

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

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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

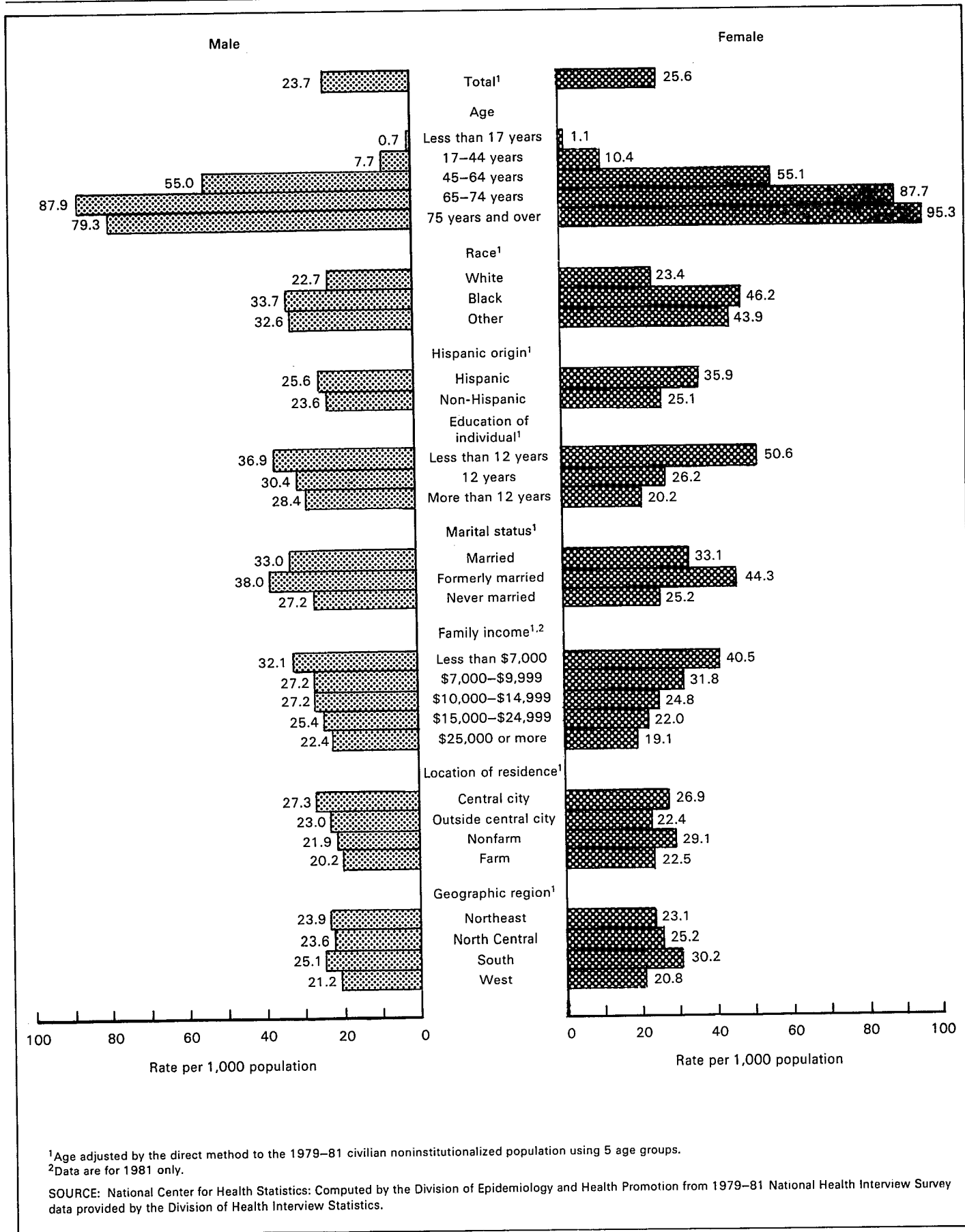
Table 3 summarizes four different sets of indicators of the impact of diabetes. While only about 15 percent of the general

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.

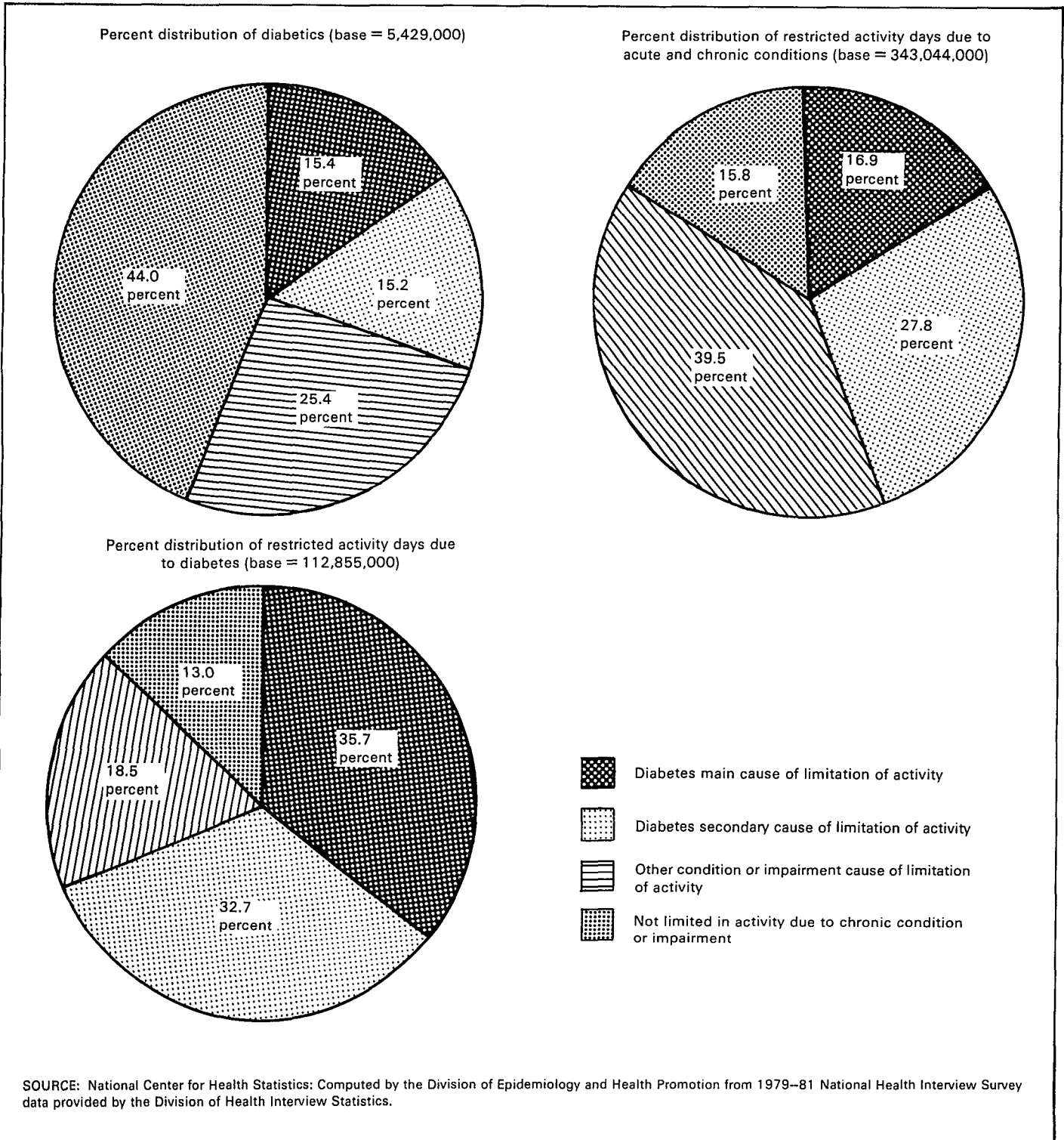


Figure 2. Percent distribution of diabetics and of selected types of restricted activity days by limitation of activity due to diabetes and other causes: United States, 1979-81

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

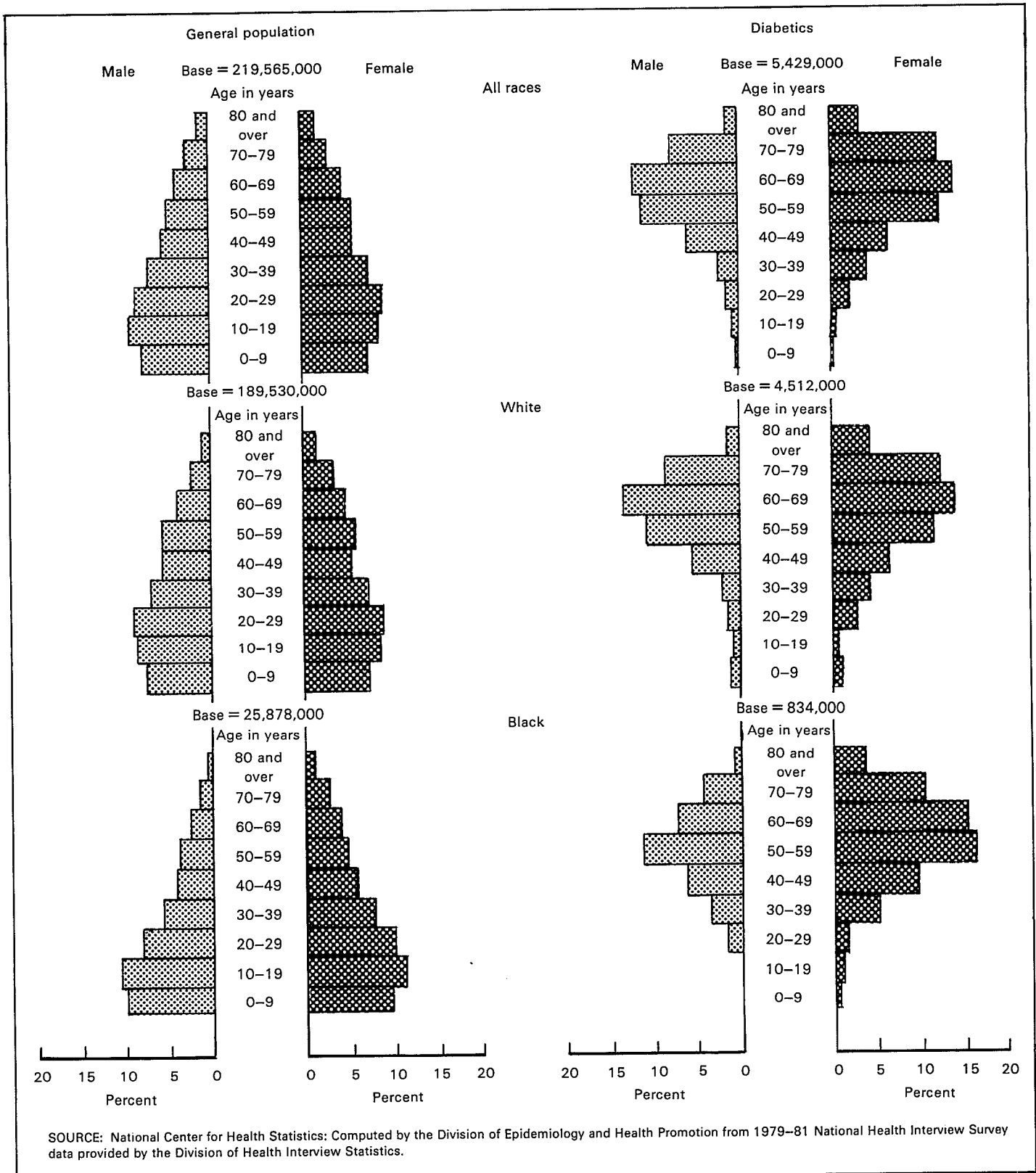


Figure 3. Age-sex composition of the general population and of diabetics by race: United States, 1979-81

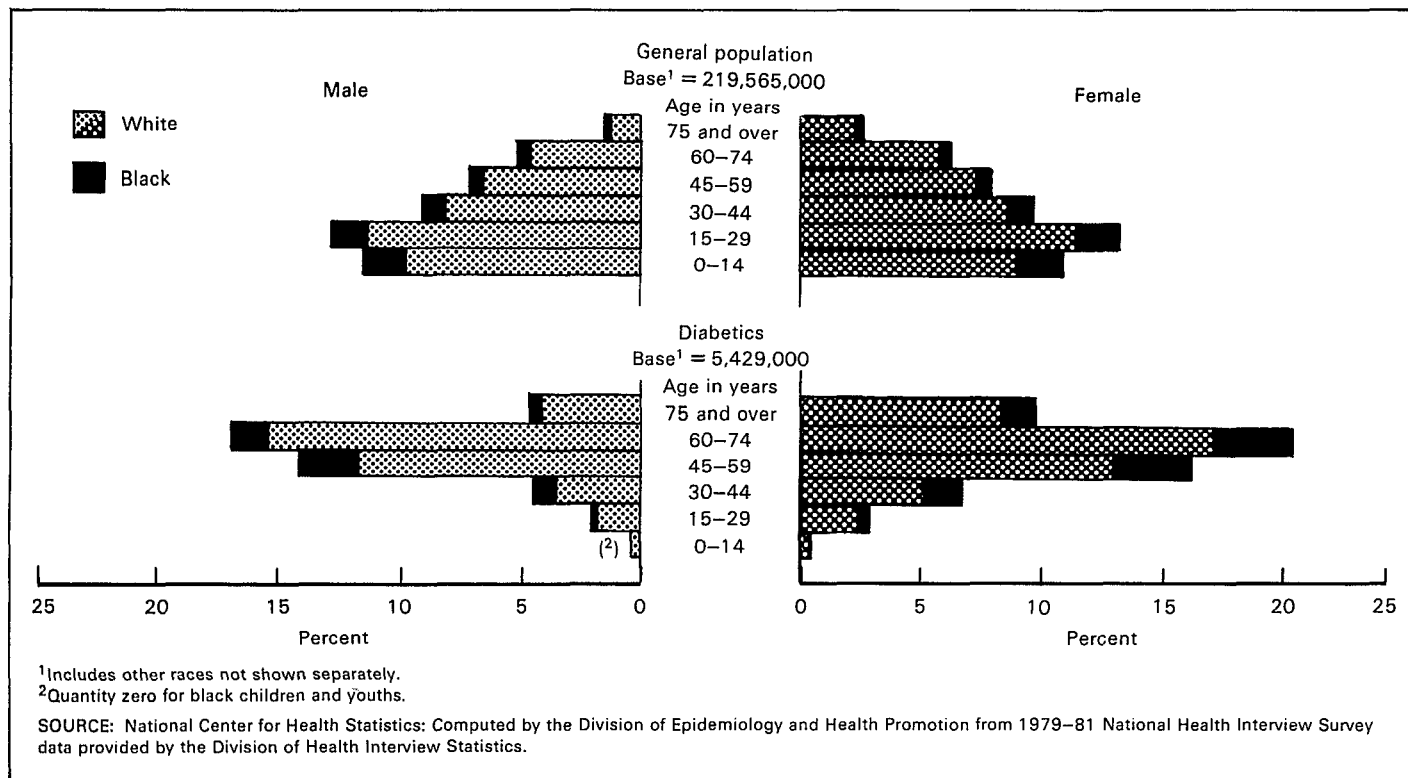


Figure 4. Age-sex-race composition of diabetics and the general population: United States, 1979-81

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.

References

- ¹National Center for Health Statistics, S. S. Jack and P. W. Ries: Current estimates from the National Health Interview Survey, United States, 1979. *Vital and Health Statistics*. Series 10, No. 136. DHHS Pub. No. (PHS) 81-1564. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1981.
- ²National Center for Health Statistics, S. S. Jack: Current estimates from the National Health Interview Survey, United States, 1980. *Vital and Health Statistics*. Series 10, No. 139. DHHS Pub. No. (PHS) 82-1567. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1981.
- ³National Center for Health Statistics, B. Bloom: Current estimates from the National Health Interview Survey, United States, 1981. *Vital and Health Statistics*. Series 10, No. 141. DHHS Pub. No. (PHS) 82-1569. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1982.
- ⁴A. S. Krolewski and J. H. Warram: Epidemiology of Diabetes Mellitus, in A. Marble, L. P. Krall, R. F. Bradley, A. R. Christlieb, and J. S. Soeldner, eds., *Joslin's Diabetes Mellitus*, 12th ed. Philadelphia. Lea and Febiger, 1985, pp. 12-42.
- ⁵L. P. Krall, P. S. Entmacher, and T. F. Drury: Life Cycle in Diabetes: Socioeconomic Aspects, in A. Marble, L. P. Krall, R. F. Bradley, A. R. Christlieb, and J. S. Soeldner, eds., *Joslin's Diabetes Mellitus*, 12th ed. Philadelphia. Lea and Febiger, 1985, pp. 907-936.
- ⁶M. I. Harris: Prevalence of Noninsulin-Dependent Diabetes and Impaired Glucose Tolerance. In *Diabetes in America*. NIH Pub. No. 85-1468. Washington. U.S. Government Printing Office, Aug. 1985, pp. VI-1-39.
- ⁷T. F. Drury, K. M. Danchik, and M. I. Harris: Sociodemographic Characteristics of Adult Diabetics. In *Diabetes in America*. NIH Pub. No. 85-1468. Washington. U.S. Government Printing Office, Aug. 1985, pp. VII-1-37.
- ⁸T. F. Drury: Disability Among Adult Diabetics. In *Diabetes in America*. NIH Pub. No. 85-1468. Washington. U.S. Government Printing Office, Aug. 1985, pp. XXVIII-1-22.
- ⁹T. F. Drury, P. A. Erickson, and A. L. Powell: Self-Assessed Health Status of Adult Diabetics. In *Diabetes in America*. NIH Pub. No. 85-1468. Washington. U.S. Government Printing Office, Aug. 1985, pp. XXIII-1-12.

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							
	17 years and over							
	All ages	Under 17 years	All persons 17 years and over	65 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 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	65 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								
				65 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	
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]

<i>Characteristic</i>	<i>All ages</i>		<i>17 years and over</i>		<i>17–44 years</i>		<i>45–64 years</i>		<i>65 years and over</i>	
	<i>General population¹</i>	<i>Known diabetics</i>	<i>General population¹</i>	<i>Known diabetics</i>	<i>General population¹</i>	<i>Known diabetics</i>	<i>General population¹</i>	<i>Known diabetics</i>	<i>General population¹</i>	<i>Known diabetics</i>
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
-

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Suggested citation

National Center for Health Statistics: Prevalence, impact, and demography of known diabetes in the United States. *Advance Data From Vital and Health Statistics*. No. 114. DHHS Pub. No. (PHS) 86-1250. Public Health Service, Hyattsville, Md., February 12, 1986.

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