	26	23	17	10	27	15
	Heavier (1.00 ounces or more absolute alcohol).....	8	9	7	9	6	14	3
T.6.	During the past 12 months, on how many days did you have 9 or more drinks of any alcoholic beverage?							
	1 or more days.....	13	26	13	7	2	23	5
	5 or more days.....	7	15	7	4	1	14	2
T.7.	During the past 12 months, on how many days did you have 5 or more drinks of any alcoholic beverage? ¹							
	1 or more days.....	26	44	30	16	6	39	15
	10 or more days.....	14	25	14	8	3	23	5
T.8.	During the past year, how many times did you drive when you had perhaps too much to drink?							
	1 time.....	4	7	5	1	0	5	3
	2 or more times.....	8	16	9	3	1	13	3
T.9.	Tell me if you think heavy alcohol drinking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?							
	Throat cancer							
	Increases.....	39	39	36	39	46	38	40
	Does not increase.....	35	42	40	31	17	38	31
	Don't know/No opinion.....	26	19	24	30	38	24	29
	Cirrhosis of the liver							
	Increases.....	95	96	97	95	89	95	95
	Does not increase.....	1	1	1	1	1	1	1
	Don't know/No opinion.....	4	3	2	4	10	4	4
	Bladder cancer							
	Increases.....	66	73	68	64	55	67	65
	Does not increase.....	11	12	13	11	7	12	11
	Don't know/No opinion.....	22	15	19	25	37	21	24

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Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
ALCOHOL USE--Con.		Percent of population						
T.9.	Tell me if you think heavy alcohol drinking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?--Con.							
	Cancer of the mouth							
	Increases.....	31	30	27	32	38	29	5
	Does not increase.....	37	45	43	31	20	42	32
	Don't know/No opinion.....	32	25	30	36	43	30	35
	Arthritis							
	Increases.....	13	15	12	13	13	14	13
	Does not increase.....	46	55	50	41	29	47	44
	Don't know/No opinion.....	41	30	38	45	58	38	43
	Blood clots							
	Increases.....	34	45	32	28	27	34	34
	Does not increase.....	31	31	37	32	20	34	28
	Don't know/No opinion.....	35	24	31	40	53	32	37
T.9.	Does heavy drinking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)							
	Miscarriage							
	Increases.....	86	90	82	...	...	86	P
	Does not increase.....	4	3	5	...	...	3	
	Don't know/No opinion.....	10	7	12	...	...	11	
	Mental retardation of the newborn							
	Increases.....	84	88	80	...	...	82	86
	Does not increase.....	5	4	6	...	...	6	5
	Don't know/No opinion.....	11	8	13	...	...	12	9
	Low birth weight of the newborn							
	Increases.....	85	87	82	...	...	81	88
	Does not increase.....	4	4	4	...	...	5	3
	Don't know/No opinion.....	11	9	13	...	...	14	8
	Birth defects							
	Increases.....	85	89	81	...	...	82	88
	Does not increase.....	5	4	6	...	...	6	4
	Don't know/No opinion.....	10	7	13	...	...	12	8
T.10.	Have you ever heard of Fetal Alcohol Syndrome? (Persons under 45 years of age) (Yes).....	58	55	60	...	...	52	63
DENTAL CARE								
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.							
	Seeing a dentist regularly							
	Important.....	96	97	97	95	93	95	97
	Not important.....	2	2	2	2	2	3	1
	Don't know/No opinion.....	2	1	1	2	4	2	2
	Drinking water with fluoride from early childhood							
	Important.....	80	86	86	77	62	79	
	Not important.....	8	9	7	8	7	9	
	Don't know/No opinion.....	12	5	7	15	30	12	12
	Regular brushing and flossing of the teeth							
	Important.....	98	99	99	97	95	98	98
	Not important.....	1	0	0	1	1	1	1
	Don't know/No opinion.....	1	0	1	2	4	2	

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

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Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
DENTAL CARE--Con.		Percent of population						
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.--Con.							
	Using fluoride toothpaste or fluoride mouth rinse							
	Important.....	90	97	94	86	76	90	90
	Not important.....	4	2	3	5	5	4	3
	Don't know/No opinion.....	6	1	3	9	19	7	6
	Avoiding between-meal sweets							
	Important.....	90	90	92	90	83	89	90
	Not important.....	6	8	6	5	6	7	5
	Don't know/No opinion.....	4	1	2	5	11	4	4
U.2.	Now I'm going to ask about preventing gum disease. In your opinion, how important or not important is each of the following in preventing gum disease?							
	Seeing a dentist regularly							
	Important.....	96	97	97	95	92	95	96
	Not important.....	2	2	2	3	2	3	1
	Don't know/No opinion.....	2	1	1	3	6	2	2
	Drinking water with fluoride from early childhood							
	Important.....	66	74	67	62	54	64	67
	Not important.....	17	18	19	17	10	19	15
	Don't know/No opinion.....	17	8	13	21	36	18	17
	Regular brushing and flossing of the teeth							
	Important.....	96	98	98	95	92	96	97
	Not important.....	1	1	1	1	2	1	1
	Don't know/No opinion.....	3	1	1	3	7	3	2
	Using fluoride toothpaste or fluoride mouth rinse							
	Important.....	78	86	78	73	71	76	80
	Not important.....	12	10	15	12	7	13	10
	Don't know/No opinion.....	11	4	8	14	22	11	11
	Avoiding between-meal sweets							
	Important.....	81	84	81	80	78	80	82
	Not important.....	12	13	13	11	8	13	10
	Don't know/No opinion.....	7	3	5	9	14	7	7
U.3.	In your opinion, which of the following is the main cause of tooth loss in children?							
	Tooth decay.....	58	54	57	61	60	55	60
	Gum disease.....	8	8	7	9	9	10	7
	Injury to the teeth.....	30	36	35	26	18	31	30
	Don't know.....	4	1	2	4	13	4	4
U.4.	In your opinion, which of the following is the main cause of tooth loss in adults?							
	Tooth decay.....	40	40	37	40	44	41	38
	Gum disease.....	55	55	60	55	43	53	57
	Injury to the teeth.....	2	3	2	2	3	3	2
	Don't know.....	3	1	1	3	10	3	3
5a.	Have you ever heard of dental sealants? (Yes).....	23	20	30	23	14	22	23

see footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-March 1985--Con.

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Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
OCCUPATIONAL SAFETY AND HEALTH		Percent of population						
V.1a.	In your present job, are you exposed to any substances that could endanger your health, such as chemicals, dusts, fumes or gases? ³ (Currently employed persons) (Yes).....	36	36	37	34	18	45	24
V.2a.	In your present job, are you exposed to any work conditions that could endanger your health, such as loud noise, extreme heat or cold, physical or mental stress, or radiation? ³ (Currently employed persons) (Yes).....	37	36	41	33	15	43	29
V.3a.	In your present job are you exposed to any risks of accidents or injuries? ³ (Currently employed persons) (Yes).....	41	44	41	38	34	52	27

¹National Center for Health Statistics, C. A. Schoenborn, and K. M. Danchik: Health Practices Among Adults: United States, 1977. Advance Data From Vital and Health Statistics. No. 64. DHEW Pub. No. (PHS) 78-1250. Public Health Service. Hyattsville, Md., Nov. 4, 1980.

²National Center for Health Statistics, A. J. Moss and G. Scott: Characteristics of persons with hypertension, United States, 1974. Vital and Health Statistics. Series 10, No. 121. DHEW Pub. No. (PHS) 79-1549. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1978.

³National Center for Health Statistics, C. A. Schoenborn, K. M. Danchik, and J. Elinson: Basic data from Wave I of the National Survey of Personal Health Practices and Consequence, United States, 1979. Vital and Health Statistics. Series 15, No. 2. DHHS Pub. No. (PHS) 81-1163. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1981.

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Technical notes

The National Health Interview Survey (NHIS) is a continuous, cross-sectional, nationwide survey conducted by household interview. Each week a probability sample of households is interviewed by personnel of the U.S. Bureau of the Census to obtain information on the health and other characteristics of each member of the household in the civilian noninstitutionalized population.

During the first quarter of 1985, the sample consisted of approximately 9,250 households. The total noninterview rate was about 4 percent—about 3 percent of which was due to respondent refusal and the remainder primarily due to an inability to locate an eligible respondent at home after repeated calls. Information was obtained for all household members for the core section of the questionnaire, although, for the Health Promotion and Disease Prevention Supplement, one adult per family was randomly selected as the respondent. This procedure resulted in an additional nonresponse rate of about 10 percent. About 8,350 supplements were completed. A description of the survey design, methods used in estimation, and general qualifications of the NHIS data is provided in *The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83* (see pp. 8–9).³

³National Center for Health Statistics, M. G. Kovar and G. S. Poe: *The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83. Vital and Health Statistics. Series 1, No. 18. DHHS Pub. No. (PHS) 85–1320. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1985.*

The estimates shown in this report are based on a sample of the civilian noninstitutionalized population rather than on the entire population and are therefore subject to sampling error. Some tables in this report contain cells in which the estimate is small for a given characteristic. When an estimate or the numerator or denominator of a rate is small, the sampling error may be relatively high. The estimated population for each of the demographic categories presented in this report is given in table I. Approximate standard errors of estimates are shown in table II.

To expedite the early release of data from the Health Promotion and Disease Prevention Supplement, it was processed separately from the NHIS core questionnaire. Thus the supplement has not been linked as yet with the core data. In addition, since there were also major changes in the sample design in 1985, both the estimates of behaviors and knowledge and the standard errors of the estimates shown in table II are provisional and will be modified when the final estimates based on the linked core are released.

Table I. Provisional estimates of the civilian noninstitutionalized population by age and sex: United States, January–March 1985

Selected populations	Age					Sex	
	All ages	18–29 years	30–44 years	45–64 years	65 years and over	Male	Female
	Population in thousands						
Total adult population	170,302	48,524	50,463	44,476	26,839	80,461	89,840
Females	89,840	24,856	25,882	23,284	15,818	...	89,840
Population in families with children under 10 years of age	42,318	16,396	22,412	3,134	375	18,350	23,968
Population in families with children under 5 years of age	26,064	13,256	11,425	1,251	132	11,634	14,430
Currently employed population	105,292	33,333	40,089	28,887	2,983	57,938	47,355

Table II. Standard errors, expressed in percentage points, of estimated percents for selected age and sex groups from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention: United States, January–March 1985

<i>Estimated percent</i>	<i>Age</i>					<i>Sex</i>	
	<i>All ages</i>	<i>18–29 years</i>	<i>30–44 years</i>	<i>45–64 years</i>	<i>65 years and over</i>	<i>Male</i>	<i>Female</i>
	Standard error in percentage points						
5 or 95	0.26	0.50	0.48	0.53	0.60	0.40	0.34
10 or 90	0.36	0.69	0.65	0.73	0.83	0.55	0.47
15 or 85	0.43	0.82	0.78	0.87	0.99	0.65	0.56
20 or 80	0.48	0.92	0.87	0.97	1.11	0.73	0.63
25 or 75	0.52	1.00	0.95	1.05	1.20	0.79	0.68
30 or 70	0.55	1.06	1.00	1.11	1.27	0.84	0.72
35 or 65	0.57	1.10	1.04	1.16	1.32	0.87	0.75
40 or 60	0.59	1.13	1.07	1.19	1.36	0.90	0.77
45 or 55	0.60	1.15	1.09	1.21	1.38	0.91	0.79
50 or 50	0.60	1.15	1.09	1.21	1.38	0.92	0.7

Prevalence, Impact, and Demography of Known Diabetes in the United States

by Thomas F. Drury, Ph.D., and Anita L. Powell, Division of Epidemiology and Health Promotion

Based on information obtained from the 1982 National Health Interview Survey (NHIS), in 1982 there were approximately 5.8 million persons in the civilian noninstitutionalized population of the United States with known diabetes—a rate of 25.4 known diabetics per 1,000 population. Because these 1982 NHIS estimates of known diabetes are based only on a one-sixth subsample, this report presents more detailed information on the prevalence, impact, and demography of known diabetes in the United States based on three one-third subsamples of the NHIS sample for whom diabetes information was collected during the 1979–81 time period. A brief description of the procedures used is given in the Technical notes section of this report.

Variations in the prevalence of known diabetes

Known diabetes is relatively more common among older persons (figure 1). Even after taking this age differential into account, known diabetes is also proportionately more common among females, black people, the less educated, and those with low family incomes. Central city residents have a higher rate of known diabetes than metropolitan area residents outside the central city. Among the regions, the South has the highest rate of known diabetes; the West, the lowest. Table 1 shows average annual estimates of the prevalence of known diabetes by age and selected characteristics for 1979–81. Table 2 shows the rates of known diabetes per 1,000 population during this same time period.

Impact

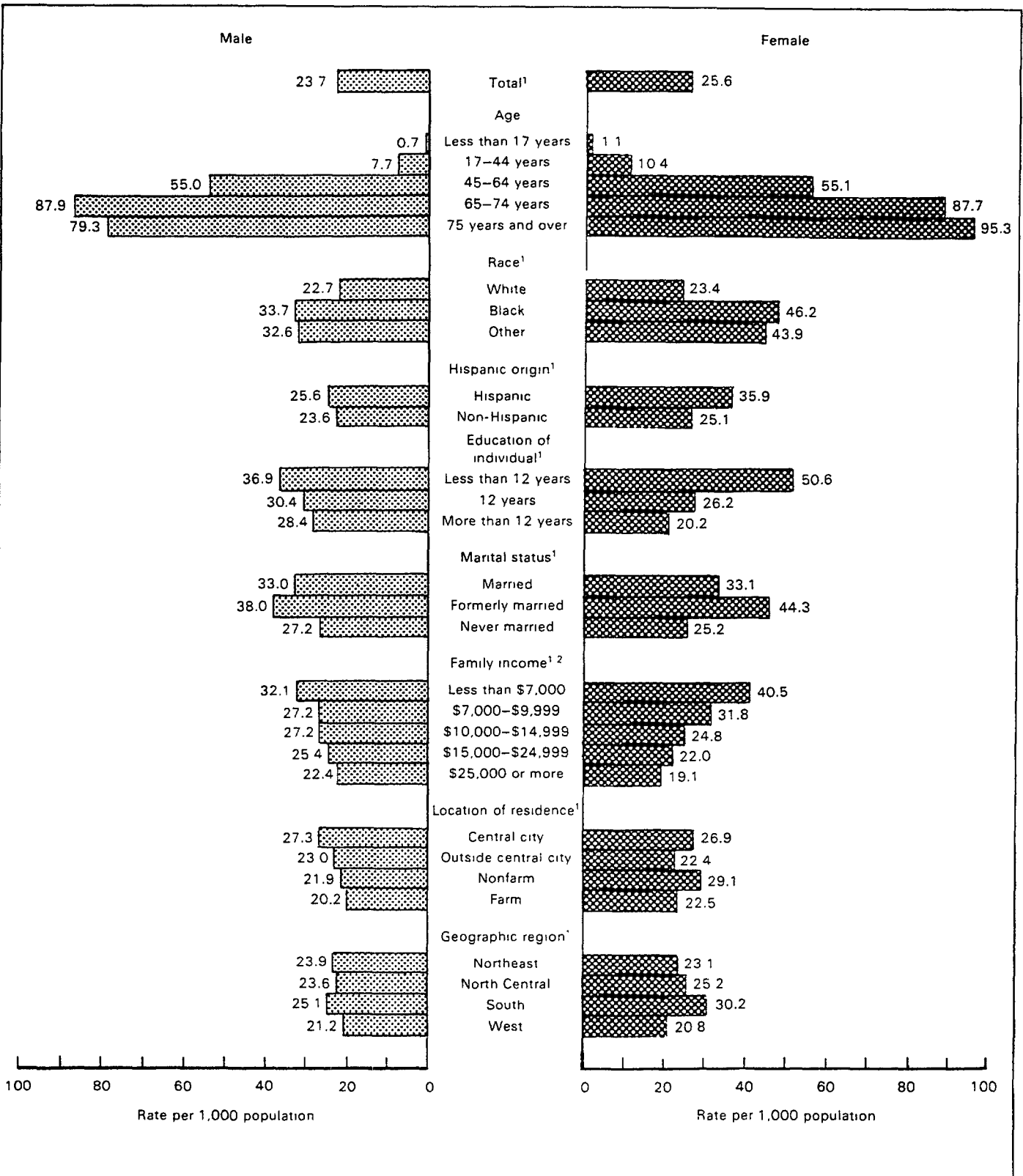
Table 3 summarizes four different sets of indicators of the impact of diabetes. While only about 15 percent of the general

population is limited in their activities due to one or more chronic conditions or impairments, over half of all known diabetics are so limited (table 3), and this higher likelihood of limitation of activity among diabetics is only partially due to the older ages of diabetics (table 4). For about 3 out of 10 diabetics their diabetes is either the main or secondary cause of some activity limitation (table 3). About 13 percent of diabetics stayed in bed all or most of the day for one or more times during the past 12 months.

As a group, diabetics averaged about 20.8 restricted activity days per year due to their diabetes, but only about 6.4 bed disability days and 3.1 work-loss days because of their diabetes. However, the small number (13 percent) of all diabetics with one bed disability day or more in the past year averaged substantially higher rates of bed disability days (41.2 per person per year).

Virtually all known diabetics have seen a physician at some time in their lives for their diabetes, and better than four out of five (87 percent) visited a physician one time or more in the past year for their diabetes. Only about a third (34.6 percent) have ever been hospitalized for their diabetes, but as many as three out of four (76.1 percent) were taking medicine or were under treatment recommended by a physician for their diabetes.

About one out of five (19.7 percent) reported being bothered all the time by their diabetes; somewhat fewer (14.5 percent) were bothered a great deal by their diabetes. About 7 percent were bothered a great deal all of the time by their diabetes. In the general population only about 14 percent of persons were perceived to be in poor or fair health. Among diabetics, however, about half (50.8 percent) were perceived to be in fair or poor health. Even with age taken into account, diabetics were at least twice as likely as persons in the general population to have such unfavorable health assessments (table 4).



¹Age adjusted by the direct method to the 1979-81 civilian noninstitutionalized population using 5 age groups

²Data are for 1981 only

SOURCE: National Center for Health Statistics. Computed by the Division of Epidemiology and Health Promotion from 1979-81 National Health Interview Survey data provided by the Division of Health Interview Statistics

Figure 1. Average annual number of persons with known diabetes per 1,000 population by sex and selected sociodemographic characteristics: United States, 1979-81

Some of these measured impacts, including limitation of activity, restricted activity days due to diabetes, and being bothered a great deal all of the time by diabetes, are relatively more common among older diabetics. Other impacts, such as bed disability caused by diabetes, annual physician visits, and lifetime hospitalization experiences for diabetes, are proportionately more common among younger diabetics.

In evaluating diabetics' levels of restricted activity days, it

is important to realize that the relatively small proportion (30 percent) of diabetics who are limited in activity due to their diabetes account not only for a disproportionate share (44.7 percent) of restricted activity days due to all acute and chronic conditions, but also for an even greater disproportionate share (68.4 percent) of restricted activity days due specifically to diabetes. Figure 2 summarizes these findings graphically for all diabetics.

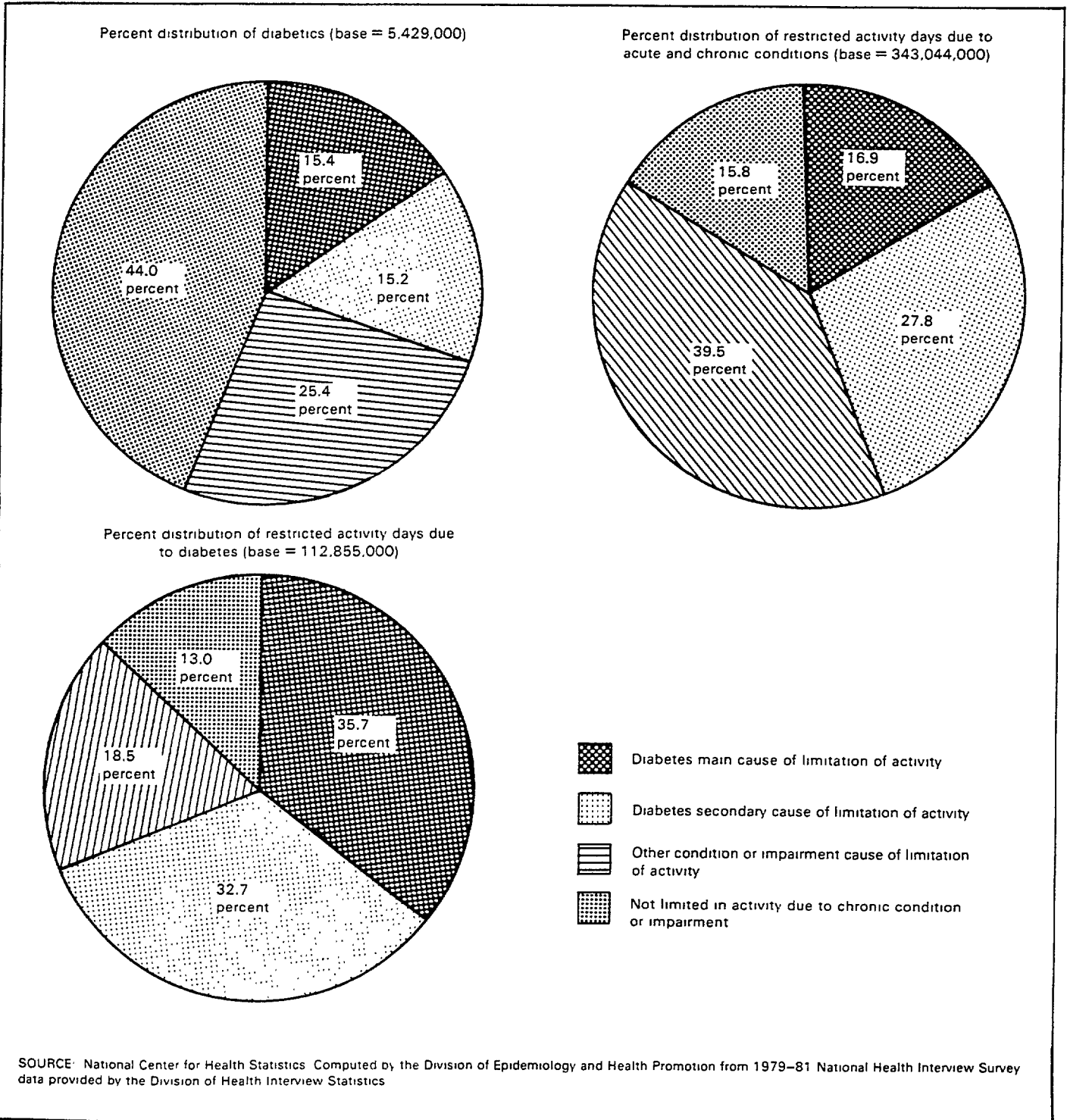


Figure 2. Percent distribution of diabetics and of selected types of restricted activity days by limitation of activity due to diabetes and other causes: United States, 1979-81

Demography

Diabetics as a group are much older than the general population in the United States (figure 3), and a smaller proportion of them are males (table 5). Although the vast majority of diabetics are white persons, the proportion of black diabetics is

higher and the proportion of white diabetics is lower than their proportions by race in the general population. About 6 percent of all diabetics are of Hispanic origin, and about 15 percent are black. The population pyramids shown in figure 3 contrast the age-sex structure of the known diabetic subpopulation with that for the general population according to race. The pyramids in

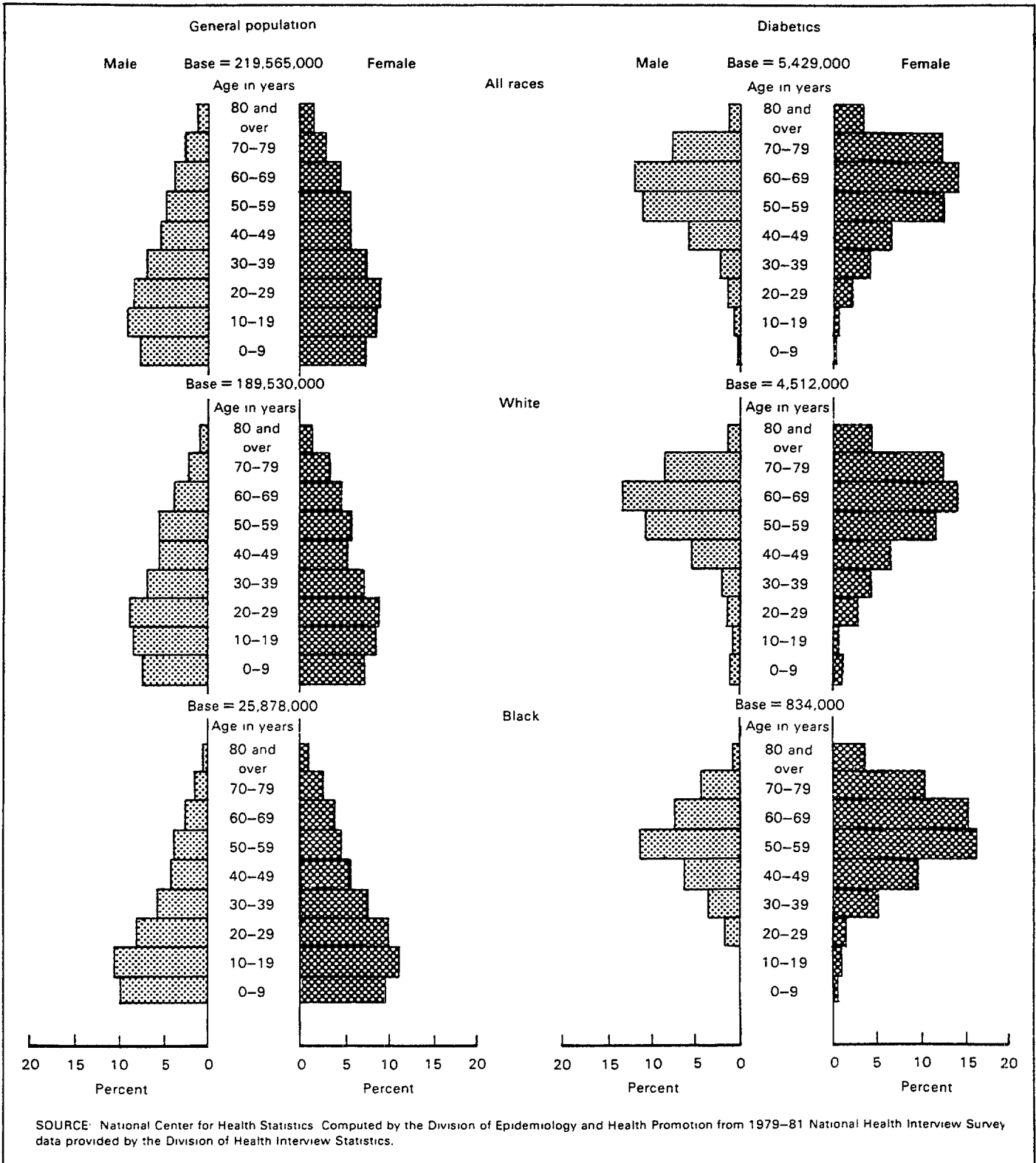


Figure 3. Age-sex composition of the general population and of diabetics by race: United States, 1979-81

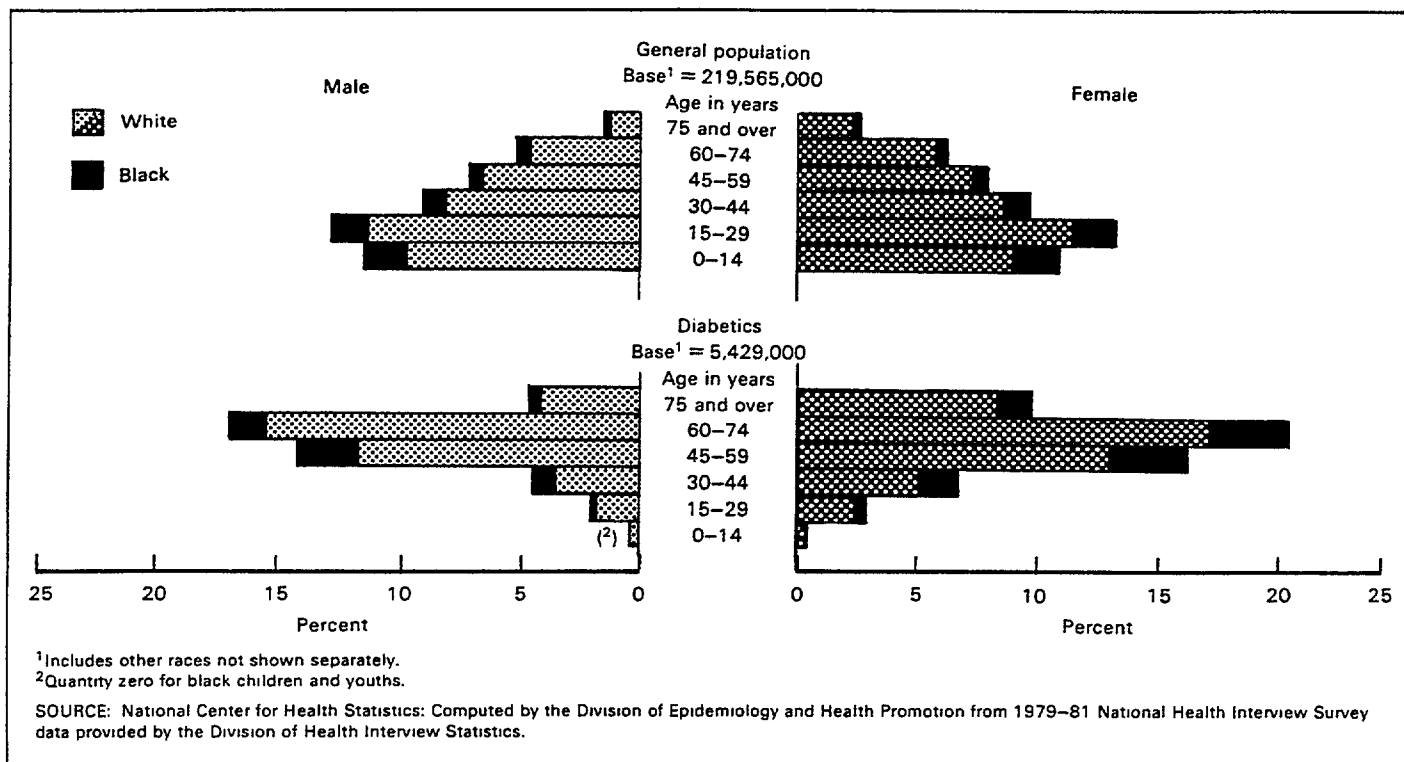


Figure 4. Age-sex-race composition of diabetics and the general population: United States, 1979-81

figure 4 contrast the age-sex-race structure of the known diabetic subpopulation with that for the general population.

Among persons 17 years and over, diabetics are less educated than the general population, as measured by the number of completed years of schooling (table 5). About one-third of diabetics 17 years and over are actively involved in the work force on a regular basis. However, such participation is substantially higher among younger diabetics and declines sharply with age (table 6). At all ages, diabetic men are much more likely than diabetic women to be in the work force, a situation seen as well in the general population. Diabetics, particularly men under 65 years of age and women of all ages, are more likely than the general population to live in families with low annual incomes (tables 5-6).

A majority of diabetics 17 years and over are currently married (table 5), but in specific age categories of diabetics 45 years and over, men are much more likely to be married than women (table 6). About 65 percent of diabetics 17 years and over live with a spouse, while living with relatives or living alone are about equally likely living arrangements. The largest share of diabetics reside in the South; the smallest share, in the West (table 5). A majority of diabetics resides in metropolitan areas, but are about equally divided among central city residents, metropolitan area residents outside the central city, and nonfarm residences outside metropolitan areas.

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Table 1. Average annual number of persons with known diabetes by age and selected sociodemographic characteristics: United States, 1979-81

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Characteristic	Age							
	All ages	Under 17 years	All persons 17 years and over	17 years and over				75 years and over
				17-44 years	45-64 years	All persons 65 years and over	65-74 years	
Number of persons with known diabetes in thousands								
Total ¹	5,429	53	5,376	848	2,406	2,123	1,338	785
Sex								
Male	2,357	*20	2,336	350	1,146	840	583	258
Female	3,072	*32	3,040	497	1,259	1,283	756	527
Race								
White	4,512	47	4,465	684	1,942	1,839	1,148	691
All other	917	*6	911	164	463	284	190	94
Black	834	*6	828	157	408	262	172	90
Hispanic origin ²								
Hispanic	330	*5	325	65	197	64	42	22
Non-Hispanic	5,072	42	5,030	778	2,204	2,048	1,292	757
Education of individual								
Less than 12 years .....	...	...	2,745	237	1,148	1,360	820	541
12 years .....	...	...	1,502	319	810	372	281	92
More than 12 years .....	...	...	933	267	380	286	185	102
Marital status								
Married .....	...	...	3,510	573	1,741	1,196	888	309
Formerly married .....	...	...	1,520	117	554	850	410	440
Never married .....	...	...	346	158	111	77	40	37
Education of head of family								
Less than 12 years	2,723	*7	2,716	275	1,165	1,276	794	482
12 years	1,428	*29	1,399	263	727	409	273	137
More than 12 years	1,038	*17	1,021	274	413	334	208	126
Family income ³								
Less than \$7,000	1,453	*6	1,447	147	470	830	414	416
\$7,000-\$9,999	586	*2	586	69	254	263	197	66
\$10,000-\$14,999	828	*23	805	64	396	346	253	93
\$15,000-\$24,999	952	*12	941	231	417	293	191	102
\$25,000 or more	1,190	*34	1,156	298	63	216	127	89
Location of residence								
SMSA ⁴	3,604	35	3,569	578	1,661	1,330	836	494
Central city	1,684	*12	1,672	264	789	619	390	230
Outside central city	1,920	*23	1,897	314	872	711	447	264
Outside SMSA ⁴	1,825	*18	1,807	270	745	793	502	291
Nonfarm	1,681	*10	1,671	262	687	723	446	277
Farm	144	*8	137	*8	59	70	56	14
Geographic region								
Northeast	1,205	*9	1,196	171	533	491	313	179
North Central	1,415	*14	1,402	239	627	536	305	232
South	1,981	*24	1,957	285	914	758	515	244
West	827	*5	822	152	332	337	207	131

¹Includes unknown Hispanic origin, education of individual, marital status, education of head of family, and family income.

²Excludes persons of unknown Hispanic origin.

³Data are for 1981 only, because information on annual family income is only available for broad income categories and is technically difficult to adjust for inflation over the 3-year time period.

⁴SMSA = standard metropolitan statistical area.

SOURCE: National Center for Health Statistics: Computed by the Division of Epidemiology and Health Promotion from 1979-81 National Health Interview Survey data provided by the Division of Health Interview Statistics.

Table 2. Average annual number of persons with known diabetes per 1,000 population by age and selected sociodemographic characteristics: United States, 1979-81

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Characteristic	Age							
	17 years and over							
	All ages	Under 17 years	All persons 17 years and over	17-44 years	45-64 years	All persons 65 years and over	65-74 years	75 years and over
	Number of persons with known diabetes per 1,000 population							
Total ¹	24.7	0.9	33.3	9.1	55.0	88.4	87.7	89.4
Sex								
Male	22.2	*0.7	30.7	7.7	55.0	85.1	87.9	79.3
Female	27.0	*1.1	35.7	10.4	55.1	90.7	87.7	95.3
Race								
White	23.8	1.0	31.6	8.5	49.9	84.3	83.4	86.0
All other	30.5	*0.6	45.9	12.8	97.4	127.7	128.4	126.5
Black	32.2	*0.7	48.8	14.5	99.9	129.8	129.3	130.9
Hispanic origin								
Hispanic	22.2	*1.0	33.1	9.4	88.7	84.9	84.5	85.6
Non-Hispanic	25.0	0.8	33.4	9.0	53.3	88.4	87.9	89.3
Education of individual								
Less than 12 years .....	...	...	57.0	11.7	77.7	104.0	104.7	102.9
12 years .....	...	...	25.0	8.5	48.9	65.6	69.6	56.0
More than 12 years .....	...	...	18.8	7.8	33.6	68.9	64.6	78.6
Marital status								
Married .....	...	...	34.2	10.4	50.5	90.9	91.4	89.5
Formerly married .....	...	...	60.9	14.0	77.7	89.4	87.6	91.1
Never married .....	...	...	10.3	5.2	52.9	56.8	47.3	72.9
Education of head of family								
Less than 12 years	41.0	*0.5	54.2	12.8	73.9	99.2	100.7	96.8
12 years	18.9	*1.3	25.9	7.7	50.9	72.9	71.5	75.9
More than 12 years	14.2	*0.9	19.0	7.5	33.0	72.6	68.1	81.5
Family income ²								
Less than \$7,000	45.0	*0.8	59.7	12.3	102.9	108.1	98.9	119.7
\$7,000-\$9,999	34.7	*0.0	45.9	11.0	90.0	72.1	80.7	54.7
\$10,000-\$14,999	27.2	*2.9	35.8	4.9	71.9	90.3	93.1	83.7
\$15,000-\$24,999	18.5	*0.8	25.9	9.7	44.4	96.7	89.1	115.2
\$25,000 or more	16.4	*1.8	21.4	8.7	38.5	73.1	62.5	97.2
Location of residence								
SMSA ³	24.1	0.9	32.2	8.9	55.2	86.2	85.4	87.6
Central city	27.7	*0.8	36.8	10.0	65.9	86.9	88.2	84.9
Outside central city	21.6	*1.0	29.0	8.1	48.1	85.6	83.1	90.1
Outside SMSA ³	26.1	*0.9	35.8	9.5	54.6	92.2	92.0	92.7
Nonfarm	26.2	*0.6	36.2	10.0	56.4	92.5	90.2	96.5
Farm	24.9	*5.2	31.7	*3.9	39.8	89.7	109.5	52.5
Geographic region								
Northeast	24.9	*0.8	33.0	8.5	51.4	85.6	86.0	84.9
North Central	24.3	*0.9	33.0	9.6	55.1	86.8	78.8	100.1
South	27.5	*1.2	37.4	9.4	64.7	95.6	100.9	86.1
West	20.2	*0.5	27.2	8.4	42.2	80.7	77.9	85.6

¹Includes unknown Hispanic origin, education of individual, marital status, education of head of family, and family income.

²Data are for 1981 only, because information on annual family income is only available for broad income categories and is technically difficult to adjust for inflation over the 3-year time period.

³SMSA = standard metropolitan statistical area.

SOURCE: National Center for Health Statistics; Computed by the Division of Epidemiology and Health Promotion from 1979-81 National Health Interview Survey data provided by the Division of Health Interview Statistics

Table 3. Impact of known diabetes by age and selected health status indicators: United States, 1979–81

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Indicator	Persons with known diabetes							
	17 years and over							
	All ages	Under 17 years	All persons 17 years and over	17–44 years		65 years and over		
				45–64 years	All persons 65 years and over	65–74 years	75 years and over	
Disability status				Percent				
Persons with limitation of activity due to one or more chronic conditions or impairments	56.0	30.7	56.2	35.6	55.3	65.7	62.4	70.9
Persons for whom diabetes is a cause of limitation of activity	30.5	21.6	30.6	24.7	31.5	32.0	33.2	30.0
Persons with one bed day or more in the past year for diabetes	12.7	43.2	12.4	17.8	12.0	10.8	11.9	9.0
Disability days				Number				
Restricted activity days due to diabetes per person per year	20.8	18.7	20.8	15.4	19.7	24.2	28.0	17.7
Bed days due to diabetes per person per year	6.4	14.1	6.4	4.3	6.2	7.4	5.7	10.3
Bed days due to diabetes per person having 1 bed day or more in the past year for diabetes	41.2	26.7	41.7	18.1	37.4	62.7	39.8	114.0
Work-loss days due to diabetes per currently employed person with diabetes per year	3.1	...	3.1	3.2	3.6	0.6	0.7	
Medical care				Percent				
Persons who have ever seen a physician for diabetes	99.7	100.0	99.7	99.6	99.7	99.7	99.8	99.5
Persons with 1 or more physician visits in the past year for diabetes	87.0	93.2	87.0	85.0	87.0	87.8	87.7	88.1
Persons ever hospitalized for diabetes	34.6	77.6	34.2	48.8	33.3	29.4	30.0	28.5
Persons taking medicine or treatment recommended by their physician for diabetes	76.1	73.7	76.2	65.6	75.1	81.5	83.1	79.0
Perceived impact								
Persons bothered all the time by diabetes	19.7	19.2	19.7	14.3	20.7	20.8	21.4	19.7
Persons bothered a great deal by diabetes	14.5	8.8	14.7	16.3	15.5	12.8	13.3	11.9
Persons bothered a great deal by diabetes all the time	6.6	4.0	6.7	5.0	6.8	7.2	7.9	6.0
Persons reported to be in fair or poor health	50.8	20.2	51.0	38.8	55.7	50.7	52.9	46.9

SOURCE: National Center for Health Statistics: Computed by the Division of Epidemiology and Health Promotion from 1979–81 National Health Interview Survey data provided by the Division of Health Interview Statistics.

Table 4. Age-adjusted average annual percent of persons with limitation of activity and fair or poor health assessments by diabetic status: United States, 1979–81

<i>Indicator</i>	<i>General population</i>	<i>Diabetics</i>
	Age-adjusted percent ¹	
Limited in activity	14.5	41.5
Unable to perform usual activity	3.7	8.8
Limited in amount and kind of usual activity	7.2	21.1
Limited, but not in usual activity	3.5	11.6
Reported to be in fair or poor health	12.6	38.6

¹Age adjusted by the direct method to the 1979–81 civilian noninstitutionalized population using 5 age groups.

SOURCE: National Center for Health Statistics; Computed by the Division of Epidemiology and Health Promotion from 1979–81 National Health Interview Survey data provided by the Division of Health Interview Statistics.

Table 5. Number of persons by diabetic status and age, and average annual percent distribution of persons by selected sociodemographic characteristics, according to diabetic status and age: United States, 1979-81

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Characteristic	All ages		17 years and over		17-44 years		45-64 years		65 years and over	
	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics
	Number in thousands									
Total	219,573	5,429	161,268	5,376	93,514	848	43,726	2,406	240,289	2,123
	Percent distribution									
Total ²	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex										
Male	48.2	43.4	47.2	43.5	48.6	41.3	47.7	47.6	41.1	39.6
Female	51.8	56.6	52.8	56.5	51.4	58.7	52.3	52.4	58.9	60.4
Race										
White	86.3	83.1	87.7	83.1	86.2	80.7	89.1	80.7	90.7	86.6
All other	13.7	16.9	12.3	16.9	13.8	19.3	10.9	19.3	9.3	13.4
Black	11.8	15.4	10.5	15.4	11.6	18.6	9.3	17.0	8.3	12.3
Hispanic origin										
Hispanic	6.8	6.1	6.1	6.1	7.4	7.7	5.1	8.2	3.1	3.0
Non-Hispanic	93.2	93.9	93.9	93.9	92.6	92.3	94.9	91.8	96.9	97.0
Education of individual										
Less than 12 years .....	...	...	31.0	54.0	22.3	30.0	35.1	50.0	58.2	68.3
12 years .....	...	...	37.8	28.4	41.0	38.1	38.5	34.0	24.2	17.9
More than 12 years .....	...	...	31.2	17.6	36.8	31.9	26.4	16.0	17.6	13.8
Marital status										
Married .....	...	...	64.0	65.3	59.2	67.6	78.9	72.4	55.5	56.4
Formerly married .....	...	...	14.8	28.3	8.7	13.7	16.4	23.0	38.8	40.0
Never married .....	...	...	20.7	6.4	32.0	18.6	4.7	4.6	5.6	3.6
Family income ³										
Less than \$7,000	15.9	29.0	16.3	29.3	13.6	18.2	11.7	21.5	35.9	42.6
\$7,000-\$9,999	8.2	11.7	8.4	11.9	6.6	8.5	7.5	11.6	17.3	13.5
\$10,000-\$14,999	15.6	16.5	15.5	16.3	15.0	7.9	14.5	18.2	19.5	17.7
\$15,000-\$24,999	24.9	19.0	24.0	19.1	26.4	28.5	23.2	19.1	14.9	15.1
\$25,000 or more	35.4	23.8	36.0	23.4	38.4	36.9	43.1	29.5	12.7	11.1
Location of residence										
SMSA ⁴	68.3	66.4	68.7	66.4	69.7	68.2	68.6	69.0	64.7	62.7
Central city	27.5	31.0	28.0	31.1	27.8	31.1	27.6	32.8	29.8	29.2
Outside central city	40.8	35.4	40.7	35.4	42.0	37.1	41.0	36.2	34.9	33.5
Outside SMSA ⁴	31.7	33.6	31.3	33.6	30.3	31.8	31.4	31.0	35.3	37.3
Nonfarm	29.1	31.0	28.6	31.1	28.1	30.8	28.0	28.5	32.1	34.0
Farm	2.6	2.7	2.7	2.5	2.2	0.9	3.4	2.4	3.1	3.3

See footnotes and source at end of table.

Table 5. Number of persons by diabetic status and age, and average annual percent distribution of persons by selected sociodemographic characteristics, according to diabetic status and age: United States, 1979-81—Con.

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Characteristic	All ages		17 years and over		17-44 years		45-64 years		65 years and over	
	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics	General population ¹	Known diabetics
Geographic region	Percent distribution									
Northeast	22.0	22.2	22.3	22.2	21.4	20.2	23.4	22.2	23.9	23.1
North Central	26.4	26.1	26.4	26.1	26.5	28.2	26.2	26.0	26.2	25.3
South	32.8	36.5	32.4	36.4	32.4	33.6	32.4	38.0	32.5	35.7
West	18.8	15.2	18.9	15.3	19.6	18.0	18.0	13.8	17.4	15.9

¹Data are for the civilian noninstitutionalized population. Data for nondiabetics are not shown separately because they are virtually equivalent to the results for the general population.

²Excludes unknowns for Hispanic origin, education of individual, marital status, and family income.

³Data are for 1981 only, because information on annual family income is only available for broad income categories and is technically difficult to adjust for inflation over the 3-year time period.

⁴SMSA = standard metropolitan statistical area

SOURCE: National Center for Health Statistics. Computed by the Division of Epidemiology and Health Promotion from 1979-81 National Health Interview Survey data provided by the Division of Health Interview Statistics

Table 6. Number of persons by sex, diabetic status, and age, and average annual percent distribution of persons 17 years and over by selected sociodemographic characteristics, according to sex, diabetic status, and age: United States, 1979-81

[Data are based on annual one-third subsamples of National Health Interview Survey household interviews of the civilian noninstitutionalized population]

Characteristic	17-44 years				45-64 years				65-74 years				75 years and over			
	General population ¹		Known diabetics		General population ¹		Known diabetics		General population ¹		Known diabetics		General population ¹		Known diabetics	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Number in thousands																
Total	45,461	48,052	350	497	20,848	22,878	1,146	1,259	6,630	8,621	583	756	3,245	5,532	257	527
Percent distribution																
Total ²	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Marital status																
Married	57.5	60.9	67.5	67.7	84.9	73.4	82.8	62.9	82.0	51.1	84.6	52.3	68.6	23.1	73.1	22.8
Formerly married	6.2	11.1	12.2	14.8	9.9	22.3	11.8	33.2	13.3	42.8	12.9	44.4	26.5	70.6	21.8	72.7
Never married	36.3	28.0	20.4	17.4	5.1	4.3	5.4	3.9	4.6	6.2	2.6	3.3	4.9	6.3	5.1	4.5
Living arrangement																
With spouse	56.8	60.1	67.5	66.1	84.1	72.8	81.5	62.4	81.1	50.5	84.3	51.2	66.7	22.4	71.6	22.1
With other relatives	28.5	29.3	20.0	27.7	6.3	14.0	6.4	21.2	6.1	15.7	6.7	19.7	10.9	27.3	11.2	27.8
With nonrelatives	4.9	3.8	5.0	1.7	1.2	1.0	1.3	1.2	0.8	1.2	0.7	2.6	1.1	1.8	0.0	1.7
Alone	9.8	6.8	7.6	4.5	8.4	12.2	10.8	15.3	12.0	32.6	8.3	26.5	21.3	48.6	17.2	48.3
Labor force status																
In labor force	89.5	67.6	85.3	55.6	81.8	51.3	64.1	32.2	26.6	13.5	20.7	9.6	12.0	3.6	7.2	1.8
Not in labor force	10.5	32.4	14.7	44.4	18.2	48.7	35.9	67.8	73.4	86.5	79.3	90.4	88.0	96.4	92.8	98.2
Employment status ³																
Currently employed	93.2	90.9	93.1	90.2	96.2	95.7	97.2	95.4	96.2	96.7	96.7	92.1	94.4	90.2	100.0	59.7
Currently unemployed	6.8	9.1	6.9	9.8	3.8	4.3	2.8	4.6	3.8	3.3	3.3	7.9	5.6	9.8	0.0	40.3
Family income ⁴																
Less than \$7,000	12.2	15.0	14.3	22.2	9.0	14.2	13.6	28.5	21.3	35.5	22.7	46.0	39.8	51.6	48.9	56.5
\$7,000-\$9,999	6.0	7.1	6.2	10.8	5.9	9.0	9.4	13.6	18.2	17.8	12.9	20.1	19.6	14.1	8.4	8.7
\$10,000-\$14,999	14.7	15.3	7.1	8.6	13.2	15.7	17.5	18.8	23.9	19.7	28.2	15.4	18.9	13.3	17.0	10.2
\$15,000-\$24,999	27.1	25.8	32.1	24.9	23.7	22.7	23.5	15.3	20.5	14.1	20.6	12.2	12.6	10.8	14.5	12.9
\$25,000 or more	40.1	36.8	40.2	33.5	48.2	38.4	36.0	23.8	16.1	12.9	15.6	6.4	9.1	10.2	11.2	11.7

¹Data are for the civilian noninstitutionalized population. Data for nondiabetics are not shown separately because they are virtually equivalent to the results for the general population.

²Excludes unknown marital status, labor force status, and employment status.

³For persons in the labor force.

⁴Includes only data for 1981.

SOURCE: National Center for Health Statistics: Computed by the Division of Epidemiology and Health Promotion from 1979-81 National Health Interview Survey data provided by the Division of Health Interview Statistics.

Technical notes

The data presented in all tables in this report were derived from a subsample of household interviews of the National Health Interview Survey. These interviews were conducted in a probability sample of the civilian noninstitutionalized population of the United States. During calendar years 1979–81, questions about diabetes, included in two of the six chronic condition checklists administered each year, were asked in approximately 39,615 households, representing one-third of the total number of the households interviewed during 1979–81. More detailed descriptions of the sample design and copies of the questionnaires used in collecting data on the prevalence, impact, and demography of known diabetes are shown in other NCHS publications.¹⁻³

Because the estimates shown are based on a sample of the population, they are subject to sampling error. Table I shows standard errors for estimates of the number of persons with known diabetes or other characteristics. Table II shows stan-

Table I. Standard errors of estimates of aggregates

<i>Size of estimates in thousands</i>	<i>Standard error in thousands</i>
35	11
100	18
300	31
500	40
1,000	57
5,000	125
10,000	174
20,000	237
30,000	278
150,000	393

NOTE: A list of references follows the text.

Table II. Standard errors, expressed in percentage points, of estimated percents

<i>Base of percents in thousands</i>	<i>Estimated percents</i>				
	<i>2 or 98</i>	<i>5 or 95</i>	<i>10 or 90</i>	<i>30 or 70</i>	<i>50</i>
200	1.8	2.8	3.8	5.9	6.4
300	1.4	2.0	3.1	4.8	5.2
400	1.2	1.9	2.7	4.1	4.5
500	1.1	1.8	2.4	3.7	4.0
1,000	0.8	1.2	1.7	2.6	2.9
2,000	0.6	0.9	1.2	1.8	2.0
5,000	0.4	0.6	0.8	1.1	1.3
10,000	0.3	0.4	0.5	0.8	0.9
20,000	0.2	0.3	0.4	0.6	0.6
30,000	0.1	0.2	0.3	0.5	0.5
50,000	0.1	0.2	0.2	0.4	0.4

dard errors appropriate for percents, including the percent of persons with known diabetes, and the percent of known diabetics with various characteristics.

Estimates of diabetes based on household reports are limited to conditions individuals know about and are willing to report. Moreover, although it is widely recognized that the term "diabetes mellitus" refers to a heterogeneous group of disorders that have glucose intolerance, it is not possible to tabulate National Health Interview Survey diabetes data to identify different types of diabetes. Because it is estimated that general population samples are composed mainly of noninsulin-dependent diabetics, one should be cautious in generalizing the descriptions in this report to insulin-dependent diabetics. More extensive discussions of these and other aspects of diabetes in the United States, including estimates of the number of persons with undiagnosed diabetes, are available.⁴⁻⁹

Symbols

- - - Data not available
 - . . . Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standard of reliability or precision
 - # Figure suppressed to comply with confidentiality requirements
-

Aging in the Eighties

Preliminary Data From the Supplement on Aging to the National Health Interview Survey, United States, January–June 1984

by M. G. Kovar, Dr.P.H., Office of Interview and Examination Statistics

Introduction

The National Health Interview Survey is the National Center for Health Statistics' large continuing survey of the civilian noninstitutionalized population of the United States. Each year people in about 42,000 households are interviewed by U.S. Bureau of the Census interviewers to obtain information about their health and use of health care. Demographic information that is needed to interpret the data is also obtained. The interviewers have special training on this survey in addition to their regular training, and response rates are high—about 97 percent. The only item with a relatively low response rate is family income.

In 1984 a special supplement was added to the questionnaire to obtain information about elderly people who were living in the community. This supplement, the Supplement on Aging (SOA), was designed to collect information about physical limitations, chronic conditions, housing, retirement status, interactions with family and organizations, use of community services, and other health-related information about middle-aged and older people.

All household members age 65 years and over and a half sample of those 55–64 years of age were asked the questions on the supplement themselves where possible. Another household member was interviewed only when the selected person was unable to answer either because of physical or mental problems or because of being away from the household for a longer period than the interviewer would be in the area. Response rates to the SOA were also high. Of the 5,982 people age 65 years and over who were interviewed in households in January–June 1984, 96 percent had complete interviews; 92 percent answered the questions on the SOA for themselves.

The data in this report are from the interviews that were completed during the first 6 months of 1984. The data are

preliminary because only one-half of the year is included and because the data from the SOA have not been edited. Including the full year will double the size of the sample and make estimates more reliable. It will also eliminate any possibility of bias because of seasonality. Editing will change some of the estimates from the SOA that are in the text because information from other parts of the questionnaire or from other family members will be used to correct missing or inconsistent information.

The preliminary data about people age 65 years and over are being published because the need for information about the elderly is critical, and 5,982 people is a large enough sample to make estimates that are reliable for many purposes. The reader should use the material in the technical appendix before deciding that differences not mentioned in the text are likely to be statistically significant. The number of people in the sample is given in each table in addition to the national population estimates that are the base of the percentages to make that simple.

The primary purpose of this report is to provide background data. Much of the information could be obtained from other publications based on data from the National Health Interview Survey (NHIS). The tables are unique only in their focus on a particular population of interest.

The information is presented in the tables for three age groups. The data for people age 85 years and over are shown separately because the number of people in this age group is increasing rapidly and because relatively little is known about them. However, the reader should remember that there were only 448 people in this half-year of the sample who had had an 85th birthday. Differences between them and younger people that appear to be large may not be statistically or even substantively significant.

Information is also presented for both men and women because the older population is primarily a population of older

Health opinions

There were questions on the SOA designed to allow people to give their opinions about their health, their level of physical activity, and changes within the past year. Optional responses were part of each question, and check boxes were provided for the interviewer to record the responses. The questions were asked only of the 5,167 people who answered all the questions on the SOA for themselves. They could differ from other people whose answers to other parts of the SOA were from proxy respondents. For example, of the 815 people who did not answer for themselves, 60 percent were recorded as being physically or mentally incapable. The proportion unable to perform their usual activity and the proportion in poor health were 15 percent of the proxy versus 11 percent of the self-respondents. However, the proportion not limited in activity and the proportion in excellent health were equal in the two groups. Thus, there is some indication that the self-respondents are a select group, but those who did not answer for themselves were certainly not all incapacitated.

They were first asked, "How good a job do you feel you are doing in TAKING CARE of your health?" Nine out of 10 thought they were doing a good job, with 24 percent excellent, 32 percent very good, and 34 percent good. Most of the remainder felt they were doing a fair job; very few felt they were doing a poor job. The majority felt they had control over their future health, 35 percent felt they had a great deal of control, and 46 percent felt they had some control. Only 8 percent felt they had very little control, and 7 percent felt they had no control.

Most of the self-respondents had not worried much about their health in the past year. In response to the question about the amount of worry their health had caused them in the past year, 49 percent reported no worry at all and 16 percent had had hardly any worry. However, 27 percent had had some worry and 8 percent had had a great deal.

When asked about their physical activity compared with others the same age, 44 percent of the people responding for themselves considered themselves more active and 43 percent felt their level of activity was about the same as other people their age. Of those who thought themselves more active than their peers, the majority, 63 percent, felt that they were a lot more active.

When asked to compare their present level of physical activity to their own activity a year earlier, most reported that it was about the same. Only 8 percent felt they were more active and 18 percent felt they were less active. However, 58 percent of those with decreased physical activity said that it was only a little less.

The majority, 58 percent, felt they got as much exercise as needed. In response to other questions, 29 percent followed a regular routine of physical exercise and 14 percent walked at least a mile every day without resting. However, 71 percent of them did not follow a regular routine of physical exercise and 56 percent never walked a mile or more without resting.

Use of health care

About four out of five (82 percent) of the people who were 65 years of age or over had seen a physician within the pre-

vious year (table 4). Another 6 percent had seen a physician within 2 years. However, 12 percent of these people had not seen a physician for more than 2 years despite their being at an age when the risk of need for medical care is high.

Most of them appeared to have received relatively routine medical care judging by the number of contacts they had had with physicians during the previous year. They had seen a physician but, on the average, not more than every other month or so, that is, they had had 1–6 contacts during the year. Only 8 percent had had 13 contacts or more with a physician during the year.

Perceptions of health were highly associated with the amount of medical care. The people who had not seen a physician within a year generally rated their health higher than those who had seen a physician. For example, 26 percent of those who had not seen a physician rated their health as excellent, 22 percent as very good, and 32 percent as good. Seventy-seven percent had no limitation on their usual activity. In contrast, the majority of the people with seven or more visits during the year rated their health as only fair or poor and only 34 percent had no limitation on their usual activity.

The difference between the youngest and oldest age groups in the proportion who had been hospitalized during the preceding year was large and programmatically significant in this population of people of an age to be Medicare eligible. Overall, about 20 percent of the people age 65 years and over who were living in the community at the time they were interviewed had been in a hospital overnight or longer during the preceding year. However, only 18 percent of those ages 65–74 years in contrast with 29 percent of those age 85 years and over had been hospitalized during the year. When one considers that hospitalization rates are much higher in the year preceding death or institutionalization,^{4–6} and that the experience of such people is excluded from the retrospective data from NHIS, these differences assume added importance.

Discussion

In general, older people living in the community show only a slight decline in health status with increasing age. Responses to only one of the three general questions about health status revealed a difference. Responses to the questions about ambulatory contacts with physicians also showed little difference with age. However, the responses to questions about limitation of activity and use of hospital care did show differences among the people in the three age groups. A relatively large proportion of the oldest part of the population of people age 65 years and over remaining in the community were functionally impaired or had used inpatient medical care during the previous year.

However, the proportion is only relatively large. The general picture of people who have had a 65th birthday is that of a population of people who vary a great deal among themselves. Sixty percent of the people age 65 years and over and 40 percent of those age 85 years and over were not limited in activity. Eighty-two percent and 71 percent, respectively, had not been hospitalized during the previous year. The population consisted of people who were college graduates as well as those who had

Table 4. Percent distribution of people age 65 years and over living in the community by selected health care use characteristics, according to age and sex: United States, January–June 1984

Health care use	Total	65–74 years			75 years and over			Age	
		Both sexes	Sex		Both sexes	Sex		75–84 years	85 years and over
			Men	Women		Men	Women		
					Number				
Sample	5,982	3,731	1,625	2,106	2,251	822	1,429	1,803	448
					Number in thousands				
Estimated population	26,290	16,227	7,048	9,178	10,063	3,685	6,378	8,073	1,990
					Percent distribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospitalizations in year									
None	79.5	82.0	80.8	83.0	75.3	74.5	75.7	76.3	71.3
1	14.4	12.6	12.5	12.7	17.4	18.2	16.9	16.8	19.8
2 or more	6.1	5.4	6.8	4.3	7.3	7.2	7.3	6.9	8.9
Interval since last doctor contact ¹									
Less than 1 year	82.0	80.7	79.4	81.8	83.9	83.4	84.2	83.6	85.2
1–2 years	6.3	6.4	6.6	6.2	6.0	6.0	6.0	6.2	5.4
2–5 years	7.0	7.8	8.3	7.5	5.8	6.8	5.2	5.9	5.6
5 years or more	4.0	4.3	5.0	3.7	3.5	3.5	3.5	3.8	2.3
Number of doctor contacts in year ¹									
None	18.6	19.7	21.2	18.5	17.0	17.7	16.5	17.1	16.4
1–2 contacts	27.8	28.9	28.8	29.0	26.1	28.7	24.6	26.1	26.1
3–6 contacts	31.7	30.3	30.2	30.4	34.0	33.6	34.3	34.1	33.8
7–12 contacts	13.2	13.0	12.7	13.3	13.4	11.8	14.4	13.0	15.1
13–24 contacts	4.9	4.9	4.3	5.3	4.8	3.4	5.6	5.1	3.8
25 contacts or more	3.3	2.9	2.6	3.2	3.8	4.2	3.6	3.8	3.7

¹Interval was unknown for 0.8 percent, and number of visits was unknown for 0.5 percent.

not gone beyond eighth grade. They lived in all parts of the country, in big cities and rural areas, in houses, apartments, and mobile homes. Many people were living alone, but many others were living with a spouse.

The measures of health reflect generally good health. The

health opinions of those answering for themselves, 94 percent of the sample, also reflected a positive attitude towards their health on the part of many older people. Most felt that they were taking care of their health, had not worried about it during the past year, and had some control over their future health.

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Technical notes

Each week a probability sample of households in the United States is visited by U.S. Bureau of the Census interviewers to obtain a wide range of information about the health and health care characteristics of the people living in those households. A description of the survey design, methods used to make the national estimates, and general qualifications of the data are provided in *The National Health Interview Survey Design, 1973-84, and Procedures, 1975-83*.⁷

In January-June 1984 there were about 21,000 households in the sample. The total noninterview rate was about 3 percent—mostly because the interviewer was unable to locate an eligible respondent despite repeated calls.

The rules for the survey are that all adults who are in the household when the interviewer calls are asked to join in the interview and to respond for themselves. People age 65 years and over are likely to be at home and are, thus, more likely to respond for themselves to the questions on the basic, or core, questionnaire. During the first 6 months of 1984, 84 percent answered the questions themselves.

For the Supplement on Aging (SOA), the interviewers made an additional effort to encourage the people selected to answer the SOA questions and to respond for themselves. They encouraged the household respondent to ask an older person to talk to the interviewer and, if necessary, made extra calls. The results of their efforts were both positive and negative. The positive result was that an even higher proportion, 92 percent, of the responses to the SOA were completely self responses. The negative result was that in a few cases information was obtained from a household respondent for the core questions but no information was obtained for the supplement. Fortunately the latter was rare: 5,629 of the 5,982, 95 percent, of the people age 65 years and over who were in the sample during January-June had complete interviews on the supplement.

The estimates in this report are based on a sample rather than on the entire population of people age 65 years and over in the civilian noninstitutionalized population. Therefore, the estimates are subject to sampling error. In addition, the sample had a complex design that has the effect of making the sampling errors somewhat larger than they would be from a simple random sample of the same size using the same procedures.

A conservative estimate is that, on the average, the variance for estimated proportions from this sample is 20 percent larger than it would have been from a simple random sample of the same size using the same procedures.

To estimate the sampling errors, convert the percent to a proportion, calculate the variance of a proportion assuming simple random sampling, multiply that variance by 1.2 to allow for the complex sample, then compute standard errors, confidence intervals, or significance tests.

For example, the estimate is that 45 percent of the 1,990 thousand people age 85 years and over lived alone. There were 448 people in the sample age 85 years and over; therefore,

$$\begin{aligned}\text{Variance (simple random sample)} &= \frac{pq}{n} \\ &= \frac{(0.45)(0.55)}{448} \\ &= 0.0006\end{aligned}$$

$$\begin{aligned}\text{Variance (complex sample)} &= (0.0006)(1.2) \\ &= 0.0007\end{aligned}$$

$$\begin{aligned}\text{Standard error} &= (0.0007)^{1/2} \\ &= 0.0257\end{aligned}$$

$$\begin{aligned}95 \text{ percent confidence interval} &= 45 \pm (1.96)(2.57) \\ &= 45 \pm 5 \text{ percent.}\end{aligned}$$

Because the estimation procedure includes poststratification to independent U.S. Bureau of the Census estimates, there is no sampling error for the number of people age 65 years and over—either for the total or for either sex.⁷ The only sampling error is in the numerator. Therefore, the sampling errors for those groups are somewhat smaller than estimated by this method.

Perhaps more important for interpretation than sampling errors, however, is a thorough understanding of what data from this, or any other, cross-sectional survey can provide. There are two issues—one important for any cross-sectional analysis and the other of especial importance for older people.

The NHIS is a point-in-time study. Associations at one point in time should not be interpreted as causality. The differences among the age groups, for example, could be the result of aging or, alternatively, they could be the result of different cohorts moving through time. Based on external knowledge, one could interpret a difference in health status as the result of aging and a difference in educational status as the result of cohort differences, but the data from a cross-sectional survey do not enable one to make that distinction.

The second is that this is a study of people who were living in the community at the time they, or a proxy respondent, were interviewed. All of those elderly people who had left the population, either through death or institutionalization, are excluded. Thus, the estimate that 20 percent of the elderly people had been hospitalized during the preceding year should not be interpreted to mean that only 20 percent of all elderly people had been hospitalized during the year. Hospitalization rates are high during the year preceding death or institutionalization,^{4,6} and the experience of those people is not included in these estimates.

NOTE: A list of references follows the text.

Aging in the Eighties, Age 65 Years and Over and Living Alone, Contacts With Family, Friends, and Neighbors Preliminary Data From the Supplement on Aging to the National Health Interview Survey: United States, January–June 1984

by M. G. Kovar, Dr.P.H., Office of Interview and Examination Statistics

Introduction

The National Health Interview Survey is the National Center for Health Statistics' large continuing survey of the health of the civilian noninstitutionalized population of the United States. Each year people in about 42,000 households are interviewed by U.S. Bureau of the Census interviewers to obtain information about their health and use of health care. Demographic information that is needed to interpret the data is also obtained. The interviewers have special training on this survey in addition to their regular training, and response rates are high—about 97 percent. The only item with a relatively low response rate is family income, which is not used for this analysis.

In 1984 a special supplement was added to the questionnaire to obtain information about older people who were living in the community. This supplement, the Supplement on Aging (SOA), was designed to collect information about physical limitations, chronic conditions, housing, retirement status, interactions with family and organizations, use of community services, and other health-related and social information about middle-aged and older people. All household members age 65 years and over and a half sample of those 55–64 years of age were asked the questions on the supplement themselves where possible. Another household member was interviewed only when the selected person was unable to answer either because of physical or mental problems or was going to be away from the household for a longer period than the interviewer would be in the area. Response rates to the SOA were also high. Of the 1,809 people age 65 years and over who were in the survey January–June 1984 and who were living alone, 96 percent

gave a complete interview to the SOA and 99 percent of those answered the questions for themselves.

The data in this report are from the interviews that were completed during the first 6 months of 1984. The data are preliminary because only one-half of the year is included and because the data from the SOA have not been edited. Including the full year will double the size of the sample and make estimates more reliable. It will also reduce any possibility of bias because of seasonality. Editing will change some of the estimates because information from other parts of the questionnaire will be used to correct missing or inconsistent information. *The approach used to make the estimates in this report was to be conservative.* If the information was missing, which it rarely was for people living alone and answering for themselves, it was treated as if the response was "No" or "None." That is, the number of living children was treated as if the person had no children, and the number of telephone contacts with relatives was treated as if there were none if there were no entries.

The purpose of this report is to provide information about one segment of the older population—those people 65 years of age and over who were living alone. They are of particular interest (1) because there are so many of them (about 31 percent of all people age 65 years and over and living in the community, or about 8 million people who had had a 65th birthday, lived alone), (2) because of concern that alienation and loneliness decreases the quality of their lives, and (3) because research^{1,2} has suggested that they are at especially high risk of need for long-term care and of institutionalization. The preliminary data are being published because of these concerns and because there is so little information available about older people living alone.

There are two points to remember when interpreting the data.

- First, this is a report about people who have, so far, successfully survived living alone in the community. Were they badly disabled, many might already have moved in with family or into institutions. They are, in a sense, a select group of people.
- Second, the estimates are based on a sample and they may differ from estimates based on a complete census using exactly the same questions and interviewing techniques. The reader should read the technical notes and consider the size of the sampling error before making inferences.

Background

About 26.3 million Americans who had had their 65th birthday were living in communities outside nursing homes or other institutions in the first half of 1984. About one-third of them, an estimated 8.0 million people, were living alone.

Before considering the special characteristics of the people who have had a 65th birthday and live alone, it is useful to recognize how they differ as a group from their peers who live with other people.

Senior people who live alone are, on the average, older than those over 65 years of age who live with others. Their average age was 75.2 years in contrast with 73.4 years. Half were age 75 years and over; 11 percent were age 85 years or over (table A). In contrast, only a third of those who lived with others were age 75 years and over; 6 percent were age 85 years and over.

Table A. Percent distribution of people age 65 years and over by age, sex, and marital status, according to whether they lived alone or with others: United States, January–June 1984

<i>Age, sex, and marital status</i>	<i>Total</i>	<i>Living alone</i>	<i>Living with others</i>
		Number	
Sample	5,982	1,809	4,173
		Number in thousands	
Estimated population	26,290	8,018	18,272
		Percent distribution	
Total	100.0	100.0	100.0
Age			
65–74 years	61.7	50.2	66.8
75–84 years	30.7	38.6	27.2
85 years and over	7.6	11.2	6.0
Sex			
Male	40.8	20.2	49.9
Female	59.2	79.8	50.1
Marital status			
Married	54.7	0.0	78.6
Widowed	34.1	77.1	15.2
Divorced	6.3	14.1	2.9
Never married	4.4	8.1	2.8

They were, being older, more likely to be widowed. They were also more likely to be divorced or separated, or never married. For example, 77 percent of the people living alone, but only 15 percent of those living with others, were widowed; 14 percent, in contrast with 3 percent, were divorced or separated; and 8 percent, in contrast with 3 percent, had never married.

Eighty percent of the older people living alone were women, in contrast with 50 percent of those living with others. Of the 8 million people age 65 years and over and living alone, about 11 percent were men and 39 percent were women ages 65–74 years; 9 percent were men and 40 percent were women age 75 years and over.

Thus, the population of people age 65 years and over and living alone tends to be older, widowed women. Many of these characteristics result from the higher death rates and shorter life expectancies of men. Fewer males survive to age 65 years, and even at age 65 years, a man’s expectation of life is less than that of a woman the same age. In 1983, the difference at age 65 years was 4.1 years.³ In addition, women tend to marry men older than themselves, which increases their likelihood of being widowed.

Despite these characteristics, many of the people who were living alone were not at all disabled, in poor health, suffering from lack of medical care, or lacking family or companionship.

Although the potential for social isolation certainly exists, the evidence from the SOA is that the majority of the older people who were living alone lived close to family with whom they had frequent contact. Many of them had been living in exactly the same place for many years; 62 percent had not moved in the previous 10 years and 32 percent had lived in the same place for 25 years or more. Only 24 percent had moved into their current house, apartment, or mobile home within the previous 5 years. About 11 percent lived in retirement communities. The long residence in the same place and the relatively high proportion in retirement communities may account for their social contacts.

Another reason that these people living alone were not as isolated as they might have been is that 94 percent of them had telephones and most apparently used them. The telephone was a major means of contact with children and other relatives and with friends and neighbors.

Given the importance of the telephone for maintaining social contacts, it appeared that elderly men living alone were at greater risk of isolation than elderly women. While 97 percent of the women had telephones, only 84 percent of the men did.

Children

One reason there is a potential for isolation is that a substantial fraction of the people age 65 years and over who lived alone had no living children (table B). Twenty-nine percent, by the conservative estimates used for this report, had no living children and an additional 19 percent had only one child.

However, most of those who did have children had frequent contact with them. They lived near their children, saw them frequently, and talked with them frequently on the telephone.

Table B. Percent of people age 65 years and over living alone by whether they had living siblings and by number of living children: United States, January–June 1984

Living children	Total	No living siblings	Living siblings	Percent of total			
				Total	No living siblings	Living siblings	Living siblings
Total	100.0	27.7	72.3				
No children	28.8	10.7	18.2				
1 child	19.1	5.4	13.7				
2–4 children	42.2	9.9	32.3				
5 children or more	9.8	1.8	8.1				

NOTE: Based on an estimated 8,018 thousand (1,809 in sample) people who lived alone.

When asked how quickly one or more of their children could get there if needed, an estimated 4 million (half of all the older people living alone) had at least one child who could get there in a matter of minutes. An additional 1.4 million had at least one child who could get there in a matter of hours—mostly within 3 hours. Of the 5.6 million people living alone who had at least one child, 72 percent said that at least one child could be there within minutes and almost all the rest said one could be there in a few hours (table C). The proportion saying that at least one child could be there within minutes was higher as the number of children increased—56 percent of those with only one child, 75 percent of those with two through four children, and 85 percent of those with five children or more.

Of the people living alone who had children, 23 percent saw a child daily. An additional 40 percent saw a child at least once a week, and half of those saw a child more than once during the week. Another 16 percent saw a child at least once a month, and again they were about evenly split between those who saw a child only once and those who saw one more often. Most of the remainder saw their children several times during the year. Only 3 percent of the people who lived alone and had one child or more said they never saw a child or saw one less than once a year.

As could be expected, there was a strong association between the time it took a child to get there and how often they saw their children. Over 90 percent of the 3.5 million who saw

Table C. People age 65 years and over who lived alone and had 1 child or more by frequency of seeing children and how quickly a child could get there: United States, January–June 1984

Frequency of seeing children	Total	How quickly a child could get there		
		Minutes	Hours	Days
Total	100.0	71.6	25.1	3.4
At least:				
Daily	23.4	22.9	0.0	0.0
Weekly	40.3	36.7	3.5	0.0
Monthly	16.2	9.4	6.7	0.0
Yearly	17.5	2.3	13.0	2.2
Never	2.7	0.0	1.5	1.0

NOTE: Based on an estimated 5.6 million (1,272 in sample) people with 1 child or more.

a child daily or weekly had a child who could get there within minutes. The majority of those who saw a child less often said the quickest a child could get there if needed was an hour or more. However, 13 percent of those who said it was less than once a month but more than once a year also said a child could be there if needed in less than an hour.

Seventy-eight percent of those with children, 4.4 million of the 8.0 million people living alone, talked with at least one child on the telephone every week. Thirty-six percent of those with children talked with at least one child every day, another 21 percent did so two or more times a week, and an additional 20 percent talked with a child at least once a week. Only 9 percent of those with children talked with a child on the telephone less than once a month.

The combination of personal and telephone contacts meant that of the 8.0 million older people living alone, 5.1 million had contact with a child at least once a month, 4.5 million at least once a week, and 2.4 million had contact with a child in person or by telephone daily.

Four-fifths, 81 percent, of those with children had contact with a child in person or by telephone at least once a week; 57 percent had both personal and telephone contact. Two-fifths, 42 percent, had daily contact with a child in person or by telephone; 16 percent had daily personal and telephone contact. Most of the people who saw their children less frequently talked with them on the telephone more often than they saw them. Very few, perhaps 1–2 percent, of the older people living alone who had children never saw or talked on the telephone with them.

Mail is apparently not used now as the means for older people staying in touch with children. The older people who lived alone seldom received mail from their children. Forty-three percent of those with children never received any mail from them. Most of the rest reported mail several times during the year but not on a routine basis.

Recent social contacts

Many of the older Americans who lived alone were living in exactly the same home they had lived in for years. A few, judging from the length of time they had lived in the same place, appeared to have spent their entire lives in the same house or apartment. Others, who were widowed, had apparently remained in the same household they had lived in with a spouse. This long residence in the same place may help account for their high rate of contact with family, friends, and neighbors.

Although 29 percent of the older people living alone had no living children and 28 percent had no living siblings, few were without any immediate family. Only 11 percent of the estimated 8 million Americans who had had a 65th birthday and were living alone had neither a child nor a sibling (table B). About 54 percent had at least one living sibling and one living child. Eighteen percent had one sibling or more but no child, and 17 percent had one child or more but no sibling.

Most had recent contact with family (table D). Within the 2 weeks prior to the interview, 73 percent of the older people who lived alone had gotten together with relatives; 84 percent had talked with relatives on the telephone; 69 percent had done both; and only 12 percent had done neither.

Those who had both children and siblings were even more likely to have had recent contact. Eighty-four percent had gotten together with relatives and 94 percent had talked with a relative on the phone. Even some of those without a child or sibling had had recent contact with relatives; 27 percent had gotten together with relatives, and 38 percent had talked with relatives on the phone within 2 weeks.

Seventy percent had gotten together with friends or neighbors within 2 weeks, and 81 percent had talked with friends or neighbors on the telephone.

Overall, 88 percent of the people living alone had gotten together either with family or with friends and neighbors during the 2 weeks prior to the interview. About 53 percent had gotten together with relatives and with friends or neighbors; 11 percent had done neither.

Overall, 90 percent of the people living alone had talked with either family or with friends and neighbors on the telephone within the 2 weeks prior to the interview. About 75 percent had talked with both relatives and others; 10 percent had talked with neither within the 2 weeks.

In sum, 84 percent of all the people living alone had talked with someone and gotten together with someone within the 2 weeks. Only 5 percent reported no contact with family or friends in person or by telephone within the 2-week period.

About half of the people age 65 years and over and living alone, 51 percent, had gone to a church or temple during that period. Fewer, only 27 percent, had attended a movie, sports event, or other such group event.

Health

On a five-point scale of excellent to poor, 70 percent of the people living alone rated their health as good or better. The perceived health status of about 18 percent was "excellent," 21 percent "very good," and 31 percent "good." Only 20 percent perceived their own health as "fair," and 10 percent perceived their health as "poor."

Sixty percent were not limited in their usual activity, 17 percent were limited in outside activities but not their usual one, 16 percent were limited in kind or amount of usual activity, and 8 percent were unable to perform their usual activity.

Their perceptions about their health were associated with their use of health care. About 18 percent had not seen a phy-

sician during the preceding year; 82 percent of those who had not seen a physician within a year perceived their health as good or better and 74 percent had no activity limitation.

Sixty-two percent had not spent an entire day in bed during the preceding year and an additional 14 percent had spent less than 7 days in bed. About 10 percent had spent 4 or more weeks in bed during the year.

Most of them felt that if they needed care, there was someone to take care of them for a few days. The majority, 69 percent, said that family would; 17 percent had someone else. However, 14 percent said there was no one.

They were less sanguine about there being someone to care for them for a few weeks if needed. The majority, 67 percent, had family, but only 10 percent had someone else. Twenty-four percent said there was no one to care for them that long.

Those who responded for themselves entirely, about 98 percent of the people living alone, were asked additional questions about their own health. Most thought they were doing well.

When asked how good a job they were doing taking care of their own health, 90 percent said good or better including 24 percent who said "excellent" and 33 percent who said "very good"; most of the others said they were doing a fair job.

When asked how their health was compared with their health a year ago, 71 percent said it was about the same, 13 percent reported it was better, and 16 percent said it was worse.

Most did not worry about their health. Forty-nine percent said they had not worried at all during the past year, and 15 percent said they had hardly any worry. Twenty-six percent had had some worry, and 10 percent a great deal.

Four-fifths of the people living alone felt they had some control over their future health, including 37 percent who thought they had a lot of control. About 8 percent thought they had very little control, and 7 percent felt they had no control.

They felt they were as active as (41 percent) or more active than (47 percent) other people their own age. Two-thirds of those who felt they were more active thought they were a lot more active.

Most (71 percent) said they were about as active now as they had been a year before, but 21 percent were less active. Two-thirds of those who were less active said it was only a little less.

Discussion

The likelihood that older people will be living alone is higher at older ages as spouses, siblings, and even children die. There is a risk of being left without a support network. However, if the support network is there, people can be helped to maintain themselves in the community, and rates of institutionalization can be decreased to the benefit of both individuals and public programs.

The evidence from these preliminary data is that many of the people who had had a 65th birthday and were living alone did see, or at least talk with, family frequently. They were not alienated and without social contacts. Also, they perceived themselves as in generally good health and felt they had some control over their health.

Table D. Percent of people age 65 years and over who lived alone by contacts with relatives, friends, and neighbors within the previous 2 weeks and whether by person or telephone: United States, January-June 1984

Immediate family	Relatives		Friends or neighbors	
	In person	Telephone	In person	Telephone
	Percent with contact			
Total	72.8	84.0	69.5	81.4
No child or sibling	26.8	37.8	50.5	56.6
Sibling(s) only	66.6	80.7	71.0	83.4
Child(ren) only	72.8	85.8	69.2	81.5
Both	84.0	93.5	39.4	85.6

It is not news that older people living alone are generally in better health than those living with others. The usual explanation is that they are able to live alone *because* they are in good health. Were they in poor health and unable to care for themselves, they would have moved in with family or been institutionalized.

These data do not refute that explanation; however, they do raise the possibility that other factors are also contributing to the ability of these older people to live alone. The perception of many of them that their health was good and the close relationships that many seemed to have with family may be additional explanations of their ability to live alone.

There is evidence from longitudinal data that older people who perceive themselves to be in good health have lower mortality rates than people the same age who perceive their health as poor.^{4,5} Although the people in this study who were living alone were no different from those living with others in the frequency of their use of health services or the number of days they had spent in bed during the year despite their being older, their perception of their health, whether measured on a scale of excellent to poor or by limitation of activity, was better.

There is also evidence from population-based longitudinal studies that people who have a lot of friends and relatives and who see a lot of them are likely to live longer than those who seldom visit with friends and relatives⁶ and that elderly people who perceive a high level of social support have lower mortality rates.⁷ Other studies have failed to confirm that relationship for women.⁸ The number of living children was a significant predictor of mortality in a study of elderly urban poor regardless of health status.⁹ Many of these studies have been reviewed and the results found to vary with the definitions of social support.¹⁰

None of them focused on older people who lived alone. Nevertheless, the preponderance of the evidence is that there is some relationship between social contact and support and mortality.

The data from the SOA are cross-sectional and cannot be used to demonstrate causality. However, the research from these longitudinal studies does suggest that many of these older people who were living alone may *not* be at unusually high risk of death. They may not even be at unusually high risk of institutionalization. They had frequent contact with family and neighbors. They had lived in the same place for many years. Those who had children lived near them and saw them frequently. Almost all had telephones and used them to stay in touch with family and neighbors.

Whether their closeness to family will have a protective effect is a hypothesis that will have to be confirmed. More extensive analysis from the full year of edited data may reveal more about the cross-sectional relationships. But testing such a hypothesis will not be possible until the records of the respondents to this survey have been matched with records in the National Death Index¹¹ for several years and their progress followed over time. That match is planned.

There did appear to be a small group of people living alone who did not have children or siblings, frequent social contact, recent medical care, or high self-perception of their health. There is some indication that men are more likely to be in this group than women, although, because there are more women living alone, the larger number of them are women. This may be the group at great risk of either death or institutionalization. Both the larger sample that will be available from the full year and the match with the National Death Index will provide more information about them.

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Technical notes

Each week a probability sample of households in the United States is visited by U.S. Bureau of the Census interviewers to obtain a wide range of information about the health and health care characteristics of the people living in those households. A description of the survey design, methods used to make the national estimates, and general qualifications of the data are provided in *The National Health Interview Survey Design, 1973-84, and Procedures, 1975-83*.¹²

During January through June 1984 there were about 21,000 households in the sample. The total noninterview rate was about 3 percent—primarily because the interviewer was unable to locate an eligible respondent despite repeated calls.

Response rates were also high for the Supplement on Aging (SOA); 97 percent of the people age 65 years and over and living alone who responded to the basic questionnaire completed the SOA. A few refused to complete the SOA, which was an extensive questionnaire, following what may have been, if there were many illnesses or episodes of care to report, a long interview. Thus, the coverage was extremely high.

The estimates in this report are based on a sample rather than on the entire population of people age 65 years and over living alone in the civilian noninstitutionalized population of the United States during the first 6 months of 1984. Therefore, the estimates are subject to sampling error. In addition, the sample had a complex design that has the effect of making the sampling errors somewhat larger than they would be from a simple random sample of the same size using the same procedures.

Table I gives some of the sample numbers to enable the user to make estimates of the sampling errors that incorporate the complex sample design. To estimate the sampling errors, convert the percent to a proportion, calculate the variance of a proportion assuming simple random sampling, multiply that

variance by the design effect to allow for the complex sample, then compute standard errors, confidence intervals, or significance tests. For example, the estimate of 8,018,000 people age 65 years and over and living alone was based on 1,809 people in the sample. Eighty percent were women; therefore,

$$\begin{aligned} \text{Variance (simple random sample)} &= \frac{pq}{n} \\ &= \frac{(0.80)(0.20)}{1,809} \\ &= 0.000088 \end{aligned}$$

The design effect is 1.2.

$$\begin{aligned} \text{Variance (complex sample)} &= (0.000088)(1.2) \\ &= 0.000106 \end{aligned}$$

$$\begin{aligned} \text{Standard error} &= (0.000106)^{1/2} \\ &= 0.0103 \end{aligned}$$

$$\begin{aligned} 95 \text{ percent confidence interval} &= 80 \pm (1.96)(1.03) \\ &= 80 \pm 2 \text{ percent} \end{aligned}$$

Perhaps more important for interpretation than sampling errors, however, is a thorough understanding of what data from this, or any other, cross-sectional survey can provide. There are two issues—one important for any cross sectional analysis and the other of especial importance for older people.

The National Health Interview Survey is a point-in-time study. Associations at one point in time should not be interpreted as causality. The difference among the age groups, for example, could be the result of aging or, alternatively, they could be the result of different cohorts moving through time. Based on external knowledge, one could interpret a difference in educational status as the result of cohort differences, but the data from a cross-sectional survey do not enable one to make that distinction.

The second factor is that this is a study of people who were living alone in the community at the time of the interview. Those elderly people who were in institutions were not in the scope of the survey. In addition, people who had formerly lived alone but because they had become badly disabled, no longer had financial resources to live alone, or for other reasons now lived with other people are no longer classified as living alone. They had left this population. This is a report about people who have, so far, successfully survived living alone in the community. Were they badly disabled, many might already have moved in with family or into an institution. They are, in that sense, a select group of older people.

NOTE: A list of references follows the text.

Table I. Population estimates and sample sizes for people age 65 years and over and who lived alone, by number of living children and immediate family: United States, January-June 1984

Characteristic	Population in thousands	Number in sample
Total	8,018	1,809
Living children		
No children	2,311	509
1 child	1,533	354
2-4 children	3,384	763
5 children or more	789	183
Immediate family		
No child or sibling	855	187
Sibling(s) only	1,457	322
Child(ren) only	1,367	311
Both	4,340	989

Office Visits to Orthopedic Surgeons, National Ambulatory Medical Care Survey: United States, 1980–81

by Raymond O. Gagnon, Division of Health Care Statistics

Introduction

This report presents statistics on the 55.5 million ambulatory visits made to orthopedic surgeons during the years 1980–81. The data were collected by means of the National Ambulatory Medical Care Survey (NAMCS), a sample survey of private office-based physicians in the United States, excluding Alaska and Hawaii. NAMCS was conducted annually from 1973 through 1981 and periodically thereafter. Data were again collected in 1985. An earlier report¹ on orthopedic surgeons covered the years 1975–76. This report serves as an update of that earlier report, comparing the data between these two different points in time, and including summary data on the use of medications not available in the earlier report.

Because the estimates presented in this report are based on a sample rather than on the entire universe of office visits, they are subject to sampling variability. A brief description of the sample design and sampling errors is provided in the "Technical notes" at the end of the report. Definitions of key terms used in the survey are also provided. The figure is a facsimile of the 1980–81 NAMCS Patient Record used by participating physicians to record information about their office visits. The Patient Record can be a useful reference as survey findings are reviewed.

¹National Center for Health Statistics, H. Koch: Office visits to orthopedic surgeons, National Ambulatory Medical Care Survey, United States, 1975–76. *Advance Data From Vital and Health Statistics*. No. 33. DHEW Pub. No. (PHS) 78–1250. Public Health Service, Hyattsville, Md., July 18, 1978.

Data highlights

During 1980–81 there were an estimated 55,470,000 visits made to the offices of orthopedic surgeons. Of the 13 most frequently visited specialties, orthopedic surgeons ranked seventh, just behind general surgeons (table 1).

In 1980–81 an estimated 69 percent of the visits to orthopedic surgeons were made to physicians in multiple-member practice arrangements, a proportion that substantially exceeded the average of 45 percent in overall office-based practice (table 2). Notably, the specialties of pediatrics and urology had similarly high proportions of visits to physicians in partnership or group practice.

Table 1. Number of office visits to the 13 most frequently visited specialties, by type of specialty and rank order: United States, 1980–81

Rank	Type of specialty	Number of visits in thousands
1	General and family practice	381,710
2	Internal medicine	144,172
3	Pediatrics	128,762
4	Obstetrics and gynecology	109,035
5	Ophthalmology	62,485
6	General surgery	61,013
7	Orthopedic surgery	55,470
8	Dermatology	51,262
9	Psychiatry	31,810
10	Otolaryngology	26,151
11	Urology	19,470
12	Cardiovascular diseases	14,781
13	Neurology	6,379

ASSURANCE OF CONFIDENTIALITY - A statement which would permit identification of patients or establishments will be held confidential, will be used only by persons authorized for the purposes of the survey and will not be disclosed or released to other persons or used for any other purpose.		Department of Health, Education and Welfare Public Health Service Office of Health Research, Statistics, and Technology National Center for Health Statistics		A No. 003939
1. DATE OF VISIT _____ M. D. Y.				
PATIENT RECORD NATIONAL AMBULATORY MEDICAL CARE SURVEY				
2. DATE OF BIRTH _____ M. D. Y.	3. SEX 1 <input type="checkbox"/> FEMALE 2 <input type="checkbox"/> MALE	4. COLOR OR RACE 1 <input type="checkbox"/> WHITE 2 <input type="checkbox"/> BLACK 3 <input type="checkbox"/> ASIAN PACIFIC ISLANDER 4 <input type="checkbox"/> AMERICAN INDIAN ALASKAN NATIVE	5. ETHNICITY 1 <input type="checkbox"/> HISPANIC ORIGIN 2 <input type="checkbox"/> NOT HISPANIC	6. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT [In patient's own words] a. MOST IMPORTANT _____ b. OTHER _____
7. MAJOR REASON FOR THIS VISIT [Check one] 1 <input type="checkbox"/> ACUTE PROBLEM 2 <input type="checkbox"/> CHRONIC PROBLEM ROUTINE 3 <input type="checkbox"/> CHRONIC PROBLEM, FLAREUP 4 <input type="checkbox"/> POST SURGERY POST INJURY 5 <input type="checkbox"/> NON ILLNESS CARE (ROUTINE PRENATAL, GENERAL EXAM WELL BABY ETC)	8. DIAGNOSTIC SERVICES THIS VISIT [Check all ordered or provided] 1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> LIMITED HISTORY/EXAM 3 <input type="checkbox"/> GENERAL HISTORY/EXAM 4 <input type="checkbox"/> PAP TEST 5 <input type="checkbox"/> CLINICAL LAB TEST 6 <input type="checkbox"/> X RAY 7 <input type="checkbox"/> BLOOD PRESSURE CHECK 8 <input type="checkbox"/> EKG 9 <input type="checkbox"/> VISION TEST 10 <input type="checkbox"/> ENDOSCOPY 11 <input type="checkbox"/> MENTAL STATUS EXAM 12 <input type="checkbox"/> OTHER (Specify) _____		9. PHYSICIAN'S DIAGNOSES a. PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 6a _____ b. OTHER SIGNIFICANT CURRENT DIAGNOSES _____	
10. HAVE YOU SEEN PATIENT BEFORE? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO ↓ IF YES, FOR THE CONDITION IN ITEM 9a? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	11. MEDICATION THERAPY THIS VISIT <input type="checkbox"/> NONE [Using brand or generic names, record all new and continued medications ordered, injected, administered, or otherwise provided at this visit. Include immunizing and desensitizing agents] a. FOR PRINCIPAL DIAGNOSES IN ITEM 9a 1 _____ 2 _____ 3 _____ 4 _____ b. FOR ALL OTHER REASONS 1 _____ 2 _____ 3 _____ 4 _____			
12. NON-MEDICATION THERAPY [Check all services ordered or provided this visit] 1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> PHYSIOTHERAPY 3 <input type="checkbox"/> OFFICE SURGERY 4 <input type="checkbox"/> FAMILY PLANNING 5 <input type="checkbox"/> PSYCHOTHERAPY/THERAPEUTIC LISTENING 6 <input type="checkbox"/> DIET COUNSELING 7 <input type="checkbox"/> FAMILY/SOCIAL COUNSELING 8 <input type="checkbox"/> MEDICAL COUNSELING 9 <input type="checkbox"/> OTHER (Specify) _____	13. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	14. DISPOSITION THIS VISIT [Check all that apply] 1 <input type="checkbox"/> NO FOLLOW-UP PLANNED 2 <input type="checkbox"/> RETURN AT SPECIFIED TIME 3 <input type="checkbox"/> RETURN IF NEEDED, P.R.N. 4 <input type="checkbox"/> TELEPHONE FOLLOW-UP PLANNED 5 <input type="checkbox"/> REFERRED TO OTHER PHYSICIAN 6 <input type="checkbox"/> RETURNED TO REFERRING PHYSICIAN 7 <input type="checkbox"/> ADMIT TO HOSPITAL 8 <input type="checkbox"/> OTHER (Specify) _____	15. DURATION OF THIS VISIT [Time actually spent with physician] _____ Minutes	

Figure. 1980-81 National Ambulatory Medical Care Survey Patient Record form

Table 2. Number and percent distribution of office visits to orthopedic surgeons, and percent distribution of office visits to all specialists, by location and type of practice: United States, 1980-81

Location and type of practice	Visits to orthopedic surgeons		Visits to all specialists
	Number in thousands	Percent distribution	Percent distribution ¹
All visits	55,470	100.0	100.0
Location of practice			
Metropolitan area ²	46,530	83.9	76.0
Nonmetropolitan area	8,940	16.1	24.0
Type of practice			
Solo	17,220	31.0	54.8
Other	38,250	69.0	45.3

¹Based on an estimated 1,160,922,000 visits made to all office-based physicians in 1980-81.

²Location within a standard metropolitan statistical area (SMSA). Composition of SMSA's does not reflect 1979 adjustment.

Table 3. Number and percent distribution of office visits to orthopedic surgeons, and percent distribution of office visits to all specialists, by characteristics of the patient: United States, 1980-81

Patient characteristic	Visits to orthopedic surgeons		Visits to all specialists
	Number in thousands	Percent distribution	Percent distribution ¹
All visits	55,470	100.0	100.0
Age			
Under 15 years	6,619	11.9	18.6
15-24 years	8,802	15.9	13.9
25-44 years	17,536	31.6	26.7
45-64 years	14,997	27.0	22.9
65 years and over	7,516	13.6	17.9
Sex			
Female	26,057	47.0	60.3
Male	29,413	53.0	39.7
Prior visit status			
New patient	12,239	22.1	14.4
Old patient, new problem	3,922	7.1	22.3
Old patient, old problem	39,309	70.9	63.4
Referred by another physician			
Yes	6,071	10.9	4.4
No	49,399	89.1	95.6

¹Based on an estimated 1,160,922,000 visits made to all office-based physicians in 1980-81.

NOTE: Figures may not add to totals due to rounding.

The majority of visits to orthopedic surgeons (59 percent) were made by patients in the age groups 25-44 years and 45-64 years (table 3). The median age of patients was 38 years. The age distribution of patients visiting orthopedic surgeons more closely parallels that of neurologists than that of the other most frequently visited specialties; that is, the proportions of patients in each of the age groups in table 3 were similar for both specialties. Table 4 contains a ranking of the median age of patients for all of the most frequently visited specialties. The distribution of visits to orthopedic surgeons by sex revealed that 53 percent of the visits were made by males, a proportion that exceeded the average proportion of male visits in overall office-based practice (40 percent). Orthopedic surgery was one of three specialties where visits by males exceeded visits by females; the other two specialties were pediatrics and urology.

Table 4. Ranking of the median age of patients for the 13 most frequently visited specialties: United States: 1980-81

Physician specialty	Median age of patients in years
Cardiovascular diseases	62
Internal medicine	57
Urological surgery	56
Ophthalmology	56
General surgery	44
Neurology	44
General and family practice	39
Orthopedic surgery	38
Psychiatry	36
All specialties	36
Otolaryngology	33
Dermatology	30
Obstetrics and gynecology	28
Pediatrics	3

Table 5. Number, percent, and cumulative percent of office visits to orthopedic surgeons, by the 25 most frequent principal reasons for visit: United States, January 1980–December 1981

Principal reason for visit and RVC code ^{1,2}	Number in thousands	Percent of visits ³	Cumulative percent of visits	
1. Knee symptoms	S925	6,821	12.3	12.3
2. Back symptoms	S905	4,114	7.4	19.7
3. Postoperative visit	T205	3,051	5.5	25.2
4. Foot and toe symptoms	S935	3,036	5.5	30.7
5. Low-back symptoms	S910	2,758	5.0	35.7
6. Progress visit, not elsewhere classified	T800	2,682	4.8	40.5
7. Shoulder symptoms	S940	2,652	4.8	45.3
8. Neck symptoms	S900	2,071	3.7	49.0
9. Hand and finger symptoms	S960	1,919	3.5	52.5
10. Ankle symptoms	S930	1,605	2.9	55.4
11. Wrist symptoms	S955	1,589	2.9	58.3
12. Leg symptoms	S920	1,569	2.8	61.1
13. Hip symptoms	S915	1,489	2.7	63.8
14. Cast splint—application, removal	T540	1,227	2.2	66.0
15. Elbow symptoms	S950	1,085	2.0	68.0
16. Fracture of leg	J020	965	1.7	69.7
17. Fracture or dislocation of arm	J035	960	1.7	71.4
18. Arm symptoms	S945	938	1.7	73.1
19. Pain and related symptoms, generalized, site unspecified	S060	884	1.6	74.7
20. Knee injury, type unspecified	J535	766	1.4	76.1
21. Fracture, other and unspecified	J050	706	1.3	77.4
22. Hand and finger(s) injury, type unspecified	J570	663	1.2	78.6
23. Musculoskeletal deformities	S975	631	1.1	79.7
24. Fracture or dislocation of wrist	J040	527	0.9	80.6
25. Other musculoskeletal or connective tissue disease	D910	512	0.9	81.5

¹Based on "A Reason for Visit Classification for Ambulatory Care" (RVC)²The S codes refer to symptoms such as pain, swelling, headache, and chills. These symptoms exclude sprains, fractures, cuts, burns, and other injuries³Based on a total of 55,470,119 visits

The 25 reasons most frequently given by patients for visiting the orthopedic surgeon are shown in table 5. The two most frequent complaints—knee and back problems—accounted for 20 percent of all visits to orthopedic surgeons. Of a more general nature, symptoms referable to the musculoskeletal system (RVC codes S900–S999) accounted for 15 of the top 25 reasons. (Reasons for visit are coded and grouped in eight modules according to a classification system that is described in "A Reason for Visit Classification for Ambulatory Care" (RVC)).²

The 30 most frequent principal diagnoses rendered by orthopedic surgeons are shown in table 6. Excluding a followup exam after surgery and certain congenital deformities, all the diagnoses listed in the table are contained in two major classes:

1. Diseases of the musculoskeletal system and connective tissue (ICD–9–CM codes 710–739).
2. Injury and poisoning (ICD–9–CM codes 800–999).

In addition to most of the diagnoses in table 6, these two classes accounted for 84 percent of all the diagnoses rendered by orthopedic surgeons. (Diagnostic terms and codes were derived from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM)).³

²National Center for Health Statistics, D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care *Vital and Health Statistics*, Series 2, No. 78. DHEW Pub. No. (PHS) 79–1352. Public Health Service, Washington, U.S. Government Printing Office, Feb. 1979.

³U.S. Public Health Service and Health Care Financing Administration: *International Classification of Diseases, 9th Revision, Clinical Modification*. DHHS Pub. No. (PHS) 80–1260. Public Health Service, Washington, U.S. Government Printing Office, Sept. 1980.

Because the orthopedic surgeon deals mainly with sprains, strains, and fractures, it follows that the diagnostic services provided would be directly related. The logical course of treatment for a sprain, strain, or fracture would be a physical examination followed by an x ray, if warranted. This is generally what is revealed in table 7. A limited history and/or exam was conducted in 69 percent of the visits to orthopedic surgeons, and an x ray was taken in 39 percent of the visits. The latter proportion is more than 5 times greater than the average proportion of 7.5 percent of the visits in overall office-based practice where an x ray is taken.

Two diagnostic services that are rarely provided in the offices of orthopedic surgeons are clinical lab tests and blood pressure checks, which are provided in 2 percent and 3 percent of the visits, respectively. In overall office-based practice, clinical lab tests are provided in 22 percent of the visits, and blood pressure is checked in 34 percent of the visits. The lower proportion of these services provided by orthopedic surgeons reflects the types of problems presented to these specialists which simply do not require the rendering of such services.

Of the nonmedication therapy services provided, physiotherapy and office surgery were provided more by orthopedic surgeons than by most other specialties. Physiotherapy was provided in 22 percent of the visits to orthopedic surgeons, a proportion not only higher than the proportion for any other specialty, but 4 times higher than the average proportion of 5 percent for all office-based practice. Office surgery was provided in 12 percent of the visits to orthopedic surgeons, and this proportion was surpassed only by general surgeons (15 percent) and dermatologists (35 percent).

Table 6. Number, percent, and cumulative percent of office visits to orthopedic surgeons, by the 30 most frequent principal diagnoses: United States, January 1980–December 1981

<i>Principal diagnosis and ICD-9-CM code¹</i>		<i>Number in thousands</i>	<i>Percent of visits²</i>	<i>Cumulative percent of visits</i>
1. Peripheral enthesopathies and allied syndromes	726	2,829	5.1	5.1
2. Sprains and strains of other and unspecified parts of back	847	2,484	4.5	9.6
3. Fracture of radius and ulna	813	2,462	4.4	14.0
4. Other disorders of synovium, tendon, and bursa	727	2,295	4.1	18.1
5. Intervertebral disc disorders	722	2,234	4.0	22.1
6. Followup examination, following surgery	V67.0	2,217	4.0	26.1
7. Osteoarthritis and allied disorders	715	2,195	4.0	30.1
8. Other and unspecified disorders of back	724	1,740	3.1	33.2
9. Dislocation of knee	836	1,685	3.0	36.2
10. Sprains and strains of ankle and foot	845	1,394	2.5	38.7
11. Fracture of ankle	824	1,374	2.5	41.2
12. Internal derangement of knee	717	1,358	2.4	43.6
13. Sprains and strains of knee and leg	844	1,251	2.3	45.9
14. Sprains and strains of sacroiliac region	846	1,199	2.2	48.1
15. Fracture of humerus	812	1,110	2.0	50.1
16. Other and unspecified disorders of joint	719	1,090	2.0	52.1
17. Fracture of one or more phalanges of hand	816	906	1.6	53.7
18. Fracture of carpal bone(s)	814	904	1.6	55.3
19. Other and unspecified arthropathies	716	858	1.5	56.8
20. Spondylosis and allied disorders	721	850	1.5	58.3
21. Fracture of tibia and fibula	823	832	1.5	59.8
22. Other acquired deformities of limbs	736	809	1.5	61.3
23. Fracture of one or more tarsal and metatarsal bones	825	750	1.4	62.7
24. Other disorders of soft tissues	729	681	1.2	63.9
25. Fracture of vertebral column without mention of spinal cord injury	805	624	1.1	65.0
26. Other derangement of joint	718	611	1.1	66.1
27. Certain congenital musculoskeletal deformities	754	577	1.0	67.1
28. Curvature of spine	737	572	1.0	68.1
29. Sprains and strains of shoulder and upper arm	840	540	1.0	69.1
30. Fracture of metacarpal bone(s)	815	531	1.0	70.1

¹Based on *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*
²Based on a total of 55,470,119 visits.

Table 7. Number and percent of office visits to orthopedic surgeons, and percent of visits to all specialists, by selected diagnostic services and nonmedication therapy: United States, 1980–81

<i>Selected diagnostic services and nonmedication therapy</i>	<i>Visits to orthopedic surgeons</i>		<i>Visits to all specialists</i>
	<i>Number in thousands</i>	<i>Percent</i>	<i>Percent¹</i>
<i>Diagnostic service</i>			
Limited history and examination	38,136	68.8	64.4
General history and examination	5,880	10.6	15.5
Clinical laboratory test	1,128	2.0	21.9
X ray	21,651	39.0	7.5
Blood pressure check	1,617	2.9	34.2
<i>Nonmedication therapy²</i>			
None	27,386	49.4	53.8
Physiotherapy	12,004	21.6	4.8
Office surgery	6,632	12.0	7.4
Medical counseling	9,192	16.6	23.0

¹Based on an estimated 1,160,922,000 visits made to all office-based physicians in 1980–81

²Percents will not add to 100.0 because more than 1 service or therapy may have been rendered during a visit

As expected, postsurgery or postinjury was the major reason for 41 percent of the visits to orthopedic surgeons compared with 9 percent of the visits in overall office-based practice (table 8). General surgery, with 34 percent, was the only other specialty to have a higher proportion of visits for postsurgery or postinjury than for chronic problems.

"Disposition of visit" refers to the physician's advice at the end of the visit. For 83 percent of the visits to orthopedic surgeons, patients were advised to return either "at a specified

time" or "if needed." This proportion was the same for physicians in overall office-based practice. Admitting patients to the hospital is a relatively rare occurrence in office-based practice, occurring in 2 percent of the visits. Orthopedic surgeons, however, admitted patients to the hospital in 5 percent of their visits, which may be a reflection of their seeing more injuries than most physicians.

A mean visit to an orthopedic surgeon lasted 14 minutes compared with 15 minutes in overall office-based practice.

Table 8. Number and percent distribution of office visits to orthopedic surgeons, and percent distribution of office visits to all specialists, by characteristics of the visit: United States, 1980-81

Visit characteristic	Visits to orthopedic surgeons		Visits to all specialists
	Number in thousands	Percent distribution	Percent distribution ¹
All visits	55,470	100.0	100.0
Major reason for visit			
Acute problem	14,685	26.5	36.4
Chronic problem, routine	10,895	19.6	28.1
Chronic problem, flareup	5,873	10.6	9.2
Postsurgery or postinjury	22,792	41.1	8.8
Nonillness care	1,225	2.2	17.6
Disposition			
No followup planned	5,066	9.1	11.5
Return at specified time	36,071	65.0	60.7
Return if needed	10,042	18.1	22.7
Referred to other physician	994	1.8	2.6
Admit to hospital	2,506	4.5	2.3
Duration			
Zero minutes ²	468	0.8	2.6
1-5 minutes	11,035	19.9	12.6
6-10 minutes	16,418	29.6	30.1
11-15 minutes	13,908	25.2	27.8
16-30 minutes	11,936	21.5	20.8
31 minutes or more	1,626	2.9	6.1

¹Based on an estimated 1,160,922,000 visits made to all office-based physicians in 1980-81.
²No face-to-face contact with physician.

Table 9. Number and percent of drug mentions and office visits to orthopedic surgeons, and percent of drug mentions and office visits to all specialists, by selected therapeutic categories and number of medications provided: United States, 1980-81

Therapeutic category and number of medications ¹	Orthopedic surgeons		All specialists
	Number in thousands	Percent	Percent
Drug mentions	22,477	---	---
Therapeutic category			
Anti-infective agents	925	4.1	15.8
Autonomic drugs	1,224	5.5	3.7
Central nervous system drugs	13,587	60.5	16.2
Analgesics and antipyretics	12,071	53.7	8.8
Sedatives and hypnotics	1,115	5.0	3.6
Hormones and synthetic drugs	2,414	10.7	8.3
Skin and mucous membrane preparations	2,117	9.4	7.8
Office visits	55,470	---	---
Number of medications			
None	39,794	71.7	38.2
1	10,792	19.5	30.9
2	3,333	6.0	17.7
3 or more	1,551	2.8	13.2

¹Based on the pharmacologic-therapeutic classification of the American Society of Hospital Pharmacists; selected categories reproduced with the permission of the Society.

The median duration of visits to orthopedic surgeons was about 10 minutes, and for all physicians the median duration was 15 minutes.

The number of medications shown in table 9 refers to the frequency of drugs ordered or provided during office visits and includes new as well as continued medications. Orthopedic surgeons, with 22.5 million drug mentions, ranked ninth among the top specialties in the number of drug mentions

in 1980-81; however, they ranked first in the proportion of visits in which no drugs or medications were used. In 72 percent of the visits to orthopedic surgeons, no drugs or medications were ordered or provided, and in 20 percent of the visits only one drug was used.

The NAMCS drug data are classified into several therapeutic categories, but most of the 22.5 million drug mentions of orthopedic surgeons can be classified into five categories.

By far the largest single proportion (54 percent) of these drug mentions are analgesics, a finding that is not unexpected when one considers that the treatment of musculoskeletal pain forms such a large part of the orthopedic surgeon's practice. The findings that follow show that no other specialist challenges the orthopedic surgeon in this intensity of prescribing or ordering analgesics.

<i>Specialty</i>	<i>Analgesics as a percent of all drug mentions</i>
Orthopedic surgery	54
General surgery	15
Neurology	15
General and family practice	10
Internal medicine	10
Other specialties	less than 10

Comparing 1975-76 data with 1980-81 data

There was an increase of 8.3 million visits to orthopedic surgeons from 1975-76 to 1980-81, but among the most frequently visited specialties providing ambulatory care, orthopedic surgeons ranked seventh in both time periods. The number of visits to orthopedic surgeons per 100 persons increased slightly from 11.3 in 1975-76 to 12.6 in 1980-81 (table 10).

The proportion of visits to orthopedic surgeons in multiple-member practice arrangements increased substantially from 55 percent in 1975-76 to 69 percent in 1980-81. Orthopedic surgeons in metropolitan areas experienced a slight increase in the proportion of visits, but the distribution of visits by sex remained unchanged, with males still accounting for 53 percent of the visits. The increase in visits by persons 65 years and over created an upward swing in the median age of patients from 35 to 38 years.

The proportion of visits for diseases of the musculoskeletal system increased from 30 to 38 percent; for injuries and poisonings, the proportion of visits increased from 36 to 45 percent. This proportional increase in visits for problems such as sprains, strains, and fractures was naturally accompanied by a corresponding increase in the respective treatment or services provided, such as limited medical examinations. The proportion of visits in which a limited medical examination was performed increased substantially after 1975, from 55 to 69 percent.

The average duration of visit remained about the same, as did the proportion of visits that culminated in the patient's admission to a hospital or in the patient's being scheduled for return visits.

Table 10. Number of office visits per 100 persons per year to orthopedic surgeons and percent of visits, by selected characteristics: United States, 1975-76 and 1980-81

<i>Characteristic</i>	<i>1975-76¹</i>	<i>1980-81²</i>
		Number
Total visits in thousands	47,152	55,470
Visits per 100 persons per year	11.3	12.6
Median age of patients in years	35	38
Average duration of visit in minutes	15	14
		Percent
Percent of all physician visits	4.1	4.8
Type of practice		
Solo	45.4	31.0
Other ³	54.6	69.0
Location of practice		
Metropolitan area	77.6	83.9
Nonmetropolitan area	22.4	16.1
Sex of patient		
Female	47.2	47.0
Male	52.8	53.0
Age of patient		
Under 25 years	32.7	27.8
25-44 years	30.4	31.6
45-64 years	27.4	27.0
65 years and over	9.6	13.6
Prior visit status		
New patient	22.5	22.1
Old patient, new problem	6.9	7.1
Old patient, old problem	70.6	70.9
Principal diagnosis		
Neoplasms	*0.7	*0.6
Diseases of the circulatory system	1.1	*0.5
Diseases of the respiratory system	*0.9	*0.2
Diseases of the digestive system	*0.6	*0.1
Diseases of the genitourinary system	*0.4	*0.1
Diseases of the skin and subcutaneous tissue	*1.0	1.1
Diseases of the musculoskeletal system and connective tissue	29.6	37.5
Injury and poisoning ⁴	36.3	45.0
Diagnostic services and nonmedication therapy		
Limited history and/or examination	55.2	68.8
General history and/or examination	10.9	10.6
Clinical laboratory test	1.6	2.0
X ray	36.3	39.0
Office surgery	14.3	12.0
Duration of visit		
Less than 11 minutes	46.7	⁵ 50.3
More than 15 minutes	28.6	24.5
Disposition		
Admit to hospital	3.5	4.5
Return at specified time	66.3	65.0
Return if needed	16.3	18.1
No followup planned	10.5	9.1

¹Based on an estimated 1,155,900,000 visits.

²Based on an estimated 1,160,922,000 visits.

³Includes partnership, group, and other types of practice.

⁴In 1975 this category was "Accidents, poisonings, and violence"

⁵Includes zero minutes.

Technical notes

Source of data and sample design

The estimates presented in this report are based on the findings of the National Ambulatory Medical Care Survey (NAMCS), a sample survey of office-based care conducted annually from 1973 through 1981 by the National Center for Health Statistics. The target universe of NAMCS is composed of office visits made by ambulatory patients to non-Federal and noninstitutional physicians who are principally engaged in office-based, patient-care practice. Visits to physicians practicing in Alaska and Hawaii are excluded from the range of NAMCS, as are visits to anesthesiologists, pathologists, and radiologists.

NAMCS uses a multistage probability sample design that involves a step-wise sampling of primary sampling units, physician practices within primary sampling units, and patient visits within physician practices. The physician sample (5,805 for the combined years 1980 and 1981) was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Those members of the sample who proved to be within the scope of the survey participated at a rate of 77.3 percent. The participation rate for orthopedic surgeons, as an individual specialty, was 84.2 percent. Responding physicians completed visit records (figure) for a systematic random sample of their office visits made during a randomly assigned weekly reporting period. Telephone contacts were excluded. During 1980 and 1981 responding physicians completed a 2-year total of 89,447 Patient Record forms on which they recorded 97,796 drug mentions. Characteristics of the physician's practice, such as primary specialty and type of practice, were obtained during an induction interview. The National Opinion Research Center, under contract to the National Center for Health Statistics, was responsible for the field operations of the survey.

Sampling errors, statistical significance, and rounding

The standard error is a measure of the sampling variability that occurs by chance because only a sample, rather than an entire universe, is surveyed. The relative standard error of an estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. Approximate relative standard errors of estimates based on all physician specialties are shown in table I; the errors of estimates based on an individual specialty are shown in table II.

In this report, the determination of statistical significance is based on the *t*-test with a critical value of 1.96 (0.95 level of significance). Terms relating to differences, such as "higher" or "less," indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistical significance exists between the estimates being compared. A lack of comment in a comparison between any two estimates does not mean that the difference was tested and found to be not significant.

Table I. Approximate relative standard errors for estimated numbers of office visits based on all physician specialties: National Ambulatory Medical Care Survey, 1980-81

<i>Estimated number of office visits in thousands</i>	<i>Relative standard error</i>
	Percent
150	51.6
250	40.1
400	31.7
500	28.4
1,000	20.2
2,000	14.5
5,000	9.5
10,000	7.1
20,000	5.6
50,000	4.4
100,000	3.9
500,000	3.5
1,000,000	3.4

NOTE: For example, an aggregate estimate of 35,000,000 office visits has a relative standard error of 5.0 percent or a standard error of 1,750,000 visits (5.0 percent of 35,000,000 visits).

Table II. Approximate relative standard errors for estimated numbers of office visits based on an individual physician specialty: National Ambulatory Medical Care Survey, 1980-81

<i>Estimated number of office visits in thousands</i>	<i>Relative standard error</i>
	Percent
*150	*53.8
*250	*42.0
*400	*33.3
500	29.9
1,000	21.6
2,000	15.9
5,000	11.1
10,000	9.0
20,000	7.7
50,000	6.8
100,000	6.5
500,000	6.2
1,000,000	6.2

NOTE: For example, an aggregate estimate of 7,500,000 visits has a relative standard error of 10.0 percent or a standard error of 750,000 visits (10.0 percent of 7,500,000 visits).

Estimates of office visits have been rounded to the nearest thousand. For this reason detailed figures within tables do not always add to totals. Rates and percents were calculated on the basis of original, unrounded figures and will not necessarily agree precisely with percents calculated from rounded data.

Definitions

Ambulatory patient—Ambulatory patients are individuals presenting themselves for personal health services who are neither bedridden nor currently admitted to any health care institution on the premises.

Physician—A physician is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in office-based practice who spends time in caring for ambulatory patients. Excluded from NAMCS are physicians who are hospital based; physicians who specialize in anesthesiology, pathology, or radiology; physicians who are Federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

Office—Offices are places that physicians identify as locations for their ambulatory practices. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than with an institution.

Visit—A visit is a direct personal exchange for the purpose of seeking care and rendering health services between an ambulatory patient and a physician or a staff member working under the physician's supervision.

Symbols

- - - Data not available
 - . . . Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standard of reliability or precision
 - # Figure suppressed to comply with confidentiality requirements
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Trends in Smoking, Alcohol Consumption, and Other Health Practices Among U.S. Adults, 1977 and 1983

by Charlotte A. Schoenborn, M.P.H., Division of Health Interview Statistics, and
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Introduction

The past decade has seen increasing recognition of the importance of personal health behaviors for the prevention of illness and disability. A pioneer work in this field was a study conducted in Alameda County, Calif., in the mid-1960's.¹ A decade later, longitudinal follow-up of the original 1965 cohort indicated that seven health habits were associated with subsequent favorable health status and reduced mortality.^{2,3} These habits were: never smoking, drinking fewer than five alcoholic beverages at one sitting, maintaining desirable weight for height, sleeping 7–8 hours a night, exercising, eating breakfast regularly, and avoiding snacks. In light of such evidence of the importance of personal practices for health,^{4,5} a national health promotion and disease prevention initiative was launched in the late 1970's.⁶ As an outgrowth of this initiative, broad national goals for reducing death and disability through health promotion activities were outlined,^{7,8} and specific quantified objectives for the year 1990 were delineated in 15 priority areas.⁹ Included among the prevention objectives were goals to reduce smoking and the misuse of alcohol, and to improve nutrition and physical fitness.

In 1977, at the outset of the prevention initiative, data were collected in the National Health Interview Survey (NHIS) on the prevalence of the seven health practices found to be associated with health status and mortality in the Alameda County study. In 1983, when implementation plans were well underway,¹⁰ data on a variety of personal health practices were collected by means of the Alcohol and Health Practices survey (AHPS), a component of NHIS. With the exception of those questions concerning alcohol (discussed below), the 1977 questions were repeated in the 1983 AHPS. The availability of

comparable data for 1977 and 1983 provides a unique opportunity to assess changes in behavior during a period of rapid growth in health promotion and disease prevention activities, including increases in media promotions of exercise and good eating habits and warnings of the dangers of cigarette smoking and excessive alcohol consumption.

This report presents 1983 prevalence estimates for seven health practices—hours of sleep, breakfast eating, snacking, physical activity level relative to contemporaries, smoking, alcohol consumption, and desirable body weight—for the non-institutionalized population aged 20 years and over, by sex, race, Hispanic origin, age, income, and education. It also provides estimates of changes in the prevalence of selected unfavorable practices between 1977 and 1983. Detailed 1977 prevalence estimates for all seven practices were presented in an earlier report.¹¹

One purpose of the 1983 AHPS was to provide data to help clarify the interrelationships of health practices among U.S. adults and to further investigate their relationships to health status. Public use data tapes are available at nominal cost from the National Center for Health Statistics. Analyses of these data are encouraged.

Some sex differences were observed in the relationship between selected health behaviors and various sociodemographic characteristics. A detailed consideration of these differences is beyond the scope of this report. Tables showing sex-specific prevalence for each of the seven health practices are available on request from the Division of Health Interview Statistics.

The statistics presented and discussed in this report are simple prevalence estimates, unadjusted for age or other

sociodemographic characteristics. Relationships between health practices and selected characteristics (education, for example) may be attributable, at least in part, to differences in the age composition of particular population subgroups. Terms such as "similar" and "the same" are used to indicate that no statistical significance exists between the statistics being compared. Terms that relate to differences (such as "greater" or "less") indicate that differences are statistically significant. The *t*-test with a critical value of 1.96 (0.05 level of significance) was used to test all comparisons that are discussed. Lack of comment regarding the difference between any two statistics does not mean that the difference was tested and found to be not significant.

Sleep

Data on sleeping practices of U.S. adults are shown in table 1. Approximately two-thirds of persons 20 years and

over reported getting 7 or 8 hours of sleep on the average, and about one-fourth reported sleeping 6 hours or less a night. Black persons were more likely to be at the extremes of the sleep range than white persons. Among black respondents, 34 percent reported sleeping 6 hours or less, compared with 23 percent of white respondents; and 13 percent of black respondents reported sleeping 9 hours or more, compared with 10 percent of white respondents. People aged 45–64 appear to get the least sleep, with approximately 28 percent reporting 6 hours or less. By contrast, 21 percent of adults under 35 years of age reported sleeping 6 hours or less.

Sleeping habits also were related to income and education. Thirty percent of persons with family incomes of less than \$7,000 reported sleeping 6 hours or less, and 21 percent of persons with family incomes of \$40,000 or more reported this behavior. Similarly, 29 percent of adults with less than 12 years of education slept 6 hours or less, in contrast to 21 percent of persons with more than a high school education.

Table 1. Total population 20 years of age and over and percent distribution by average number of hours of sleep a night, according to selected characteristics: United States, 1983

Characteristic	Population 20 years of age and over ¹	Hours of sleep				
		Total ²	6 or less	7	8	9 or more
All persons 20 years of age and over	158,867	100.0	24.3	27.9	38.2	10.0
Sex						
Male	74,600	100.0	24.9	29.2	37.2	8.7
Female	84,266	100.0	23.8	25.9	39.1	11.2
Race ³						
White	138,695	100.0	23.1	28.2	39.0	9.7
All other	20,172	100.0	33.0	22.2	32.8	12.0
Black	16,716	100.0	34.3	20.3	32.6	12.7
Other	3,456	100.0	26.4	31.3	33.5	8.9
Hispanic origin ³						
Hispanic	9,596	100.0	21.2	24.8	42.0	12.0
Non-Hispanic	148,501	100.0	24.5	27.6	38.0	9.9
Age						
20–34 years	59,868	100.0	20.8	28.2	40.7	10.3
35–44 years	28,933	100.0	24.5	30.9	38.3	6.3
45–54 years	22,169	100.0	27.5	29.5	35.7	7.2
55–64 years	22,004	100.0	28.0	27.0	36.5	8.5
65–74 years	16,377	100.0	26.5	22.6	36.7	14.2
75 years and over	9,516	100.0	26.4	16.6	34.4	22.7
Income						
Less than \$7,000	18,355	100.0	30.0	19.6	35.3	15.1
\$7,000–\$14,999	29,272	100.0	25.8	23.7	38.4	12.1
\$15,000–\$24,999	36,146	100.0	23.6	28.3	38.2	9.9
\$25,000–\$39,999	36,373	100.0	22.5	31.8	38.3	7.4
\$40,000 or more	21,466	100.0	21.3	32.2	39.5	6.9
Education of individual						
Less than 12 years	41,916	100.0	28.9	20.7	36.4	14.0
12 years	60,122	100.0	24.1	27.5	38.9	9.6
More than 12 years	55,799	100.0	21.1	32.6	38.8	7.4

¹Includes unknowns

²Excludes unknown hours of sleep

³Based on self-reported identification

Table 2. Percent distribution of persons 20 years of age and over by frequency of eating breakfast, according to selected characteristics: United States, 1983

Characteristic	Frequency of eating breakfast			
	Total ¹	Every day	Sometimes	Never
Percent distribution				
All persons 20 years of age and over	100.0	53.9	19.0	27.1
Sex				
Male	100.0	52.9	19.3	27.8
Female	100.0	54.9	18.8	26.4
Race ²				
White	100.0	55.1	17.6	27.3
All other	100.0	46.1	28.4	25.5
Black	100.0	46.0	28.8	25.2
Other	100.0	46.8	26.2	27.1
Hispanic origin ²				
Hispanic	100.0	53.5	22.8	23.7
Non-Hispanic	100.0	54.0	18.8	27.2
Age				
20-34 years	100.0	38.4	25.9	35.6
35-44 years	100.0	45.3	22.7	32.1
45-54 years	100.0	55.0	17.8	27.2
55-64 years	100.0	69.3	11.6	19.1
65-74 years	100.0	82.0	7.5	10.5
75 years and over	100.0	91.6	4.0	4.4
Income				
Less than \$7,000	100.0	55.7	19.4	24.9
\$7,000-\$14,999	100.0	56.8	18.3	24.9
\$15,000-\$24,999	100.0	52.8	19.4	27.8
\$25,000-\$39,999	100.0	50.7	19.7	29.7
\$40,000 or more	100.0	53.2	18.1	28.7
Education of individual				
Less than 12 years	100.0	58.8	17.1	24.1
12 years	100.0	50.1	20.4	29.5
More than 12 years	100.0	54.4	18.9	26.7

¹Excludes unknown breakfast-eating habits
²Based on self-reported identification

NOTE: See table 1 for population

Eating breakfast

Table 2 shows that more than one-half of U.S. adults eat breakfast every day, and more than one-fourth never eat breakfast. White respondents were more likely (55 percent) to eat breakfast every day than black respondents (46 percent). Breakfast eating habits were strongly related to age. The percent of persons who reported eating breakfast every day rose steadily from less than 40 percent of persons 20-34 years of age to more than 90 percent of persons 75 years and older.

Snacking

Data on snacking behavior are shown in table 3. Slightly more than one-third of respondents reported snacking every

day. The remaining respondents were evenly divided among those reporting snacking sometimes and those never snacking. Persons of Hispanic origin were less likely to snack every day (30 percent) than were non-Hispanic persons (38 percent). Snacking is clearly related to age, with about 40 percent of the youngest age groups reporting daily snacking, and 27 percent of the elderly, aged 75 years and over, reporting this practice. Concomitantly, only 25 percent of persons in the youngest age group indicated that they never eat snacks compared with more than 50 percent of those 75 years and over.

Table 3. Percent distribution of persons 20 years of age and over by frequency of eating snacks, according to selected characteristics: United States, 1983

Characteristic	Frequency of eating snacks			
	Total ¹	Every day	Sometimes	Never
All persons 20 years of age and over	100.0	37.0	30.6	32.4
Sex				
Male	100.0	38.9	28.1	33.1
Female	100.0	35.4	32.8	31.8
Race ²				
White	100.0	37.4	29.9	32.7
All other	100.0	34.8	35.0	30.2
Black	100.0	35.8	35.0	29.1
Other	100.0	29.8	34.9	35.4
Hispanic origin ²				
Hispanic	100.0	29.6	34.4	36.0
Non-Hispanic	100.0	37.5	30.3	32.2
Age				
20-34 years	100.0	40.2	35.4	24.5
35-44 years	100.0	37.9	31.5	30.6
45-54 years	100.0	37.8	28.5	33.7
55-64 years	100.0	34.4	26.6	39.0
65-74 years	100.0	32.8	24.0	43.3
75 years and over	100.0	26.6	22.8	50.7
Income				
Less than \$7,000	100.0	34.5	31.2	34.3
\$7,000-\$14,999	100.0	36.7	30.7	32.7
\$15,000-\$24,999	100.0	37.6	31.0	31.4
\$25,000-\$39,999	100.0	38.5	31.0	30.5
\$40,000 or more	100.0	39.0	29.2	31.8
Education of individual				
Less than 12 years	100.0	34.8	28.6	36.5
12 years	100.0	38.4	31.5	30.1
More than 12 years	100.0	37.3	30.9	31.7

¹Excludes unknown snacking habits.²Based on self-reported identification.

NOTE: See table 1 for population.

Physical activity

Table 4 shows that about 40 percent of adults considered themselves "more active" than others their own age, and 14 percent perceived their activity level to be lower than that of their contemporaries. Almost one-half of the persons in the population indicated that they were "about as active" as people the same age. Men more often reported being "more active" (44 percent) than women did (35 percent). Black persons more often reported being "less active" (18 percent) than white persons did (13 percent).

Perceived physical activity levels varied with age, income, and education. Thirty-six percent of persons 20-34 years of age reported being more active in contrast to 41 percent of persons 65-74 years and 49 percent of the 75 and over age group. Interestingly, reports of being less active were also more prevalent in the older age groups; 16 percent of the oldest group, compared with 13 percent of the youngest group said they were less active. Thus, persons in the older age

groups were more likely to place themselves at the extremes of the physical activity spectrum. Young people aged 20-34 years were most likely to report their activity level to be about the same as their contemporaries (52 percent), and the elderly aged 75 years and over were least likely to classify themselves this way (35 percent).

More active physical activity levels were associated with both income and education. Among persons with incomes of less than \$7,000, 33 percent reported being more active in contrast to 46 percent of people in the highest income group. Similarly, about one-third of those persons who had not completed high school indicated that they were more active than their contemporaries, compared with 44 percent of people with post-high school education. The proportion of persons reporting themselves less active than their contemporaries declined correspondingly with both increasing income and education.

Table 4. Percent distribution of persons 20 years of age and over by physical activity level relative to persons of same age, according to selected characteristics: United States, 1983

Characteristic	Physical activity level			
	Total ¹	More active	Same	Less active
All persons 20 years of age and over	100.0	38.8	47.4	13.8
Sex				
Male	100.0	43.5	44.6	11.9
Female	100.0	34.7	49.8	15.4
Race ²				
White	100.0	39.3	47.5	13.2
All other	100.0	35.5	46.9	17.6
Black	100.0	35.5	46.2	18.3
Other	100.0	35.4	50.6	14.1
Hispanic origin ²				
Hispanic	100.0	38.1	47.9	14.0
Non-Hispanic	100.0	38.9	47.4	13.7
Age				
20-34 years	100.0	35.5	51.6	12.9
35-44 years	100.0	40.4	48.3	11.3
45-54 years	100.0	39.9	46.9	13.3
55-64 years	100.0	39.6	43.3	17.1
65-74 years	100.0	40.5	43.4	16.1
75 years and over	100.0	48.6	35.4	16.0
Income				
Less than \$7,000	100.0	32.7	45.2	22.0
\$7,000-\$14,999	100.0	35.5	48.3	16.2
\$15,000-\$24,999	100.0	38.3	48.5	13.2
\$25,000-\$39,999	100.0	40.0	49.4	10.6
\$40,000 or more	100.0	45.8	44.6	9.6
Education of individual				
Less than 12 years	100.0	33.3	48.0	18.8
12 years	100.0	38.1	49.7	12.2
More than 12 years	100.0	43.9	44.5	11.6

¹Excludes unknown physical activity level.

²Based on self-reported identification

NOTE See table 1 for population.

Alcohol consumption

Alcohol consumption classifications shown in table 5 were developed by the National Institute on Alcohol Abuse and Alcoholism and were based on the number and frequency of drinks reported for the most recent 2-week period in which alcohol was consumed.¹² Quantity and frequency of alcohol consumed was converted into average number of ounces of ethanol consumed daily, and three categories of drinker—lighter, moderate, and heavier—were derived. About one-third of respondents reported never drinking more than 12 drinks in any single year and were therefore classified as lifetime abstainers. Only 7 percent of respondents said they had been drinkers at some time in their lives but had not had a drink in the past year. These persons were classified as former drinkers. Thirty percent of AHPs respondents reported consumption patterns that were indicative of “lighter drinking,” defined as between 0.01 ounces and 0.21 ounces of ethanol a day. Ten percent of the people in the population were

classified as “heavier drinkers,” indicating that they consumed one ounce or more of ethanol per day on the average (two or more drinks). Men and women differed markedly in their drinking habits, with 19 percent of men reporting lifetime abstention in contrast to 45 percent of women. Men were about four times more likely than women to be heavier drinkers (16 percent of men versus 4 percent of women). Among drinkers, men were twice as likely as women to have had five drinks or more on at least 1 day in the past year (50 percent of men compared with 23 percent of women).

Drinking habits also varied according to race and Hispanic origin. Black persons and members of other racial groups were significantly more likely to be lifetime abstainers (48 percent and 56 percent, respectively) than were white persons (31 percent). Among drinkers, black persons were less likely than white persons to report having had five drinks or more on at least 1 day in the past year (30 percent of black persons in contrast to 38 percent of white persons). Although Hispanic

persons were more likely to be lifetime abstainers (46 percent) than were non-Hispanic persons (32 percent), Hispanic drinkers were more likely than non-Hispanic drinkers to have consumed five drinks or more in 1 day at some time during the past year (43 percent versus 37 percent, respectively).

Alcohol consumption was also strongly associated with age, education, and income. Younger people were more likely to drink, and they tended to drink more heavily than older people. About 26 percent of persons 20–34 years of age were lifetime abstainers, in comparison with 45 percent of persons 65–74 years and 61 percent of those 75 years and older. Among drinkers, 52 percent of the youngest group reported having had five drinks or more in 1 day, in contrast

to 13 percent of adults aged 65–74 years and only 5 percent of respondents 75 years and older. These findings are consistent with other research showing an apparent trend toward increased alcohol consumption in the younger age groups.¹³ Heavier drinking among young adults could indicate that young people drink more but reduce their alcohol consumption as they get older; however, lower lifetime abstention rates found for younger persons in the current analysis, combined with evidence from other studies that indicate alcohol consumption levels do not tend to decrease as people age,¹³ suggest that younger people are now drinking more than did earlier generations. In light of current knowledge about the harmful health and social consequences of heavy drinking, the findings of

Table 5. Percent distribution of persons 20 years of age and over by alcohol consumption, according to selected characteristics, and percent of persons who consumed 5 or more drinks in 1 day in past year: United States, 1983

Characteristic	Total ²	Alcohol consumption ¹					Percent of drinkers who consumed 5 or more drinks in 1 day
		Lifetime abstainer	Former drinker	Lighter drinker	Moderate drinker	Heavier drinker	
				Percent distribution			
All persons 20 years of age and over	100.0	33.0	6.7	29.5	21.0	9.9	37.7
Sex							
Male	100.0	18.5	9.0	28.5	27.7	16.2	49.9
Female	100.0	45.4	4.6	30.4	15.1	4.3	23.4
Race ³							
White	100.0	30.6	6.6	30.5	22.0	10.3	38.4
All other	100.0	49.6	7.2	22.8	13.8	6.6	30.9
Black	100.0	48.3	7.5	22.6	14.4	7.2	29.6
Other	100.0	55.8	6.0	23.8	10.6	3.9	37.6
Hispanic origin ³							
Hispanic	100.0	46.1	4.1	23.3	18.0	8.5	42.6
Non-Hispanic	100.0	32.1	6.8	29.9	21.1	10.0	37.4
Age							
20–34 years	100.0	26.3	3.5	33.7	26.1	10.4	51.8
35–44 years	100.0	28.2	6.3	31.9	23.1	10.4	36.0
45–54 years	100.0	32.8	8.1	28.7	19.1	11.3	30.2
55–64 years	100.0	36.3	9.4	27.3	17.3	9.8	21.2
65–74 years	100.0	45.3	12.2	22.8	11.7	8.0	13.2
75 years and over	100.0	61.1	8.9	14.5	10.9	4.7	5.0
Income							
Less than \$7,000	100.0	47.6	9.4	20.1	15.2	7.7	42.5
\$7,000–\$14,999	100.0	38.8	9.0	25.6	18.3	8.3	40.4
\$15,000–\$24,999	100.0	32.6	7.0	29.8	21.1	9.5	39.9
\$25,000–\$39,999	100.0	25.3	5.2	34.8	23.6	11.0	37.3
\$40,000 or more	100.0	18.3	3.3	35.9	28.5	14.0	36.3
Education of individual							
Less than 12 years	100.0	47.3	10.9	21.0	13.1	7.8	35.3
12 years	100.0	32.1	6.1	31.8	20.6	9.5	38.0
More than 12 years	100.0	23.0	4.1	33.6	27.4	11.9	38.5

¹Measure developed by the National Institute on Alcohol Abuse and Alcoholism. Categories based on ounces of ethanol consumed during a 2-week reference period within the past 12 months: Zero for abstainers; 0.01–0.21 ounces per day for lighter drinkers; 0.22–0.99 ounces per day for moderate drinkers; and 1.0 ounces or more per day for heavier drinkers. The conversion factors were: 0.4 ounces of ethanol per ounce of beer, .15 ounces per ounce of wine, and .45 ounces per ounce of liquor.

²Excludes unknown alcohol consumption level, and for last column also excludes drinkers for whom it is unknown whether or not they have 5 or more drinks in 1 day.

³Based on self-reported identification.

more prevalent and heavier alcohol consumption among the young should be a matter of considerable public health concern.

Drinking was also associated with education, with adults in the higher educational attainment groups being more likely to drink and to drink more heavily. The relationship between drinking and income was somewhat different. Persons at the lower income levels were less likely to drink than persons with higher incomes (48 percent of persons with incomes under \$7,000 were abstainers compared with 18 percent of persons with incomes of \$40,000 or more). They were also less likely to drink heavily on a regular basis (8 percent of the lowest income group, compared with 14 percent of the highest income group, being classified as heavier drinkers). However, the lowest income group was somewhat more likely to have had five drinks or more on at least 1 day in the

past year (43 percent) than persons in the \$40,000 or more income category were (36 percent).

Smoking

Data on smoking status and number of cigarettes smoked are shown in table 6. In 1983, about 32 percent of U.S. adults currently smoked cigarettes, 45 percent had never smoked, and 23 percent had smoked but quit. A larger proportion of men (36 percent) currently smoked than women (29 percent). Men were more likely than women to have ever smoked cigarettes (65 percent of men had ever smoked compared to 46 percent of women), but they were also more likely than women to be former smokers. About 30 percent of all men were classified as former smokers (45 percent

Table 6. Percent distribution of persons 20 years of age and over by smoking status and percent distribution of current smokers by number of cigarettes smoked daily, according to selected characteristics: United States, 1983

Characteristic	Smoking status				Number of cigarettes smoked daily					
	Total ¹	Never smoked	Former smoker	Current smoker	All current smokers ²	Less than 15	15-24	25-34	35 or more	
All persons 20 years of age and over	100.0	45.2	22.5	32.4	100.0	28.4	44.8	13.4	13.4	
Sex										
Male	100.0	34.7	29.5	35.7	100.0	23.1	43.8	15.6	17.5	
Female	100.0	54.4	16.2	29.4	100.0	34.1	45.9	11.0	9.0	
Race ³										
White	100.0	44.5	23.5	32.0	100.0	24.4	46.1	14.7	14.4	
All other	100.0	50.0	15.1	34.9	100.0	53.6	36.8	4.9	4.7	
Black	100.0	48.2	14.7	37.1	100.0	54.7	36.0	4.8	4.5	
Other	100.0	58.6	16.9	24.5	100.0	45.0	42.6	*5.9	*6.4	
Hispanic origin ³										
Hispanic	100.0	57.2	16.5	26.4	100.0	56.4	34.1	4.8	4.6	
Non-Hispanic	100.0	44.4	22.9	32.7	100.0	27.0	45.4	13.8	13.8	
Age										
20-34 years	100.0	49.6	14.4	36.1	100.0	32.0	47.3	11.8	8.9	
35-44 years	100.0	40.6	22.1	37.3	100.0	23.0	42.5	17.1	17.4	
45-54 years	100.0	37.6	25.9	36.5	100.0	22.7	41.0	15.0	21.3	
55-64 years	100.0	38.2	31.7	30.2	100.0	25.7	45.7	12.8	15.8	
65-74 years	100.0	45.5	33.0	21.5	100.0	37.0	43.7	10.5	8.9	
75 years and over	100.0	64.7	26.8	8.5	100.0	46.0	45.4	*5.9	*2.5	
Income										
Less than \$7,000	100.0	48.2	16.4	35.4	100.0	34.4	42.5	11.7	11.3	
\$7,000-\$14,999	100.0	43.2	21.8	35.0	100.0	30.5	48.0	10.7	10.8	
\$15,000-\$24,999	100.0	44.3	21.9	33.8	100.0	27.7	45.0	14.0	13.3	
\$25,000-\$39,999	100.0	45.2	23.8	31.0	100.0	23.7	44.3	15.5	16.5	
\$40,000 or more	100.0	45.4	27.7	26.9	100.0	25.8	42.3	17.4	14.5	
Education of individual										
Less than 12 years	100.0	41.2	22.1	36.7	100.0	28.1	44.7	12.0	15.3	
12 years	100.0	42.1	21.8	36.2	100.0	27.9	45.8	13.6	12.7	
More than 12 years	100.0	51.5	23.4	25.1	100.0	29.5	43.6	14.4	12.5	

¹Excludes unknown smoking status.
²Excludes unknown amount smoked.
³Based on self-reported identification.

NOTE: See table 1 for population.

of men who had ever smoked) compared with 16 percent of all women (36 percent of women who had ever smoked). Among current smokers, women appeared to smoke fewer cigarettes than men. Thirty-four percent of women smoked less than 15 cigarettes a day compared with 23 percent of men, and 18 percent of men smoked 35 cigarettes or more in contrast to 9 percent of women.

Smoking practices differed for black and white persons and for Hispanic and non-Hispanic persons. A higher proportion of black persons (37 percent) currently smoked cigarettes than white persons did (32 percent), but black smokers reported smoking fewer cigarettes per day than white smokers did—about one-fourth of white smokers (24 percent) smoked less than 15 cigarettes daily, and over one-half of black smokers (55 percent) smoked this amount. A smaller proportion of Hispanic persons reported currently smoking cigarettes (26 percent) than non-Hispanic respondents did (33 percent). Among smokers, Hispanic persons were twice as likely (56 percent) as non-Hispanic persons (27 percent) to smoke less than 15 cigarettes per day. (See Technical notes for further discussion of Hispanic smoking practices.)

Smoking practices were also related to age. Prevalence of cigarette smoking was fairly similar in all age groups under age 55, but smoking prevalence in the older age groups was sharply lower. Among persons aged 55–74, this lower prevalence of current smoking was associated with much larger proportions of former smokers; approximately one-third of persons in this age group were former smokers. In contrast, the low smoking prevalence in the oldest group (9 percent) is attributable to the fact that they never started smoking (65 percent).

Smoking prevalence was associated with education and to some extent with income. Persons with more than 12 years of education were the least likely to smoke (25 percent) and the most likely to have never started (52 percent) of any education group. Smoking was inversely related to income level, declining from 35 percent of persons with incomes of less than \$7,000 to 27 percent of persons with incomes of \$40,000 a year or more.

Desirable weight

Desirable weight is presented using the 1960 Metropolitan Life Insurance Company (MLIC) standards of desirable body weight for height.¹⁴ The MLIC desirable weight standards are based on the mortality experience of a group of life insurance policy holders. Because persons who obtain life insurance are not representative of the general population, the appropriateness of these standards for some population subgroups is unknown.¹⁵ The 1960 MLIC standards are slightly lower than

the more recent MLIC standards, published in 1983. Thus, data presented in this report somewhat overestimate the proportion of the population that is overweight according to 1983 standards. Both MLIC and NHIS data are based on self-reported height and weight (see Technical notes for a discussion of adjustments made for reporting differences). Self-reported height and weight data produce conservative estimates of the extent of overweight in the population because heavier people tend to report lighter body weights than are obtained by actual physical measurements.¹⁶

A variety of measures of overweight status are used both within NCHS and by outside researchers.¹⁵ A major source of data on the prevalence of overweight in the U.S. population is the Second National Health and Nutrition Examination Survey (NHANES II). Data released from the NHANES II on overweight status are computed using measured height and weight and are expressed in terms of body mass index (BMI), calculated as weight divided by height squared. Although not identical, the proportions of the population defined as “20 percent or more overweight” using the BMI NHANES II cut-off points and the 1960 and 1983 MLIC standards are not substantially different.¹⁵ The 1960 MLIC standards were selected for the present analysis to maintain comparability with measures of overweight used in previously published research.¹¹

Overall, about 23 percent of U.S. adults reported height and weight measurements that placed them within 5 percent of their desirable body weight, whereas 16 percent of the population was 30 percent or more above desirable weight (see table 7). The proportion of Hispanic persons and non-Hispanic persons reporting desirable weight did not differ significantly. Young people were more likely to be of desirable weight than were older people. Almost 28 percent of persons in the youngest group were within 5 percent of desirable weight in contrast to 23 percent of persons 35–44 years of age and even lower proportions in the older age groups.

Women were more likely than men to be at the extremes of the desirable weight range. Twelve percent of women in contrast to 5 percent of men were in the most underweight category, and 18 percent of women compared with 13 percent of men were in the most overweight category. The proportion of persons 30 percent or more overweight differed significantly for black and white persons. About 26 percent of black persons reported weights in this range compared with 15 percent of white persons.

Extreme overweight was also associated with both income and education. People in the lowest income and education groups were about twice as likely to be 30 percent or more overweight compared with people at the high ends of the income and education ranges.

Table 7. Percent distribution of persons 20 years of age and over by body weight, according to selected characteristics: United States, 1983

Characteristic	Total ²	Body weight ¹						30 percent or more above desirable weight
		10 percent or more below desirable weight	5-9.9 percent below desirable weight	Plus or minus 4.9 percent of desirable weight	5-9.9 percent above desirable weight	10-19.9 percent above desirable weight	20-29.9 percent above desirable weight	
All persons 20 years of age and over	100.0	9.0	8.4	22.8	12.9	20.1	10.8	16.0
Sex								
Male	100.0	5.2	6.3	21.7	16.1	24.0	13.2	13.4
Female	100.0	12.4	10.2	23.8	10.1	16.6	8.6	18.3
Race ³								
White	100.0	9.2	8.4	23.0	13.2	20.4	10.8	15.0
All other	100.0	8.0	8.3	21.5	10.8	17.6	11.0	22.8
Black	100.0	7.1	7.4	19.6	10.8	17.8	11.6	25.7
Other	100.0	12.4	12.3	30.7	10.8	16.9	8.2	8.7
Hispanic origin ³								
Hispanic	100.0	6.4	6.7	23.6	10.8	20.6	13.8	18.1
Non-Hispanic	100.0	9.2	8.5	22.7	13.0	20.0	10.6	15.9
Age								
20-34 years	100.0	13.3	11.5	27.6	12.6	16.5	7.8	10.7
35-44 years	100.0	7.2	8.0	22.5	13.1	21.5	11.0	16.7
45-54 years	100.0	4.9	5.7	18.1	13.1	23.1	13.3	21.9
55-64 years	100.0	4.7	5.0	18.9	12.9	23.3	13.9	21.3
65-74 years	100.0	6.6	6.2	18.1	12.3	22.0	13.3	21.5
75 years and over	100.0	12.0	8.4	21.5	15.2	20.1	11.2	11.6
Income								
Less than \$7,000	100.0	10.4	8.8	20.6	11.1	18.0	10.5	20.7
\$7,000-\$14,999	100.0	9.3	7.9	21.9	12.8	18.4	10.9	18.8
\$15,000-\$24,999	100.0	9.0	8.2	22.7	12.0	21.0	11.4	15.6
\$25,000-\$39,999	100.0	8.1	8.5	23.5	14.1	20.8	10.4	14.6
\$40,000 or more	100.0	8.9	9.8	25.0	14.1	21.7	10.0	10.5
Education of individual								
Less than 12 years	100.0	7.6	6.2	18.8	11.1	20.7	13.0	22.5
12 years	100.0	9.0	8.2	23.0	12.8	20.3	10.9	15.8
More than 12 years	100.0	10.0	10.3	25.7	14.3	19.4	9.0	11.3

¹Desirable weight based on 1960 Metropolitan Life Insurance Company standards. NHIS data are self-reported, and estimates may vary from those that would be obtained if physical measurements were taken.

²Excludes unknown height or weight.

³Based on self-reported identification.

NOTE: See table 1 for population.

Trends

Table 8 shows changes between 1977 and 1983 in the proportion of persons reporting selected unfavorable health practices, expressed as a ratio of the proportion reporting a particular practice in 1983 to the proportion reporting the same practice in 1977. Thus, ratios greater than 1.00 represent increases in the prevalence of the (unfavorable) practice over the 6-year period, and ratios of less than 1.00 represent decreases.

In general, between 1977 and 1983 there appears to have been an increase in unfavorable health practices, except for a decline of approximately 10 percent in reported rates of current smoking and a slight decrease in rates of irregular eating habits represented by snacking (3 percent). Although most of the differences were not marked, there was an increase of 10 percent or more in the prevalence rates of 4 of the

7 unfavorable practices—sleeping 6 hours or less (12 percent); being less physically active than contemporaries (12 percent); weighing 30 percent or more above desirable weight (10 percent); and drinking five or more drinks in any 1 day (28 percent). The proportion of persons who never eat breakfast increased only slightly (4 percent).

Declines in smoking prevalence between 1977 and 1983 signify a public health accomplishment and demonstrate that progress in being made toward reaching the 1990 objective of reducing smoking prevalence in the U.S. population to below 25 percent.

It should be noted that increases in the proportion of persons who reported that they are less physically active than their contemporaries could be attributed as much to changing perceptions of the norms of physical activity as to changes in individual physical activity levels. In both 1977 and 1983,

the physical activity questions required that people assess their level of activity relative to others the same age, thereby measuring their perceptions of relative activity rather than any objective, quantifiable activity level. These perceptions, by definition, incorporate both an evaluation of individuals' own physical activity levels and those of their contemporaries. With recent increased publicity encouraging exercise and physical fitness, U.S. adults may perceive higher activity levels in the general population than in earlier years, even though their own physical activity levels may have remained constant or even increased slightly.

The substantial increase in the proportion of persons who reported drinking five or more drinks is difficult to interpret because of differences in question wording and context between the two survey years. In 1977, respondents were asked if they had had five or more drinks at one sitting in the past year, whereas in 1983 people were asked about having five or more drinks in any 1 day. Also, unlike the 1977 question, the 1983 question on consuming five or more drinks followed one that asked respondents whether they had had nine or more drinks in any 1 day. These and other changes in the 1983 alcohol questions allow better estimates of the alcohol

Table 8. Changes between 1977 and 1983 in the proportion of U.S. adults ages 20 years and over, reporting selected health practices: Ratio of the proportion reporting the practice in 1983 to the proportion reporting the practice in 1977

Characteristic	Health practices						
	Sleeps 6 hours or less	Never eats breakfast	Snacks every day	Less physically active than contemporaries	Had 5 or more drinks on any 1 day ¹	Current smoker	30 percent or more above desirable weight ²
	Ratio of the proportion reporting practice in 1983 to the proportion reporting practice in 1977						
All persons 20 years of age and over	1.12	1.04	0.97	1.12	1.28	0.90	1.10
Sex							
Male	1.07	1.03	0.97	1.02	1.15	0.87	1.15
Female	1.17	1.04	0.98	1.21	1.26	0.92	1.10
Race ³							
White	1.10	1.05	0.98	1.11	1.28	0.90	1.12
All other	1.21	0.96	0.93	1.15	1.21	0.86	0.99
Black	1.23	0.91	0.96	1.16	1.12	0.88	1.04
Other	1.17	1.33	0.81	1.24	2.08	0.84	0.77
Hispanic origin ³							
Hispanic	0.87	1.10	0.87	0.92	1.33	0.79	0.96
Non-Hispanic	1.14	1.03	0.98	1.14	1.26	0.90	1.12
Age							
20-34 years	1.03	0.99	0.93	1.29	1.20	0.90	1.07
35-44 years	1.12	0.99	0.94	1.11	1.07	0.86	1.11
45-54 years	1.20	1.12	1.03	1.11	1.13	0.92	1.25
55-64 years	1.23	1.10	0.99	1.00	1.15	0.88	1.09
65-74 years	1.16	1.13	1.12	1.10	1.42	1.00	1.14
75 years and over	1.18	0.77	1.00	1.00	1.39	0.85	0.97
Income ⁴							
Less than \$7,000	1.11	1.23	1.02	1.02	2.08	1.06	1.08
\$7,000-\$14,999	1.21	0.99	0.99	1.08	1.54	0.93	1.14
\$15,000-\$24,999	1.10	1.04	0.95	1.28	1.24	0.88	1.08
\$25,000-\$39,999	1.08	1.01	0.95	1.19	1.12	0.83	1.16
\$40,000 or more	1.10	1.02	1.01	1.25	0.99	0.79	1.11
Education of individual							
Less than 12 years	1.14	1.03	0.97	1.14	1.60	0.98	1.07
12 years	1.16	1.02	0.97	1.13	1.22	0.92	1.17
More than 12 years	1.10	1.03	0.98	1.23	1.09	0.82	1.28

¹The 1977 question asked about 5 or more drinks on any one occasion in the past year, while the 1983 question asked about 5 or more drinks on any 1 day in the past year.

²Desirable weight based on 1960 Metropolitan Life Insurance Company standards. NHIS data are self-reported, and estimates may vary from those that would be obtained if physical measurements were taken.

³Based on self-reported identification.

⁴The income categories for 1983 shown here differ from the 1977 categories shown in *Advance Data* No. 64. The 1983 income categories contain roughly the same proportion of the 1983 population as the 1977 categories contained of the 1977 population. The income categories for 1977 were less than \$5,000, \$5,000-\$9,999, \$10,000-\$14,999, \$15,000-\$24,999, and \$25,000 or more.

consumption habits of the American people, but limit the ability to measure changes over time.

Overall, these findings, especially with regard to alcohol use, body weight, and physical activity, suggest the need for further assessment of the progress made toward the 1990 prevention objectives and of the public health education strate-

gies designed to accomplish those goals. Progress has been made in the area of smoking reduction, but additional gains are needed to reach the 1990 goal. The recently completed 1985 NHIS Health Promotion and Disease Prevention survey will offer an opportunity to continue to monitor advances toward the national goals.¹⁷

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Technical notes

Data presented in this report were obtained from household interviews of the National Health Interview Survey (NHIS). These interviews were conducted among a probability sample of the civilian noninstitutionalized population of the United States. During 1983 approximately 106,000 persons living in about 41,000 households were included in the sample. The total noninterview rate for the NHIS was about 3.3 percent, including 2.0 percent attributable to respondent refusal and 1.3 percent attributable to failure to find an eligible respondent at home after repeated calls.

Questions about health practices were asked of a one-third subsample of all persons 18 years of age and over, or approximately 22,400 persons. This report is based on data for the approximately 21,450 subsample respondents who were 20 years of age and over. Self-reporting was generally required for these questions, but proxy responses were accepted when subsample persons were physically or mentally incapable of answering the questions for themselves. Persons with unknown health practice characteristics are excluded only from the analysis for that particular health practice. Item nonresponse for the data discussed in this report ranged from 0.2 percent for snacking to 3.1 percent for desirable weight.

The measure of desirable weight used in this report was based on the 1960 Metropolitan Life Insurance Company (MLIC) standards of desirable weights for men and women that were derived from the 1959 Build and Blood Pressure Study conducted by the Society of Actuaries. These standards are published in a Metropolitan Life Insurance Company booklet entitled *Overweight: Its Prevention and Significance*.¹⁴ Desirable weights were shown for small, medium, and large frames for men and women. For NHIS analyses, the midpoint of the desirable weight range for the medium frame category was used as the "desirable weight" for a particular height, with certain adjustments. The MLIC standards were developed based on weight in indoor clothing and height with 1-inch heels for men and 2-inch heels for women. The NHIS asked respondents to report their height without shoes and their weight without shoes. To compensate for these differences, the MLIC standards were adjusted by subtracting 2 pounds from the midpoint of the medium frame category for both sexes, and subtracting 1 inch from the height for men and 2 inches from the height for women.

Estimates for the white, black, and other populations, shown in table 1 of the text, are based on self-reported racial identifications. The Hispanic classification is also based on self-reporting. For detailed definitions of other sociodemographic terms used here, see appendix II in most Series 10 reports in the *Vital and Health Statistics* series. In accordance with new Government guidelines, the race and Hispanic origin designations shown in this report differ from those presented in the earlier *Advance Data* report on health practices of

Standard errors, expressed in percentage points, of estimated percents, NHIS Alcohol and Health Practices Survey, 1983

Base of percent in thousands	Estimated percent				
	2 or 98	5 or 95	10 or 90	20 or 80	50
50	5.5	8.5	11.7	15.6	19.5
70	4.6	7.2	9.9	13.2	16.5
100	3.9	6.0	8.3	11.0	13.8
300	2.2	3.5	4.8	6.4	8.0
500	1.7	2.7	3.7	4.9	6.2
700	1.5	2.3	3.1	4.2	5.2
1,000	1.2	1.9	2.6	3.5	4.4
5,000	0.5	0.8	1.2	1.6	1.9
10,000	0.4	0.6	0.8	1.1	1.4
20,000	0.3	0.4	0.6	0.8	1.0
30,000	0.2	0.3	0.5	0.6	0.8
50,000	0.2	0.3	0.4	0.5	0.6
100,000	0.1	0.2	0.3	0.3	0.4

the U.S. population.¹¹ To calculate the ratios shown in table 8 of this report, the 1977 data were recomputed with race and Hispanic origin designations that resembled, as closely as possible, those shown here for the 1983 population.

Findings presented in this report regarding the smoking practices of Hispanic persons differ somewhat from findings presented elsewhere¹⁸ for Mexican-Americans living in the Southwest United States, collected in the Hispanic Health and Nutrition Examination Survey (HHANES). HHANES data showed a higher prevalence of current smoking among Mexican-American men and a lower prevalence among Mexican-American women than did unpublished sex-specific data from the 1983 NHIS for persons of Hispanic origin. Possible explanations for these discrepancies could include differences in sample design or interviewing procedures, cultural differences between Mexican-Americans and other Hispanic groups (NHIS includes all Hispanic groups), regional differences in smoking behavior, or differences in the age or educational composition of the two Hispanic samples. Analysis of these methodological issues is beyond the scope of this report.

Because the estimates shown in this report are based on a sample of the population rather than on the entire population, they are subject to sampling error. Standard errors appropriate for estimated percents of persons are shown in the table above. The statistics shown and discussed here are simple prevalence estimates, unadjusted for age or other sociodemographic characteristics.

To better understand the limitations of the estimates presented in this report, data users are encouraged to familiarize themselves with the survey design, the methods used in estimation, and the general qualifications of the data, which are described in appendix I of the 1983 Current Estimates report.¹⁹ Definitions of certain terms used in this report, but not specifically addressed in this section, and the questionnaire and flashcards used during 1983 are presented in appendixes II and III of that report.

NOTE: See list of references at end of text.

Health Promotion and Disease Prevention Provisional Data from the National Health Interview Survey: United States, January–June 1985

by Owen T. Thornberry, Ph.D., Division of Health Interview Statistics, Ronald W. Wilson, M.A.,
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The National Center for Health Statistics included the topic of health promotion and disease prevention as part of the 1985 National Health Interview Survey. This report presents provisional findings from the first 6 months of data collection on that topic. Provisional findings from the first 3 months of data collection have been previously published.¹

The 1985 Health Promotion and Disease Prevention Survey was designed to monitor progress toward one of the major initiatives of the Department of Health and Human Services. This initiative is described in the 1979 Surgeon General's Report on Health Promotion and Disease Prevention, *Healthy People*.² In that report, broad goals were established for the improvement of the health of Americans. The 1980 Public Health Service report, *Promoting Health/Preventing Disease: Objectives for the Nation*,³ details specific objectives necessary for attainment of those goals in each of 15 priority areas. The target date for achieving the objectives is 1990. This 1985 questionnaire will be used for data collection again in 1990 for the purpose of monitoring progress achieved in the intervening 5 years.

The 1985 Health Promotion and Disease Prevention Survey is devoted primarily to the collection of baseline data on the following topics: general health (including nutrition), injury control and child health, high blood pressure, stress, exercise, smoking, alcohol use, dental care, and occupational safety and health. Those topics were selected after consultation with the Office of Disease Prevention and Health Promotion (Assistant Secretary for Health) as well as with the agencies designated by the Assistant Secretary for Health as having "lead" responsibility for implementing and monitoring progress toward achieving the 1990 objectives. Within each agency, subject matter experts also were consulted during the development of the questionnaire.

The report presents estimated percents or percent distributions for all persons 18 years of age and over and for four age groups and both sexes. Generally, except for the questions on knowledge of health practices where "don't know" is a legitimate response, "don't know" and other inappropriate responses were excluded from the denominator in the calculation of the estimates. In most cases, the actual question asked of the respondent is shown along with the response categories. In a few cases, there has been minor paraphrasing or combining of questions. Each question is referenced to the item number on the questionnaire.

In general, the items in the questionnaire are about either individual health behaviors or knowledge of health practices. Most of the questions on knowledge of health practices have answers that are currently presumed correct and are indicated in bold type (question U.4 has 2 correct answers). For some questions, references are provided for selected publications that present related data from previous data collection by the National Center for Health Statistics.

¹National Center for Health Statistics, Provisional Data from the Health Promotion and Disease Prevention Supplement to the National Health Interview Survey: United States, January–March 1985, *Advance Data From Vital and Health Statistics*. No. 113. DHHS Pub. No. (PHS) 86-1250. Public Health Service. Hyattsville, Md., Nov. 15, 1985.

²Office of the Assistant Secretary for Health and Surgeon General: *Healthy People—The Surgeon General's Report on Health Promotion and Disease Prevention—Background Papers, 1979*. DHEW Pub. No. (PHS) 79-55071A.

³U.S. Department of Health and Human Services, Public Health Service: *Promoting Health/Preventing Disease: Objectives for the Nation*. Washington. U.S. Government Printing Office, 1980.

Selected findings

- *General health habits:* Most adults eat breakfast almost every day (55 percent), get 7–8 hours of sleep each night (66 percent), and have a usual place to go for health care (77 percent).
- *Weight:* Males are more likely to consider their weight “just about right” than are females (55 percent versus 42 percent). However, about one-quarter of males and one-half of females are trying to lose weight, largely by eating fewer calories and/or increasing physical activity.
- *Preventive exams for females:* About one-half of females have had a Pap smear test (45 percent) and/or breast examination (50 percent) by a health professional within less than 1 year. The majority of women (88 percent) know how to examine their own breasts for lumps, but only one-third do so more than 6 times a year.
- *Seat belts:* Only about one-third of adults wear seat belts most of the time when in an automobile. Almost one-half of the adults with children under 5 years of age have been advised by health professionals about the importance of using child safety seats.
- *Home safety:* About two-fifths of homes do not have a working smoke detector. Most adults do not know the temperature of the hot water in the home (65 percent), and most adults do not know the temperature above which scald injuries will occur.
- *High blood pressure:* Three-quarters (74 percent) of adults have had their blood pressure taken by health professionals within the past year. Women are more likely than men to have their blood pressure taken and persons over 65 years more likely than persons in other age groups. The large majority of adults (80 percent or higher) are aware of three of the four principal risk factors associated with heart disease (smoking, cholesterol, and high blood pressure). Only about 60 percent are aware that diabetes is also a principal risk factor.
- *Stress:* One-half of adults reported experiencing at least a moderate amount of stress during the 2 weeks preceding the interview, with the lowest percent for the elderly (27 percent). In addition, almost one-half of the adults felt that stress had had some effect on their health in the past year.
- *Exercise:* Less than one-half (42 percent) of the adult population exercise on a regular basis and only one-quarter have done so for 5 or more years. A higher percent of adults in the younger than the older age groups engage in regular exercise. However, over four-fifths of adults consider themselves as active or more active than other persons of the same age. The majority are not knowledgeable regarding the specific requirements for exercise to strengthen the heart and lungs (frequency and duration of exercise and heart and breathing rate during exercise).
- *Cigarette smoking:* Although a continuation of the downward trend in cigarette smoking has been occurring since the 1964 Surgeon General’s Report on Smoking and Health, almost one-third of adults still smoke (33 percent for males and 28 percent for females). The majority of adults (80 percent or higher) are aware of the major conditions associated with smoking (emphysema, chronic bronchitis, and cancer of the lung, larynx, and esophagus). The exception is bladder cancer, which only about one-third associate with smoking.
- *Alcohol use:* With the exception of cirrhosis of the liver, the adult population appears less knowledgeable about the effects of alcohol on health than the effects of smoking. Whereas 95 percent felt that heavy alcohol consumption increased the chances of getting cirrhosis of the liver, only about one-third recognized the association between heavy alcohol use and cancers of the throat (39 percent) and mouth (31 percent). Eight percent of adults were classified as heavier drinkers (2 or more drinks per day), 21 percent as moderate drinkers, and 24 percent as lighter drinkers (3 drinks or less per week). Twelve percent of adults admitted to driving at least once in the last year when they perhaps had had too much to drink and almost a quarter of young adults admitted to doing so.
- *Dental care:* Almost all persons are knowledgeable about the major preventive factors relative to tooth decay and gum disease. However, only 57 percent recognize tooth decay as the main cause of tooth loss in children and only 54 percent view gum disease as the main cause of tooth loss in adults.

Symbols

- ... Category not applicable
 - 0 Quantity more than zero but 0.5 or less
-

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985

(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 technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
	Total.....	100	100	100	100	100	100	100
	Percent of population							
	GENERAL HEALTH HABITS							
N.1.	How often do you eat breakfast? ¹							
	Almost every day.....	55	41	46	62	87	54	56
	Sometimes.....	20	27	23	17	6	20	19
	Rarely or never.....	25	32	31	21	8	26	24
N.2.	Including evening snacks, how often do you eat between meals? ¹							
	Almost every day.....	39	42	41	37	30	40	37
	Sometimes.....	32	37	33	29	26	29	34
	Rarely or never.....	29	21	26	34	44	30	29
N.3.	When you visit a doctor or other health professional for routine care, is eating proper foods discussed?							
	Often.....	10	8	8	13	11	8	11
	Sometimes.....	16	17	16	16	17	14	18
	Rarely or never.....	64	65	67	61	63	64	65
	Don't visit for routine care.....	10	10	9	10	9	14	6
N.5.	In your opinion which of these are the two best ways to lose weight?							
	Don't eat at bedtime.....	29	29	26	30	31	31	27
	Eat fewer calories.....	74	70	76	77	72	69	79
	Take diet pills.....	2	2	2	1	1	2	2
	Increase physical activity.....	73	83	81	67	53	74	73
	Eat no fat.....	11	7	7	12	20	12	10
	Eat grapefruit with each meal.....	4	4	3	5	6	5	4
	Don't know.....	7	4	5	8	17	9	5
N.6.	Are you now trying to lose weight? ² (Yes).....	37	35	42	41	26	27	46
N.7.	Are you eating fewer calories to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	82	77	83	86	81	77	85
N.8.	Have you increased your physical activity to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	60	74	63	51	40	62	59
N.9.	Do you consider yourself overweight, underweight, or just about right? (If overweight) Would you say you are very overweight, somewhat overweight, or only a little overweight? ^{2,3}							
	Very overweight.....	8	5	9	11	6	3	12
	Somewhat overweight.....	17	13	19	21	14	13	21
	Only a little overweight.....	21	18	22	22	20	20	22
	About right.....	48	56	45	41	52	55	42
	Underweight.....	6	8	4	4	7	8	4
N.10.	On the average, how many hours of sleep do you get in a 24-hour period? ¹							
	Less than 7 hours.....	22	21	25	22	21	23	22
	7-8 hours.....	66	65	68	68	58	66	65
	9 or more hours.....	12	14	7	10	21	11	13
N.11.	Is there a particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health? ⁴ (Yes).....	77	69	75	82	87	70	83
N.15.	About how long has it been since you had a Pap smear test? ⁵ (Females only)							
	Less than 1 year.....	45	61	50	36	24	...	45
	1 year.....	17	16	22	17	13	...	17
	2 years.....	10	7	11	13	12	...	10
	3-4 years.....	8	4	9	10	10	...	8
	5 or more years.....	12	2	8	19	25	...	12
	Never.....	7	11	2	4	15	...	7

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
GENERAL HEALTH HABITS--Con.		Percent of population						
N.16a.	About how long has it been since you had a breast examination by a doctor or other health professional? ⁵ (Females only)							
	Less than 1 year.....	50	61	51	44	38	...	50
	1 year.....	18	16	21	17	14	...	18
	2 years.....	10	7	10	12	11	...	10
	3-4 years.....	7	4	8	9	8	...	7
	5 or more years.....	8	2	7	13	14	...	8
	Never.....	7	9	2	6	15	...	7
N.16b.	Do you know how to examine your own breasts for lumps? (Females only) (Yes).....	88	87	92	90	79	...	88
N.16c.	About how many times a year do you examine your own breasts for lumps? (Females only)							
	12 or more times.....	32	27	34	37	30	...	32
	7-11 times.....	2	2	3	2	2	...	2
	2-6 times.....	35	37	39	33	25	...	35
	Once a year.....	4	5	5	4	3	...	4
	Never.....	14	16	10	13	16	...	14
	Don't know how to examine own breast.....	12	13	8	10	21	...	12
INJURY CONTROL AND CHILD SAFETY AND HEALTH								
0.1a.	Have you ever heard about Poison Control Centers? (Persons in families with children under 10 years of age) (Yes).....	89	88	92	80	64	87	91
0.1b.	Do you have the telephone number for a Poison Control Center in your area? (Persons in families with children under 10 years of age) (Yes).....	60	56	67	45	21	58	62
0.3.	Have you heard about child safety seats, sometimes called car safety carriers, which are designed to carry children while they are riding in a car? (Persons in families with children under 5 years of age) (Yes).....	99	99	99	96	95	98	99
0.4.	Did a doctor or other health professional ever tell you about the importance of using car safety seats for your children? (Persons in families with children under 5 years of age) (Yes)....	47	51	44	36	29	40	52
0.10.	When driving or riding in a car, do you wear a seat belt ³ --							
	All or most of the time.....	32	31	36	30	29	31	33
	Some of the time.....	17	18	18	17	15	16	18
	Once in awhile.....	15	16	14	14	14	15	14
	Never.....	35	34	32	37	41	37	34
	Don't ride in car.....	1	0	0	1	2	1	1
	Does this home have any working smoke detectors? (Based on Items 0.11a.-c.) (Yes).....	59	57	64	59	54	59	59
0.12a.	Do you know about what the hot water temperature is in this home? (Yes).....	35	24	39	43	33	46	25
0.13.	In the past 12 months, have you (or has anyone in your household) used a thermometer to test the temperature of the hot water here? (Yes).....	4	3	5	4	3	4	3
0.14.	Above what temperature will hot water cause scald injuries?							
	127 degrees or less.....	14	20	17	10	5	17	12
	128-139 degrees (can produce burns in less than a minute).....	2	3	3	2	1	4	1
	140 degrees or above (can produce burns in 5 seconds or less)...	20	15	20	25	19	30	11
	Don't know.....	63	62	60	62	74	50	75

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
HIGH BLOOD PRESSURE		Percent of population						
P.1.	I am going to read a list of things which may or may not affect a person's chances of getting heart disease. After I read each one, tell me if you think it definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting heart disease.							
	Cigarette smoking							
	Increases.....	91	94	93	89	83	90	91
	Definitely increases.....	67	70	71	65	59	67	67
	Probably increases.....	24	24	23	24	24	24	24
	Does not increase.....	4	3	3	4	5	4	3
	Probably does not increase.....	3	2	2	3	3	3	2
	Definitely does not increase.....	1	1	1	1	2	1	1
	Don't know/No opinion.....	6	3	4	7	12	6	6
	Worry or anxiety							
	Increases.....	85	82	88	86	80	83	86
	Definitely increases.....	38	31	42	43	37	37	39
	Probably increases.....	46	51	45	43	43	46	46
	Does not increase.....	8	12	8	7	7	9	8
	Probably does not increase.....	6	9	6	5	5	7	6
	Definitely does not increase.....	2	3	1	2	2	2	2
	Don't know/No opinion.....	7	6	5	7	14	8	7
	High blood pressure							
	Increases.....	92	93	94	92	84	92	92
	Definitely increases.....	69	70	73	69	58	68	69
	Probably increases.....	23	24	21	23	26	23	23
	Does not increase.....	3	3	2	3	4	3	2
	Probably does not increase.....	2	2	2	2	2	2	2
	Definitely does not increase.....	1	1	1	1	1	1	1
	Don't know/No opinion.....	6	4	4	5	13	5	6
	Diabetes							
	Increases.....	60	66	64	58	48	60	60
	Definitely increases.....	31	32	34	31	24	31	30
	Probably increases.....	30	34	31	27	24	29	30
	Does not increase.....	10	10	11	10	9	10	10
	Probably does not increase.....	7	8	8	7	6	7	7
	Definitely does not increase.....	3	3	3	3	3	3	3
	Don't know/No opinion.....	29	24	25	32	43	29	29
	Being very overweight							
	Increases.....	94	95	96	94	87	93	94
	Definitely increases.....	70	73	74	71	60	69	71
	Probably increases.....	23	22	22	24	27	24	23
	Does not increase.....	2	2	2	2	3	2	2
	Probably does not increase.....	1	2	1	1	2	1	1
	Definitely does not increase.....	1	1	1	1	1	1	1
	Don't know/No opinion.....	4	3	2	4	10	4	4
	Overwork							
	Increases.....	71	77	78	66	57	68	74
	Definitely increases.....	31	32	34	30	25	28	33
	Probably increases.....	40	46	44	36	32	40	41
	Does not increase.....	19	16	15	24	24	23	16
	Probably does not increase.....	13	12	11	16	15	15	11
	Definitely does not increase.....	6	4	4	8	9	7	5
	Don't know/No opinion.....	9	6	7	10	19	9	9
	Drinking coffee with caffeine							
	Increases.....	50	53	53	50	41	47	53
	Definitely increases.....	12	11	12	13	11	11	13
	Probably increases.....	38	42	41	36	30	37	40
	Does not increase.....	30	31	29	30	28	33	27
	Probably does not increase.....	23	25	24	21	18	25	21
	Definitely does not increase.....	7	6	5	8	10	8	6
	Don't know/No opinion.....	20	16	18	21	31	20	20

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
	HIGH BLOOD PRESSURE--Con.	Percent of population						
P.1.	I am going to read a list of things which may or may not affect a person's chances of getting heart disease. After I read each one, tell me if you think it definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting heart disease.--Con.							
	Eating a diet high in animal fat							
	Increases.....	80	77	82	83	76	77	82
	Definitely increases.....	41	36	42	44	40	37	44
	Probably increases.....	39	41	40	39	36	40	39
	Does not increase.....	8	10	7	6	6	10	6
	Probably does not increase.....	6	8	6	5	4	7	5
	Definitely does not increase.....	2	2	2	2	3	2	1
	Don't know/No opinion.....	12	12	10	11	18	13	12
	Family history of heart disease							
	Increases.....	83	86	86	83	70	80	86
	Definitely increases.....	49	48	54	51	39	45	53
	Probably increases.....	34	39	33	32	31	35	33
	Does not increase.....	8	7	7	8	11	10	6
	Probably does not increase.....	5	4	4	5	6	6	3
	Definitely does not increase.....	3	2	3	3	5	4	2
	Don't know/No opinion.....	9	7	7	9	19	10	9
	High cholesterol							
	Increases.....	87	89	89	87	76	85	88
	Definitely increases.....	54	52	56	57	47	51	56
	Probably increases.....	33	37	33	30	29	34	32
	Does not increase.....	4	5	4	4	5	5	3
	Probably does not increase.....	3	4	2	2	3	3	2
	Definitely does not increase.....	1	1	1	1	2	2	1
	Don't know/No opinion.....	9	6	7	9	18	9	9
P.2.	The following conditions are related to having a stroke. In your opinion, which of these conditions most increases a person's chances of having a stroke?							
	Diabetes.....	4	6	4	3	4	5	4
	High blood pressure.....	77	74	80	80	75	75	79
	High cholesterol.....	12	15	12	10	9	14	11
	Don't know.....	6	5	5	7	12	7	6
P.3.	Which one of the following substances in food is most often associated with high blood pressure?							
	Sodium (or salt).....	59	57	64	60	49	56	61
	Cholesterol.....	25	27	23	24	24	25	25
	Sugar.....	9	11	7	7	12	11	7
	Don't know.....	8	5	6	9	15	8	8
P.12a.	About how long has it been since you last had your blood pressure taken by a doctor or other health professional? ^{2,3}							
	Less than 6 months.....	56	50	49	59	72	50	61
	6-11 months.....	18	21	20	15	13	17	18
	12 months to 23 months.....	14	15	16	13	7	16	12
	24 months and over.....	13	13	14	13	8	16	10
P.12b.	Blood pressure is usually given as one number over another. Were you told what your blood pressure was, in numbers? (Persons with blood pressure checked within 24 months in 12a) (Yes).....	70	67	71	71	68	72	68
P.14.	Have you ever been told by a doctor or other health professional that you had high cholesterol? (Yes).....	5	1	3	9	11	5	5

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
STRESS		Percent of population						
Q.1.	During the past 2 weeks, would you say that you experienced a lot of stress, a moderate amount of stress, relatively little stress, or almost no stress at all?							
	A lot of stress.....	20	23	24	18	11	18	22
	A moderate amount of stress.....	31	34	38	30	16	33	30
	Relatively little stress.....	22	24	20	22	21	22	22
	Almost none.....	25	18	17	28	46	26	24
	Don't know what stress is.....	2	1	1	2	5	2	2
Q.2.	In the past year, how much effect has stress had on your health?							
	A lot.....	13	12	15	15	9	10	17
	Some.....	31	34	34	28	21	29	32
	Hardly any or none.....	54	53	49	55	65	60	49
	Don't know what stress is.....	2	1	1	2	5	2	2
Q.3a.	In the past year, did you think about seeking help for any personal or emotional problems from family or friends? (Yes).....	16	23	21	10	4	12	20
Q.3b.	In the past year, did you think about seeking help for any personal or emotional problems from a helping professional or a self-help group? (Yes).....	12	14	17	9	4	9	14
Q.4.	Did you actually seek any help? (Yes) From whom did you seek help?							
	Family or friends.....	8	12	9	4	2	5	10
	Professional or self help group.....	7	7	11	6	3	5	9
EXERCISE								
R.2a.	In the past 2 weeks, have you done any of the following exercises, sports, or physically active hobbies ⁶ --							
	Walking for exercise.....	43	46	42	43	42	39	47
	Jogging or running.....	12	24	13	4	1	15	9
	Calisthenics or general exercise.....	25	38	28	17	11	25	25
	Biking.....	11	16	13	8	5	11	11
	Swimming or water exercises.....	9	15	10	5	2	10	8
R.3.	Do you exercise or play sports regularly? (Yes).....	42	55	45	32	28	44	39
R.4.	For how long have you exercised or played sports regularly?							
	Less than 1 year.....	6	8	6	4	2	3	8
	1-2 years.....	6	7	7	5	4	5	7
	3-4 years.....	3	4	4	3	3	3	4
	5 or more years.....	26	35	26	19	18	32	20
	Do not exercise regularly.....	58	45	55	68	72	56	61
R.5a.	Would you say that you are physically more active, less active, or about as active as other persons your age? ^{1,3} Is that (a lot more or a little more/a lot less or a little less) active?							
	A lot more.....	18	16	17	18	22	21	15
	A little more.....	15	14	16	15	17	17	14
	About as active.....	49	50	47	49	47	47	50
	A lot less.....	6	5	5	8	7	5	7
	A little less.....	12	15	14	9	7	10	14
R.7a.	How many days a week do you think a person should exercise to strengthen the heart and lungs?							
	Less than 3 days.....	6	8	6	4	3	6	5
	3-4 days.....	40	52	50	31	16	41	39
	5 days or more.....	38	34	34	44	46	37	39
	Don't know.....	16	6	10	21	35	15	16
R.7b.	For how many minutes do you think a person should exercise on each occasion so that the heart and lungs are strengthened?							
	Less than 15 minutes.....	6	4	4	7	9	5	7
	15 to 25 minutes.....	23	22	26	24	20	21	25
	More than 25 minutes.....	52	67	58	43	27	55	49
	Don't know.....	19	8	12	26	44	19	20

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
EXERCISE--Con.		Percent of population						
R.7c.	During those (number in 7b) minutes, how fast do you think a person's heart rate and breathing should be to strengthen the heart and lungs? Do you think that the heart and breathing rate should be--							
	No faster than usual.....	3	2	3	3	7	3	4
	A little faster than usual.....	45	46	42	45	45	44	46
	A lot faster but talking is possible.....	35	44	45	29	11	37	33
	So fast that talking is not possible.....	1	1	1	1	0	1	1
	Don't know.....	16	6	10	22	36	15	16
SMOKING								
	Cigarette smoking status (Based on Items S.1-3)							
	Never.....	45	55	41	37	49	35	54
	Former.....	24	13	24	30	35	31	18
	Current (Includes unknown amount smoked).....	31	32	35	33	16	33	28
	Less than 15.....	10	12	9	9	6	9	10
	15-24.....	13	14	13	14	7	13	12
	25 and over.....	8	5	12	10	3	10	6
S.3.	On the average, about how many cigarettes a day do you now smoke? ⁷ (Current smokers)							
	Less than 15.....	32	40	27	28	38	28	37
	15-24.....	41	44	39	41	45	41	42
	25 and over.....	27	17	34	30	17	31	21
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?							
	Emphysema							
	Increases.....	91	90	94	92	87	91	92
	Definitely increases.....	74	71	78	75	71	71	77
	Probably increases.....	17	19	16	17	16	19	15
	Does not increase.....	2	3	2	2	2	3	2
	Probably does not increase.....	1	2	1	1	1	2	1
	Definitely does not increase.....	1	1	0	1	1	1	1
	Don't know/No opinion.....	7	7	4	6	10	7	7
	Bladder cancer							
	Increases.....	35	42	33	34	31	36	34
	Definitely increases.....	12	13	11	13	11	13	11
	Probably increases.....	23	29	22	21	19	23	24
	Does not increase.....	25	29	30	21	14	25	25
	Probably does not increase.....	17	22	21	13	8	17	18
	Definitely does not increase.....	8	7	9	8	5	8	8
	Don't know/No opinion.....	40	29	37	45	56	39	40
	Cancer of the larynx or voice box							
	Increases.....	88	91	92	86	76	87	89
	Definitely increases.....	56	61	60	54	47	54	58
	Probably increases.....	31	30	32	33	30	32	30
	Does not increase.....	3	4	2	3	4	4	3
	Probably does not increase.....	2	3	2	2	2	3	2
	Definitely does not increase.....	1	1	1	1	2	1	1
	Don't know/No opinion.....	9	5	6	11	20	9	9
	Cataracts							
	Increases.....	15	20	14	13	11	16	14
	Definitely increases.....	4	5	3	3	3	4	3
	Probably increases.....	11	15	10	9	8	12	11
	Does not increase.....	42	46	48	38	29	42	41
	Probably does not increase.....	21	27	23	17	13	21	21
	Definitely does not increase.....	21	19	25	21	16	21	21
	Don't know/No opinion.....	43	34	38	50	60	42	44

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
SMOKING--Con.		Percent of population						
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?--Con.							
	Cancer of the esophagus							
	Increases.....	80	84	83	77	69	78	81
	Definitely increases.....	43	46	46	40	36	42	44
	Probably increases.....	37	38	37	37	33	37	37
	Does not increase.....	6	6	6	6	6	7	5
	Probably does not increase.....	4	5	4	4	3	5	3
	Definitely does not increase.....	2	1	2	3	3	2	2
	Don't know/No opinion.....	14	10	11	16	25	15	14
	Chronic bronchitis							
	Increases.....	86	89	89	85	76	85	87
	Definitely increases.....	54	57	58	53	44	52	56
	Probably increases.....	32	33	31	33	32	33	31
	Does not increase.....	5	5	4	5	5	5	4
	Probably does not increase.....	3	3	3	3	3	4	2
	Definitely does not increase.....	2	1	1	2	2	2	2
	Don't know/No opinion.....	9	6	6	10	19	10	9
	Gallstones							
	Increases.....	11	15	9	9	9	11	11
	Definitely increases.....	3	3	2	2	3	3	2
	Probably increases.....	8	12	7	7	6	8	8
	Does not increase.....	45	50	52	42	32	47	44
	Probably does not increase.....	22	27	24	18	13	22	21
	Definitely does not increase.....	24	22	27	24	20	25	23
	Don't know/No opinion.....	44	35	39	49	59	42	45
	Lung cancer							
	Increases.....	95	98	97	93	88	94	95
	Definitely increases.....	80	87	82	75	72	78	82
	Probably increases.....	15	11	15	17	16	16	13
	Does not increase.....	2	1	1	2	2	2	1
	Probably does not increase.....	1	1	1	1	1	1	1
	Definitely does not increase.....	1	0	1	1	1	1	1
	Don't know/No opinion.....	4	2	2	5	9	4	4
S.4.	Does cigarette smoking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)							
	Miscarriage							
	Increases.....	73	77	70	...	...	73	74
	Definitely increases.....	34	36	31	...	...	33	35
	Probably increases.....	40	41	38	...	...	40	39
	Does not increase.....	13	12	13	...	...	10	15
	Probably does not increase.....	10	9	10	...	...	9	10
	Definitely does not increase.....	3	3	3	...	...	2	4
	Don't know/No opinion.....	14	11	17	...	...	17	11
	Stillbirth							
	Increases.....	65	69	60	...	...	63	66
	Definitely increases.....	27	29	25	...	...	26	29
	Probably increases.....	37	40	35	...	...	37	37
	Does not increase.....	15	14	17	...	...	13	17
	Probably does not increase.....	11	11	12	...	...	11	12
	Definitely does not increase.....	4	3	5	...	...	3	5
	Don't know/No opinion.....	20	17	23	...	...	23	17
	Premature birth							
	Increases.....	70	74	66	...	...	65	75
	Definitely increases.....	32	34	29	...	...	26	37
	Probably increases.....	38	40	37	...	...	39	38
	Does not increase.....	13	12	14	...	...	13	12
	Probably does not increase.....	9	9	10	...	...	10	9
	Definitely does not increase.....	3	3	4	...	...	3	4
	Don't know/No opinion.....	17	15	20	...	...	22	13

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
SMOKING--Con.		Percent of population						
S.4.	Does cigarette smoking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)--Con.							
	Low birth weight of the newborn							
	Increases.....	80	83	78	...	...	75	85
	Definitely increases.....	45	47	43	...	...	36	52
	Probably increases.....	35	36	35	...	...	39	33
	Does not increase.....	7	7	8	...	...	8	7
	Probably does not increase.....	5	5	5	...	...	6	4
	Definitely does not increase.....	2	2	2	...	...	2	2
	Don't know/No opinion.....	13	11	15	...	...	17	8
S.5a.	If a woman takes birth control pills, is she more likely to have a stroke if she smokes than if she does not smoke? (Persons under 45 years of age)							
	More likely.....	64	65	62	...	...	54	73
	Not likely.....	6	7	6	...	...	7	6
	Don't know.....	30	28	32	...	...	39	21
ALCOHOL USE								
T.1c.	Have you had at least one drink of beer, wine or liquor during the past year? ¹ (Yes).....	67	76	75	63	43	77	58
T.2.	In the past 2 weeks, on how many days did you drink any alcoholic beverages, such as beer, wine, or liquor? ^{1,3}							
	Did not drink in past year.....	33	24	25	37	57	23	42
	None.....	14	14	15	14	12	13	15
	1-4 days.....	33	43	38	27	15	35	31
	5-9 days.....	9	12	11	7	4	13	6
	10-14 days.....	11	7	11	13	11	15	6
T.3.	In the past 2 weeks, on the days that you drank alcoholic beverages, how many drinks did you have per day, on the average? ^{1,3}							
	Did not drink in past year.....	33	24	25	37	57	23	42
	None.....	14	14	15	14	12	13	15
	1 drink.....	16	12	18	18	16	16	16
	2 drinks.....	16	18	19	16	9	19	14
	3-4 drinks.....	13	19	14	9	4	17	9
	5 or more drinks.....	7	12	7	5	2	12	3
	Drinking Index (2-week daily drinking, based on items T.1-3) ⁷							
	Did not drink in past year.....	33	24	25	37	57	23	42
	None.....	14	14	15	14	12	13	15
	Light (.01 to .21 ounce absolute alcohol).....	24	27	29	23	14	24	25
	Moderate (.22 to .99 ounce absolute alcohol).....	21	27	23	17	11	27	15
	Heavier (1.00 ounces or more absolute alcohol).....	8	8	8	8	6	13	3
T.6.	During the past 12 months, on how many days did you have 9 or more drinks of any alcoholic beverage?							
	1 or more days.....	13	25	14	7	2	22	5
	5 or more days.....	7	13	7	4	1	13	2
T.7.	During the past 12 months, on how many days did you have 5 or more drinks of any alcoholic beverage? ¹							
	1 or more days.....	26	43	30	16	5	39	15
	10 or more days.....	14	24	15	8	3	23	5
T.8.	During the past year, how many times did you drive when you had perhaps too much to drink?							
	1 time.....	4	7	5	1	0	5	2
	2 or more times.....	8	15	10	3	0	13	4

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
ALCOHOL USE--Con.		Percent of population						
T.9.	Tell me if you think heavy alcohol drinking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?							
	Throat cancer							
	Increases.....	39	38	36	40	45	37	41
	Definitely increases.....	14	11	12	16	21	13	15
	Probably increases.....	25	27	24	24	25	24	25
	Does not increase.....	34	42	40	30	18	39	31
	Probably does not increase.....	23	29	27	19	11	26	21
	Definitely does not increase.....	11	12	14	10	6	13	10
	Don't know/No opinion.....	27	20	24	30	37	24	29
	Cirrhosis of the liver							
	Increases.....	95	96	97	95	89	94	95
	Definitely increases.....	80	80	83	80	72	78	82
	Probably increases.....	15	16	13	14	17	17	13
	Does not increase.....	1	1	1	1	1	1	1
	Probably does not increase.....	1	1	0	0	1	1	0
	Definitely does not increase.....	0	0	0	0	0	0	0
	Don't know/No opinion.....	4	3	2	4	10	4	4
	Bladder cancer							
	Increases.....	66	73	67	63	57	67	66
	Definitely increases.....	28	30	27	27	26	28	27
	Probably increases.....	39	43	40	36	31	39	38
	Does not increase.....	11	12	13	12	7	12	11
	Probably does not increase.....	8	9	10	8	4	9	8
	Definitely does not increase.....	3	3	3	4	2	3	3
	Don't know/No opinion.....	23	15	19	25	36	21	24
	Cancer of the mouth							
	Increases.....	31	30	28	32	38	28	34
	Definitely increases.....	10	7	9	12	16	9	12
	Probably increases.....	21	23	19	20	22	19	22
	Does not increase.....	37	45	43	31	19	42	32
	Probably does not increase.....	24	31	28	19	12	27	21
	Definitely does not increase.....	13	15	15	12	8	15	11
	Don't know/No opinion.....	32	25	29	36	43	30	34
	Arthritis							
	Increases.....	14	15	13	14	14	14	14
	Definitely increases.....	3	3	3	4	4	4	3
	Probably increases.....	10	12	10	10	9	10	10
	Does not increase.....	46	54	51	41	32	48	44
	Probably does not increase.....	24	31	26	20	13	25	23
	Definitely does not increase.....	22	23	24	21	18	23	21
	Don't know/No opinion.....	40	31	37	46	55	38	42
	Blood clots							
	Increases.....	34	45	33	28	27	33	35
	Definitely increases.....	9	11	9	9	9	9	10
	Probably increases.....	25	34	24	20	18	24	25
	Does not increase.....	31	30	36	31	21	35	27
	Probably does not increase.....	18	20	22	16	10	20	17
	Definitely does not increase.....	13	10	15	14	11	15	11
	Don't know/No opinion.....	35	25	31	41	52	32	38
T.9.	Does heavy drinking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)							
	Miscarriage							
	Increases.....	86	89	82	...	...	84	87
	Definitely increases.....	47	53	41	...	...	44	51
	Probably increases.....	38	36	41	...	...	40	36
	Does not increase.....	4	4	5	...	...	4	5
	Probably does not increase.....	4	3	4	...	...	3	4
	Definitely does not increase.....	1	1	1	...	...	1	1
	Don't know/No opinion.....	10	7	13	...	...	12	8

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
ALCOHOL USE--Con.		Percent of population						
T.9.	Does heavy drinking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)--Con.							
	Mental retardation of the newborn							
	Increases.....	84	88	80	...	...	81	87
	Definitely increases.....	46	53	40	...	...	40	51
	Probably increases.....	38	35	41	...	...	40	36
	Does not increase.....	5	4	6	...	...	6	4
	Probably does not increase.....	4	3	5	...	...	5	3
	Definitely does not increase.....	1	1	2	...	...	1	1
	Don't know/No opinion.....	11	8	13	...	...	13	9
	Low birth weight of the newborn							
	Increases.....	85	87	83	...	...	81	89
	Definitely increases.....	46	50	42	...	...	39	52
	Probably increases.....	39	37	41	...	...	41	37
	Does not increase.....	4	4	4	...	...	5	3
	Probably does not increase.....	3	3	3	...	...	4	2
	Definitely does not increase.....	1	1	1	...	...	1	1
	Don't know/No opinion.....	11	9	13	...	...	14	8
	Birth defects							
	Increases.....	85	89	81	...	...	82	88
	Definitely increases.....	48	54	41	...	...	41	54
	Probably increases.....	37	35	40	...	...	40	34
	Does not increase.....	5	4	6	...	...	6	4
	Probably does not increase.....	4	3	5	...	...	5	3
	Definitely does not increase.....	1	1	1	...	...	1	1
	Don't know/No opinion.....	10	7	13	...	...	13	8
T.10.	Have you ever heard of Fetal Alcohol Syndrome? (Persons under 45 years of age) (Yes).....	57	54	60	...	...	51	63
DENTAL CARE								
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.							
	Seeing a dentist regularly							
	Important	96	97	97	95	93	95	97
	Definitely important.....	83	84	85	84	79	79	87
	Probably important.....	12	13	12	12	14	15	10
	Not important.....	2	2	2	3	2	3	1
	Probably not important.....	2	2	1	2	2	2	1
	Definitely not important.....	1	0	0	1	1	1	0
	Don't know/No opinion.....	2	1	1	2	5	2	2
	Drinking water with fluoride from early childhood							
	Important	79	85	86	76	62	78	80
	Definitely important.....	45	47	52	43	30	42	47
	Probably important.....	35	38	34	33	32	36	33
	Not important.....	8	9	7	8	8	10	7
	Probably not important.....	6	7	5	5	5	6	5
	Definitely not important.....	3	2	2	3	3	3	2
	Don't know/No opinion.....	13	6	7	16	30	12	13
	Regular brushing and flossing of the teeth							
	Important	98	99	99	97	95	97	98
	Definitely important.....	90	93	93	88	81	88	91
	Probably important.....	8	6	6	9	14	10	7
	Not important.....	1	1	0	1	1	1	0
	Probably not important.....	0	0	0	0	0	0	0
	Definitely not important.....	0	0	0	0	0	0	0
	Don't know/No opinion.....	2	1	1	2	4	2	1

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
DENTAL CARE--Con.		Percent of population						
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.--Con.							
	Using fluoride toothpaste or fluoride mouth rinse							
	Important.....	90	96	94	86	76	89	90
	Definitely important.....	61	74	66	53	43	58	63
	Probably important.....	29	22	28	34	33	31	27
	Not important.....	4	2	3	5	5	4	3
	Probably not important.....	3	2	3	4	3	3	2
	Definitely not important.....	1	1	1	2	2	1	1
	Don't know/No opinion.....	7	2	3	8	19	7	6
	Avoiding between-meal sweets							
	Important.....	89	90	92	90	83	88	91
	Definitely important.....	59	57	63	61	54	56	62
	Probably important.....	30	33	29	28	29	32	28
	Not important.....	6	8	5	6	6	8	5
	Probably not important.....	5	7	4	4	5	6	4
	Definitely not important.....	2	1	1	2	2	2	1
	Don't know/No opinion.....	4	2	2	5	11	4	4
U.2.	Now I'm going to ask about preventing gum disease. In your opinion, how important or not important is each of the following in preventing gum disease?							
	Seeing a dentist regularly							
	Important.....	95	97	97	94	91	94	96
	Definitely important.....	83	85	85	83	76	79	87
	Probably important.....	12	12	11	11	15	15	10
	Not important.....	2	2	2	2	2	3	1
	Probably not important.....	2	2	1	2	1	2	1
	Definitely not important.....	1	0	1	1	1	1	0
	Don't know/No opinion.....	3	1	1	3	7	3	2
	Drinking water with fluoride from early childhood							
	Important.....	65	74	67	62	53	63	67
	Definitely important.....	33	37	34	31	25	30	35
	Probably important.....	32	37	33	30	28	33	32
	Not important.....	17	17	20	16	11	19	15
	Probably not important.....	12	13	15	11	7	14	11
	Definitely not important.....	5	4	5	5	4	5	4
	Don't know/No opinion.....	18	9	13	23	36	18	18
	Regular brushing and flossing of the teeth							
	Important.....	96	98	98	95	91	96	96
	Definitely important.....	83	87	87	82	73	81	86
	Probably important.....	13	11	10	14	18	15	10
	Not important.....	1	1	1	1	2	1	1
	Probably not important.....	1	1	1	1	1	1	1
	Definitely not important.....	0	0	0	1	0	0	0
	Don't know/No opinion.....	3	1	2	4	7	3	3
	Using fluoride toothpaste or fluoride mouth rinse							
	Important.....	78	86	77	73	70	75	80
	Definitely important.....	47	57	46	42	38	44	50
	Probably important.....	31	29	31	31	32	31	30
	Not important.....	12	9	15	12	8	14	10
	Probably not important.....	9	7	12	9	5	10	7
	Definitely not important.....	3	2	4	3	3	4	3
	Don't know/No opinion.....	11	5	7	15	22	11	10
	Avoiding between-meal sweets							
	Important.....	81	84	82	80	77	79	83
	Definitely important.....	50	48	50	52	48	46	53
	Probably important.....	31	35	32	28	29	33	30
	Not important.....	11	13	13	11	8	13	10
	Probably not important.....	9	10	10	7	5	10	7
	Definitely not important.....	3	3	3	3	3	3	3
	Don't know/No opinion.....	7	4	5	9	15	8	7

See footnotes at end of table.

Table 1. Provisional estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention, by age and sex: United States, January-June 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Age					Sex	
		All ages	18-29 years	30-44 years	45-64 years	65 years and over	Male	Female
DENTAL CARE--Con.		Percent of population						
U.3.	In your opinion, which of the following is the main cause of tooth loss in children?							
	Tooth decay.....	57	55	56	60	61	55	60
	Gum disease.....	9	9	8	9	9	10	7
	Injury to the teeth.....	30	34	35	26	17	30	29
	Don't know.....	4	1	2	5	13	4	4
U.4.	In your opinion, which of the following is the main cause of tooth loss in adults?							
	Tooth decay.....	40	42	35	40	44	42	38
	Gum disease.....	54	53	62	54	43	52	56
	Injury to the teeth.....	3	4	2	2	3	3	2
	Don't know.....	3	1	1	4	10	3	3
U.5a.	Have you ever heard of dental sealants? (Yes).....	23	19	31	22	14	22	23
OCCUPATIONAL SAFETY AND HEALTH								
V.1a.	In your present job, are you exposed to any substances that could endanger your health, such as chemicals, dusts, fumes or gases? ³ (Currently employed persons) (Yes).....	35	36	36	33	18	44	23
V.2a.	In your present job, are you exposed to any work conditions that could endanger your health, such as loud noise, extreme heat or cold, physical or mental stress, or radiation? ³ (Currently employed persons) (Yes).....	36	37	41	33	13	42	29
V.3a.	In your present job are you exposed to any risks of accidents or injuries? ³ (Currently employed persons) (Yes).....	41	45	40	38	27	52	27

¹National Center for Health Statistics, C. A. Schoenborn, and K. M. Danchik: Health Practices Among Adults: United States, 1977. Advance Data From Vital and Health Statistics. No. 64. DHEW Pub. No. (PHS) 78-1250. Public Health Service. Hyattsville, Md., Nov. 4, 1980.

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³National Center for Health Statistics, C. A. Schoenborn, K. M. Danchik, and J. Elinson: Basic data from Wave I of the National Survey of Personal Health Practices and Consequence, United States, 1979. Vital and Health Statistics. Series 15, No. 2. DHHS Pub. No. (PHS) 81-1163. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1981.

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⁵National Center for Health Statistics, A. J. Moss and M. H. Wilder: Use of selected medical procedures associated with preventive care, United States, 1973. Vital and Health Statistics. Series 10, No. 110. DHEW Pub. No. (HRA) 77-1538. Health Resources Administration. Washington. U.S. Government Printing Office, Mar. 1977.

⁶National Center for Health Statistics, J. W. Choi: Exercise and Participation in Sports Among Persons 20 Years of Age and Over: United States, 1975. Advance Data From Vital and Health Statistics. No. 19. DHEW Pub. No. (PHS) 78-1250. Public Health Service. Hyattsville, Md., March 15, 1978.

⁷National Center for Health Statistics: Health, United States, 1985. DHHS Pub. No. (PHS) 85-1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1984.

Technical notes

The National Health Interview Survey (NHIS) is a continuous, cross-sectional, nationwide survey conducted by household interview. Each week a probability sample of households is interviewed by personnel of the U.S. Bureau of the Census to obtain information on the health and other characteristics of each member of the household in the civilian non-institutionalized population.

During the first 2 quarters of 1985, the sample consisted of approximately 18,300 households. The total noninterview rate was about 4 percent—about 3 percent of which was due to respondent refusal and the remainder primarily due to an inability to locate eligible respondents at home after repeated calls. Information was obtained for all household members for the core section of the questionnaire; although, for the Health Promotion and Disease Prevention questionnaire, one adult per family was randomly selected as the respondent. This procedure resulted in an additional nonresponse rate of about 8 percent. About 16,780 questionnaires were completed. A description of the survey design, methods used in estimation, and general qualifications of the NHIS data is provided in *The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83* (see pp. 8–9).⁴

The estimated population for each of the demographic categories is shown in table I to allow readers to derive a provisional estimate of the number of people in the United States with a given characteristic. However, the estimates are based on a sample of the civilian noninstitutionalized population rather than on the entire population and are therefore subject to sam-

pling error. Some estimates in table 1 are small for given characteristics. When an estimate or the numerator or denominator of a rate is small, the sampling error may be relatively high. Approximate standard errors for estimates in this report are shown in table II.

To expedite the early release of data from the Health Promotion and Disease Prevention questionnaire, it was processed separately from the NHIS core questionnaire. Thus, it has not been linked as yet with the core data. In addition, because of major changes in the sample design in 1985, both the estimates of behaviors and knowledge and the standard errors of the estimates shown in table II are provisional and will be modified when the final estimates based on the linked core are released. A final weighted data file covering the entire calendar year of data collection will be available in 1986.

The following Federal agencies provided partial funding for the 1985 Health Promotion and Disease Prevention Survey:

- Office of the Assistant Secretary for Health
- Office of Disease Prevention and Health Promotion
- Alcohol, Drug Abuse, and Mental Health Administration
- National Institute of Alcohol Abuse and Alcoholism
- National Institutes of Health
- National Heart, Lung, and Blood Institute
- National Cancer Institute
- National Institute of Dental Research
- National Institute of Child Health and Human Development
- Health Resources and Services Administration
- Centers for Disease Control
- Center for Prevention Services
- Center for Infectious Diseases
- Center for Environmental Health
- Center for Health Promotion and Education
- National Institute for Occupational Safety and Health

⁴National Center for Health Statistics, M. G. Kovar and G. S. Poe: *The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83. Vital and Health Statistics. Series 1, No. 18. DHHS Pub. No. (PHS) 85–1320. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1985.*

Table I. Provisional estimates of the civilian noninstitutionalized population by age and sex: United States, January–June 1985

Selected populations	Age					Sex	
	All ages	18–29 years	30–44 years	45–64 years	65 years and over	Male	Female
	Population in thousands						
Total adult population	170,520	48,461	50,677	44,486	26,896	80,564	89,955
Females.....	89,955	24,825	25,990	23,288	15,853	...	89,955
Population in families with children under 10 years of age	42,031	16,408	22,123	3,055	445	17,787	24,243
Population in families with children under 5 years of age.....	26,213	13,171	11,722	1,195	125	11,230	14,983
Currently employed population	107,104	34,639	40,645	28,557	3,263	59,103	48,001

Table 11. Standard errors, expressed in percentage points, of estimated percents for selected age and sex groups from the 1985 National Health Interview Survey Supplement on Health Promotion and Disease Prevention: United States, January–June 1985

<i>Estimated percent</i>	<i>Age</i>					<i>Sex</i>	
	<i>All ages</i>	<i>18–29 years</i>	<i>30–44 years</i>	<i>45–64 years</i>	<i>65 years and over</i>	<i>Male</i>	<i>Female</i>
	Standard error in percentage points						
5 or 95	0.18	0.36	0.34	0.37	0.42	0.28	0.24
10 or 90	0.25	0.49	0.46	0.51	0.58	0.39	0.33
15 or 85	0.30	0.59	0.55	0.61	0.69	0.46	0.40
20 or 80	0.34	0.66	0.62	0.68	0.78	0.52	0.45
25 or 75	0.37	0.71	0.67	0.74	0.84	0.56	0.48
30 or 70	0.39	0.76	0.71	0.78	0.89	0.60	0.51
35 or 65	0.40	0.79	0.74	0.81	0.92	0.62	0.53
40 or 60	0.41	0.81	0.76	0.83	0.95	0.64	0.55
45 or 55	0.42	0.82	0.77	0.85	0.96	0.65	0.55
50 or 50	0.42	0.82	0.77	0.85	0.97	0.65	0.56

Physiotherapy Office Visits: National Ambulatory Medical Care Survey: United States, 1980–81

Cheryl Nelson, Division of Health Care Statistics

Physiotherapy office visits in the United States increased from 2.0 percent in 1975 to 4.6 percent in 1981 (figure 1). This report describes patient visits during 1980 and 1981 to office-based ambulatory care physicians in which physiotherapy services were ordered or provided (physiotherapy office visit). This information was obtained by combining the 1980 and 1981 results of the National Ambulatory Medical Care Survey. This survey, a probability sample survey of office-based physicians, was conducted annually from 1973 through 1981 and again in

1985 by the Division of Health Care Statistics of the National Center for Health Statistics.

Because the estimates presented in this report are based on a sample rather than on the entire universe of office visits, they are subject to sampling variability. A brief description of the sample design, guidelines for judging the precision of the estimates, and key terms used in the survey are provided in the Technical notes at the end of the report. The Patient Record form is shown in figure 2.

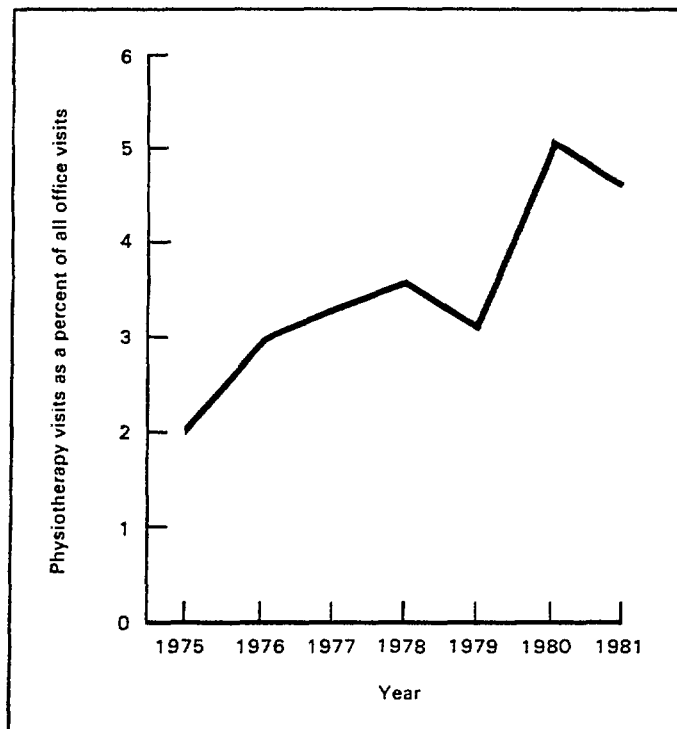


Figure 1. The percent of physiotherapy visits from 1975–81

Patient characteristics

Physiotherapy office visit data according to patient demographic characteristics are presented in tables 1 and 2 and figure 3. From January 1980 through December 1981, ambulatory patients made 1.2 billion visits to non-Federal, office-based physicians practicing in the coterminous United States. Of this total, 56,023,000 (4.8 percent) had physiotherapy services ordered or provided. This amounted to an average of 48 physiotherapy visits per 1,000 office visits. Physiotherapy visits were most frequent among patients in age groups 15–64 years, and male rates substantially exceeded those for female patients in the age interval from the 15th to the 44th year. Variations in physiotherapy office visit rates as they occurred among selected racial or ethnic groups are examined in table 2. White persons, accounting for 90.7 percent of all physiotherapy visits, did not significantly differ from black persons and those of other races in physiotherapy visit rate. However, physiotherapy visit rates were more frequent among Hispanic patients.

Physician characteristics

Among office-based physicians, the general and family practice specialty (37.7 percent) led all other specialties in volume of physiotherapy office visits (table 3). However, when

ASSURANCE OF CONFIDENTIALITY—All information which would permit identification of an individual, a practice of an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to other persons or used for any other purpose.		Department of Health, Education, and Welfare Public Health Service Office of Health Research, Statistics, and Technology National Center for Health Statistics		A No. 003937	
PATIENT RECORD NATIONAL AMBULATORY MEDICAL CARE SURVEY					
1. DATE OF VISIT ____/____/____ Month Day Year					
2. DATE OF BIRTH ____/____/____ Month Day Year		3. SEX 1 <input type="checkbox"/> FEMALE 2 <input type="checkbox"/> MALE		4. COLOR OR RACE 1 <input type="checkbox"/> WHITE 2 <input type="checkbox"/> BLACK 3 <input type="checkbox"/> ASIAN/PACIFIC ISLANDER 4 <input type="checkbox"/> AMERICAN INDIAN/ ALASKAN NATIVE	
5. ETHNICITY 1 <input type="checkbox"/> HISPANIC ORIGIN 2 <input type="checkbox"/> NOT HISPANIC		6. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT [In patient's own words] a MOST IMPORTANT _____ b OTHER _____			
7. MAJOR REASON FOR THIS VISIT [Check one] 1 <input type="checkbox"/> ACUTE PROBLEM 2 <input type="checkbox"/> CHRONIC PROBLEM, ROUTINE 3 <input type="checkbox"/> CHRONIC PROBLEM, FLAREUP 4 <input type="checkbox"/> POST SURGERY/POST INJURY 5 <input type="checkbox"/> NON ILLNESS CARE (ROUTINE PRENATAL, GENERAL EXAM WELL BABY ETC.)		8. DIAGNOSTIC SERVICES THIS VISIT [Check all ordered or provided] 1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> LIMITED HISTORY/EXAM 3 <input type="checkbox"/> GENERAL HISTORY/EXAM 4 <input type="checkbox"/> PAP TEST 5 <input type="checkbox"/> CLINICAL LAB TEST 6 <input type="checkbox"/> X RAY 7 <input type="checkbox"/> BLOOD PRESSURE CHECK 8 <input type="checkbox"/> EKG 9 <input type="checkbox"/> VISION TEST 10 <input type="checkbox"/> ENDOSCOPY 11 <input type="checkbox"/> MENTAL STATUS EXAM 12 <input type="checkbox"/> OTHER (Specify) _____		9. PHYSICIAN'S DIAGNOSES a PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 6a. _____ b OTHER SIGNIFICANT CURRENT DIAGNOSES _____	
10. HAVE YOU SEEN PATIENT BEFORE? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO IF YES, FOR THE CONDITION IN ITEM 9a? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		11. MEDICATION THERAPY THIS VISIT <input type="checkbox"/> NONE [Using brand or generic names, record all new and continued medications ordered, injected, administered, or otherwise provided at this visit. Include immunizing and desensitizing agents] a. FOR PRINCIPAL DIAGNOSES IN ITEM 9a 1 _____ 2 _____ 3 _____ 4 _____ b. FOR ALL OTHER REASONS 1. _____ 2. _____ 3. _____ 4. _____			
12. NON-MEDICATION THERAPY [Check all services ordered or provided this visit] 1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> PHYSIOTHERAPY 3 <input type="checkbox"/> OFFICE SURGERY 4 <input type="checkbox"/> FAMILY PLANNING 5 <input type="checkbox"/> PSYCHOTHERAPY/ THERAPEUTIC LISTENING 6 <input type="checkbox"/> DIET COUNSELING 7 <input type="checkbox"/> FAMILY/SOCIAL COUNSELING 8 <input type="checkbox"/> MEDICAL COUNSELING 9 <input type="checkbox"/> OTHER (Specify) _____		13. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		14. DISPOSITION THIS VISIT [Check all that apply] 1 <input type="checkbox"/> NO FOLLOW-UP PLANNED 2 <input type="checkbox"/> RETURN AT SPECIFIED TIME 3 <input type="checkbox"/> RETURN IF NEEDED, P.R.N. 4 <input type="checkbox"/> TELEPHONE FOLLOW-UP PLANNED 5 <input type="checkbox"/> REFERRED TO OTHER PHYSICIAN 6 <input type="checkbox"/> RETURNED TO REFERRING PHYSICIAN 7 <input type="checkbox"/> ADMIT TO HOSPITAL 8 <input type="checkbox"/> OTHER (Specify) _____	
				15. DURATION OF THIS VISIT [Time actually spent with physician] _____ Minutes	

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Figure 2. Patient record

stratified by age of the patient, general and family practitioners' volume of physiotherapy office visits did not differ significantly from that of pediatric specialists for patients under 15 years of age and orthopedic surgery and dermatology specialists for patients 15-24 years of age.

Visit characteristics

Reason for visit

The principal reason for visiting the physician's office as expressed in the patient's own words is listed first in item 6 of the Patient Record. The patient's problem or complaint was classified and coded according to the Reason for Visit Classifi-

cation for Ambulatory Care (RVC),¹ and divided into eight modules or groups of reasons, as shown in table 4. Reasons for visit classified as "symptoms" (symptom module) accounted for 72.3 percent of all physiotherapy office visits. As might be expected, symptoms of the musculoskeletal system accounted for 65.8 percent of all physiotherapy visits. Symptoms referable to the musculoskeletal system make up a large proportion of

¹National Center for Health Statistics. D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care. *Vital and Health Statistics. Series 2, No. 78*. DHEW Pub. No. (PHS) 79-1352. National Health Service, Washington. U.S. Government Printing Office, Feb. 1979.

Table 1. Number of office visits, number and percent distribution of physiotherapy visits, and physiotherapy visit rate, by patient's age and sex-age group: United States, 1980 and 1981

Patient age and sex	All office visits		Physiotherapy office visits	
	Number in thousands	Percent distribution	Percent distribution	Visit rate ¹
Both sexes				
All ages	1,160,922	56,023	100.0	48
Less than 15 years . . .	216,129	4,370	7.8	20
15-24 years	160,795	8,653	15.4	54
25-44 years	310,384	17,998	32.1	58
45-64 years	265,700	16,173	28.9	61
65 years and over . . .	207,914	8,830	15.8	42
Female				
All ages	699,718	30,958	55.3	44
Less than 15 years . . .	102,633	2,384	4.3	23
15-24 years	107,276	4,421	7.9	41
25-44 years	206,395	9,044	16.1	44
45-64 years	157,031	9,332	16.7	59
65 years and over . . .	126,383	5,777	10.3	46
Male				
All ages	461,204	25,065	44.7	54
Less than 15 years . . .	113,495	1,986	3.5	17
15-24 years	53,519	4,232	7.6	79
25-44 years	103,990	8,954	16.0	86
45-64 years	108,668	6,840	12.2	63
65 years and over . . .	81,532	3,052	5.4	37

¹Number of physiotherapy office visits per 1,000 office visits.

Table 2. Number of office visits, number and percent distribution of physiotherapy visits, and physiotherapy visit rate by patient's race and Hispanic origin of patient: United States, 1980 and 1981

Patient race and Hispanic origin	All office visits		Physiotherapy office visits	
	Number in thousands	Percent distribution	Percent distribution	Visit rate ¹
All patients	1,160,922	56,023	100.0	48
Race				
White	1,037,590	50,803	90.7	49
Black	110,546	4,565	8.1	41
Other ²	12,786	655	1.2	51
Hispanic origin				
Hispanic	53,337	3,455	6.2	65
Non-Hispanic	1,107,585	52,568	93.8	47

¹Number of physiotherapy office visits per 1,000 office visits.

²Includes Asian, Pacific Islander, American Indian, and Alaskan Indian.

the 20 most common principal reasons for visit with 18.8 percent being classified as some type of "back" symptom (table 5). For general and family practice and orthopedic surgery specialties, the top 10 principal reasons for visit are presented in table 6. The reader is cautioned that the rankings presented may be somewhat artificial because some estimates may not be statistically different from other near estimates due to sampling variability. Detailed tabulations of reasons for visit data have been published.¹

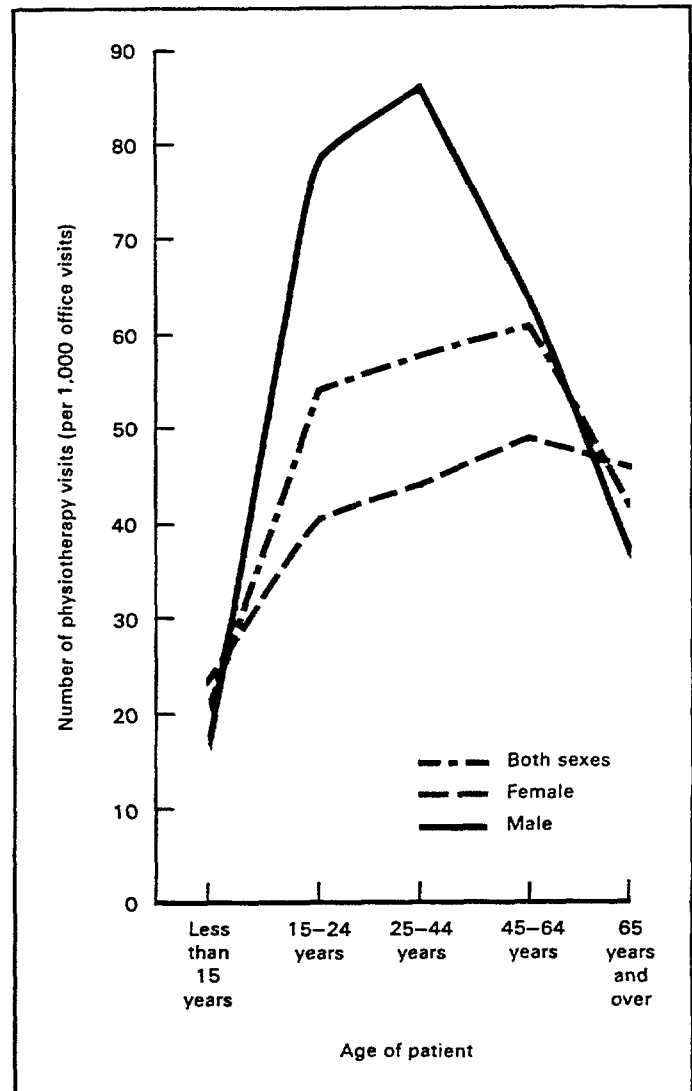


Figure 3. Physiotherapy visit rate by sex and age of patient: United States, 1980 and 1981

Principal diagnosis

The principal diagnosis, the first-listed diagnosis in item 9 on the Patient Record, was classified according to the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.² As can be seen from tables 7 and 8, the principal diagnoses for physiotherapy office visits are primarily from two ICD-9-CM major classifications: Diseases of the musculoskeletal system and connective tissue (710-739) and Injury and poisoning (800-899).

Major reason for visit

Item 7 of the Patient Record represents the major reason for visit as determined by the physician. Data in table 9 show that a greater proportion of physiotherapy visits were made for acute problems.

²Commission on Professional and Hospital Activities: *International Classification of Diseases, 9th Revision, Clinical Modification*. Ann Arbor, Edwards Brothers, Inc., 1978.

Table 3. Distribution of physiotherapy office visits by selected specialties and patient's age: United States, 1980 and 1981

Physician specialty	All patients	Patient age				
		Less than 15 years	15-24 years	25-44 years	45-64 years	65 years and over
Number in thousands						
All physiotherapy office visits	56,023	4,370	8,653	17,998	16,173	8,830
Percent distribution						
All physiotherapy office visits	100.0	100.0	100.0	100.0	100.0	100.0
General and family practice	37.7	30.4	32.9	39.3	39.8	38.9
Internal medicine	10.7	*2.3	*4.3	7.0	12.8	24.8
Pediatrics	3.1	32.9	*2.3	*0.5	-	-
General surgery	4.4	*1.4	*4.5	5.7	4.5	*2.8
Obstetrics and gynecology	2.7	-	*3.7	5.5	*1.1	*0.3
Orthopedic surgery	21.4	14.8	22.3	23.3	23.6	16.2
Cardiovascular disease	*0.6	-	*0.5	*0.3	*0.8	*1.1
Dermatology	8.5	*10.0	23.1	7.5	4.0	*3.9
Urology	*0.9	-	*0.3	*0.8	*1.3	*1.2
Psychiatry	*0.3	*0.3	*0.1	*0.3	*0.5	*0.3
Neurology	*0.3	*0.7	*0.2	*0.3	*0.4	*0.2
Ophthalmology	1.6	*3.6	*1.3	*1.1	*1.1	*3.0
Otolaryngology	*0.6	*0.1	*1.0	*0.7	*0.3	*0.8

Table 4. Number and percent distribution of physiotherapy office visits by patient's reason for visit: United States, 1980 and 1981

Reason for visit	Physiotherapy office visits	
	Number in thousands	Percent distribution
All physiotherapy office visits	56,023	100.0
General reason for visit		
Symptom module	40,483	72.3
Disease module	3,290	5.9
Diagnostic screen/preventive module	1,698	3.0
Treatment module	3,199	5.7
Injury/adverse effect module	6,458	11.5
Test result module	*63	*0.1
Administrative module	*78	*0.1
Uncodable	683	1.2
Residual	*71	*0.1
Symptom module and RVC ¹ code		
All physiotherapy office visits	40,483	100.0
General symptoms (s001-s099)	2,722	6.7
Psychological-mental (s100-s199)	*169	*0.4
Nervous (s200-s259)	1,438	3.6
Cardiovascular-lymphatic (s260-s299)	*162	*0.4
Eyes and ears (s300-s399)	1,054	2.6
Respiratory (s400-s499)	1,820	4.5
Digestive (s500-s639)	1,072	2.6
Genitourinary (s640-s829)	1,242	3.1
Skin, nails, and hair (s830-s899)	4,158	10.3
Musculoskeletal (s900-s999)	26,645	65.8

¹Based on National Center for Health Statistics, D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care. *Vital and Health Statistics*. Series 2, No. 78. DHEW Pub. No. (PHS) 79-1352. Public Health Service, Washington, U.S. Government Printing Office, Feb. 1979.

Table 5. Number and percent distribution of physiotherapy office visits by the 20 most common principal reasons for visit: United States, 1980 and 1981

Rank	Most common principal reason for visit and RVC ¹ code	Physiotherapy office visits	
		Number in thousands	Percent distribution
...	All physiotherapy visits	56,023	100.0
1	Back symptoms (s905)	6,110	10.9
2	Low back symptoms (s910)	4,408	7.9
3	Neck symptoms (s900)	3,416	6.1
4	Knee symptoms (s925)	3,047	5.4
5	Shoulder symptoms (s940)	2,408	4.3
6	Acne or pimples (s830)	1,388	2.5
7	Postoperative visit (t205)	1,301	2.3
8	Leg symptoms (s920)	1,192	2.1
9	Foot and toe symptoms (s935)	1,043	1.9
10	Hand and finger symptoms (s960)	903	1.6
11	Hip symptoms (s915)	802	1.4
12	Skin rash (s860)	798	1.4
13	Headache (s210)	797	1.4
14	Arm symptoms (s945)	734	1.3
15	Ankle symptoms (s930)	685	1.2
16	Psoriasis (d820)	645	1.2
17	Pain, site not referable to a specific body system (s055)	610	1.1
18	Skin lesion (s865)	601	1.1
19	Injury/back (j515)	591	1.1
20	Symptoms of unspecified joints (s970)	575	1.0

¹Based on National Center for Health Statistics, D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care. *Vital and Health Statistics*. Series 2, No. 78. DHEW Pub. No. (PHS) 79-1352. Public Health Service, Washington, U.S. Government Printing Office, Feb. 1979.

Table 6. Number and percent distribution of physiotherapy office visits by the 10 most common principal reasons for visit for selected specialties: United States, 1980 and 1981

Rank	Most common principal reason for visit and RVC ¹ code	Physiotherapy office visits	
		Number in thousands	Percent distribution
General and family practice			
...	All physiotherapy visits	21,115	100.0
1	Back symptoms (s905)	3,227	15.3
2	Low back symptoms (s910)	1,966	9.3
3	Neck symptoms (s900)	1,351	6.4
4	Shoulder symptoms (s940)	1,016	4.8
5	Knee symptoms (s925)	766	3.6
6	Leg symptoms (s920)	*430	*2.0
7	Foot and toe symptoms (s935)	*416	*2.0
8	Headache (s210)	*398	*1.9
9	Physical medicine and rehabilitation (t400)	*396	*1.9
10	Hip symptoms (s915)	*355	*1.8
Orthopedic surgery			
...	All physiotherapy visits	12,004	100.0
1	Knee symptoms (s925)	1,774	14.8
2	Back symptoms (s905)	1,222	10.2
3	Low back symptoms (s910)	1,212	10.1
4	Neck symptoms (s900)	994	8.3
5	Shoulder symptoms (s940)	768	6.4
6	Postoperative visit (t205)	655	5.5
7	Hip symptoms (s915)	*297	*2.5
8	Wrist symptoms (s955)	*280	*2.3
9	Elbow symptoms (s950)	*279	*2.3
10	Ankle symptoms (s930)	*275	*2.3

¹Based on National Center for Health Statistics, D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care. *Vital and Health Statistics. Series 2, No. 78.* DHEW Pub. No. (PHS) 79-1352. Public Health Service, Washington, U.S. Government Printing Office, Feb. 1979.

Prior visit status

More than 60 percent of all physiotherapy visits to office-based physicians were by patients who had seen the physician before for problems that had previously been treated by the physician ("old patients" with an "old problem"). This was true for all age groups except for patients less than 15 years old who had a majority of visits classified as "old patients" with "new problem."

Disposition

Data on disposition show that the majority of physiotherapy office visits involved some type of followup, with "return at specific time" being the most frequent disposition decision (table 10).

Table 7. Number and percent distribution of physiotherapy office visits by major diagnostic groups: United States, 1980 and 1981

Principal diagnosis and ICD-9-CM ¹ code	Physiotherapy office visits	
	Number in thousands	Percent distribution
All physiotherapy office visits	56,023	100.0
Infectious and parasitic diseases (001-139)	865	1.5
Neoplasms (140-239)	*292	*0.5
Endocrine, nutritional, and metabolic diseases and immunity disorders (240-279)	*333	*0.6
Mental disorders (290-319)	548	1.0
Diseases of nervous system and sense organs (320-389)	2,203	3.9
Diseases of circulatory system (390-459)	2,404	4.3
Diseases of respiratory system (460-519)	1,801	3.2
Diseases of digestive system (520-579)	695	1.2
Diseases of genitourinary system (580-629)	1,390	2.5
Diseases of skin and subcutaneous tissue (680-709)	5,435	9.7
Diseases of musculoskeletal system and connective tissue (710-739)	17,801	31.8
Symptoms, signs, and ill-defined conditions (780-799)	844	1.5
Injury and poisoning (800-999)	17,456	31.2
Supplementary classification (V01-V82)	2,691	4.8
Other diagnosis ²	535	1.0
Unknown diagnosis ³	730	1.3

¹Based on Public Health Service and Health Care Financing Administration: *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*. DHHS Pub. No. (PHS) 80-1260. Public Health Service, Washington, U.S. Government Printing Office, Sept. 1980.

²Includes diseases of the blood and blood-forming organs (280-289); complication of pregnancy, childbirth, and the puerperium (630-676); congenital anomalies (740-759); and certain conditions originating in the perinatal period (760-779).

³Includes blank diagnosis, noncodable diagnosis, and illegible diagnosis.

Duration of visit

Duration of visit is that amount of time spent in face-to-face contact between physician and patient. It does not include time spent waiting to see the physician; time spent receiving care from sources other than the physician without the presence of the physician; or time spent reviewing patient records, test results, and so forth. Data in table 10 indicate that the duration of more than 60 percent of the physiotherapy office visits were between 6 and 15 minutes with a mean duration of 15 minutes.

Table 8. Number and percent of physiotherapy office visits by the 20 most common principal diagnoses: United States, 1980 and 1981

Rank	Most common principal diagnosis and ICD-9-CM ¹ code	Physiotherapy office visits	
		Number in thousands	Percent distribution
...	All physiotherapy visits	56,023	100.0
1	Sprains and strains of other and unspecified parts of back	4,281	7.6
2	Sprains and strains of sacroiliac region	3,221	5.7
3	Other and unspecified disorders of back	2,889	5.2
4	Diseases of sebaceous glands	2,244	4.0
5	Other disorders of soft tissues	2,105	3.8
6	Peripheral enthesopathies and allied syndromes	1,706	3.0
7	Osteoarthritis and allied disorders	1,653	3.0
8	Intervertebral disc disorders	1,418	2.5
9	Spondylosis and allied disorders	1,324	2.4
10	Other and unspecified arthropathies	976	1.7
11	Other disorders of synovium, tendon, and bursa	960	1.7
12	Sprains and strains of knee and leg	940	1.7
13	Psoriasis and similar disorders	930	1.7
14	Other disorders of cervical region	855	1.5
15	Sprains and strains of ankle and foot	736	1.3
16	Contusion of lower limb and of other unspecified site	665	1.2
17	Rheumatoid arthritis and other inflammatory polyarthropathies	661	1.2
18	Disorders of muscle, ligament, and fasci.	635	1.1
19	Essential hypertension	634	1.1
20	Other and unspecified disorders of joint	593	1.1

¹Based on Public Health Service and Health Care Financing Administration: *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM). DHHS Pub. No. (PHS) 80-1260. Public Health Service. Washington, U.S. Government Printing Office, Sept. 1980.

Table 10. Number and percent distribution of physiotherapy office visits by prior visit status, disposition, and duration of visit: United States, 1980 and 1981

Prior visit status, disposition, and duration of visit	Physiotherapy office visits	
	Number in thousands	Percent distribution
All physiotherapy office visits	56,023	100.0
Prior visit status		
New patient	8,863	15.8
Old patient	47,161	84.2
New problem	12,449	22.2
Old problem	34,712	62.0
Disposition ¹		
No followup planned	3,696	6.6
Return at specific time	37,007	66.1
Return if needed	13,374	23.9
Telephone followup planned	1,924	3.4
Referred to other physician	944	1.7
Return to referring physician	*355	*0.6
Admit to hospital	*301	*0.5
Other	*47	*0.1
Duration		
0 minute ²	1,058	1.9
1-5 minutes	6,016	10.7
6-10 minutes	16,822	30.0
11-15 minutes	18,011	32.2
16-30 minutes	12,001	21.4
30 minutes or more	2,115	3.8

¹May not add to 100.0 because more than 1 disposition was possible.

²Represents office visits in which there was no face-to-face contact between the patient and the physician.

Table 9. Number and percent distribution of physiotherapy office visits by major reason for visit: United States, 1980 and 1981

Major reason for visit	Physiotherapy office visits	
	Number in thousands	Percent distribution
All physiotherapy office visits	56,023	100.0
Acute problem	24,796	44.2
Chronic problem/routine	14,235	25.4
Chronic problem/flareup	7,312	13.1
Postsurgery or postinjury	8,149	14.6
Nonillness care ¹	1,531	2.7

¹Includes, for example, routine prenatal care, general examination, and well-baby examination.

Technical notes

Source of data and sample design

The estimates presented in this report are based on the findings of the National Ambulatory Medical Care Survey (NAMCS), a sample survey of office-based care conducted annually from 1973 through 1981 and again in 1985 by the National Center for Health Statistics. The target universe of NAMCS is composed of office visits made by ambulatory patients to non-Federal and noninstitutional physicians who are primarily engaged in office-based, patient-care practice. Excluded from the survey are visits to physicians practicing in Alaska and Hawaii, as are visits to anesthesiologists, pathologists, and radiologists.

NAMCS uses a multistage probability sample design that involves a step sampling of primary sampling units (PSU's), physicians' practices within PSU's, and patient visits within physicians' practices. The physician sample (5,805 physicians for 1980 and 1981) was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Those members of the sample who proved to be in scope and eligible participated at a rate of 77.3 percent. Responding physicians completed visit records for a systematic random sample of office visits made during a randomly assigned weekly reporting period. Telephone contacts were excluded. During 1980 and 1981 responding physicians completed 89,447 visit records on which they recorded 97,796 drug mentions. Characteristics of the physician's practice, such as primary specialty and type of practice, were obtained during an induction interview. The National Opinion Research Center, under contract to the National Center for Health Statistics, was responsible for the field operations of the survey.

Sampling errors and rounding

The standard error is a measure of the sampling variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. The relative standard error of an estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. In this report, any estimate that exceeds a relative standard error of 30 percent is marked with an asterisk. Approximate relative standard errors of selected aggregate statistics are shown in tables I and II.

The determination of statistical inference is based on a two-sided *t*-test with a critical value of 1.960 (0.05 level of confidence). Terms relating to differences, such as "exceeded" or "fell below" indicate that the differences are statistically significant. Terms such as "similar" or "roughly equal" mean that no statistical significance exists between the estimates being compared. In the tables of the report, estimates have been rounded to the nearest thousand. For this reason, detailed estimates do not always add to totals.

Table I. Approximate relative standard errors of estimated number of office visits based on all physician specialties: NAMCS, 1980 and 1981

<i>Estimated number of office visits</i>		<i>Relative standard error</i>
Number in thousands		Percent
200*	.....	*44.8
400*	.....	*31.7
450*	.....	*30.0
1,000	.....	20.2
2,000	.....	14.5
5,000	.....	9.5
10,000	.....	7.1
20,000	.....	5.6
50,000	.....	4.4
100,000	.....	3.9
200,000	.....	3.6
500,000	.....	3.5

EXAMPLE OF USE OF TABLE: An aggregate of 30,000,000 visits has a relative standard error of 5.0 percent or a standard error of 1,500,000 visits (5.0 percent of 30,000,000).

Table II. Approximate relative standard errors of estimated number of office visits based on an individual physician specialty: NAMCS, 1980 and 1981

<i>Estimated number of office visits</i>		<i>Relative standard error</i>
Number in thousands		Percent
200*	.....	*46.7
450*	.....	*31.5
500*	.....	*30.0
1,000	.....	21.5
2,000	.....	16.0
5,000	.....	11.1
10,000	.....	9.0
20,000	.....	7.7
50,000	.....	6.8

EXAMPLE OF USE OF TABLE: An aggregate of 7,000,000 visits has a relative standard error of 10.0 percent or a standard error of 700,000 visits (10.0 percent of 7,000,000).

Definitions

An *office* is a place that physicians identify as a location for their ambulatory practice. Responsibility for patient care and professional services rendered in an office resides with the individual physician rather than with an institution.

A *visit* is a direct personal exchange between an ambulatory patient seeking health care and a physician, or staff member working under the physician's supervision, who provides the health services.

An *acute problem* is a morbid condition with a relatively sudden or recent onset (within 3 months of the visit).

A *chronic problem* is a morbid condition that existed for 3 months or longer before the visit.

Symbols

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

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