Chapter 6

Sociodemographic Characteristics of Persons with Diabetes

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SUMMARY

This chapter examines the sociodemographic characteristics of persons with and without diagnosed diabetes. The primary data source is the 1989 National Health Interview Survey (NHIS), a household interview survey of a representative sample of the U.S. civilian, noninstitutionalized population age ≥18 years. The age distribution of persons with diagnosed diabetes is much older than that of the total population, with 57.9% of diabetic persons being age ≥60 years, compared with only 21.9% of nondiabetic persons. In adults age ≥18 years, median age is 32 years in insulin-dependent diabetes mellitus (IDDM), 64 years in non-insulin-dependent diabetes mellitus (NIDDM), and 40 years in nondiabetic populations. About 58.4% of those with NIDDM are women; this is similar to the percent in nondiabetic persons (52.4%). In persons with IDDM, ~47% are female. Among U.S. adults age ≥18 years with NIDDM, 69.6% are non-Hispanic white, 20.2% are non-Hispanic black, 4.7% are Mexican American, and 5.4% are of other race/ethnicity. This contrasts with the proportion of whites (79.3%), blacks (10.7%), and Mexican Americans (4.0%) in the nondiabetic population and illustrates the disproportionate rate of NIDDM in blacks and Mexican Americans. Duration of diabetes is longest in adults with IDDM, with 60.7% having duration ≥15 years, compared with 27.4% in NIDDM. Onset of diabetes is most frequently at age 10-14 years in IDDM cases diagnosed at age <20 years. Among U.S. adults age ≥18 years, mean age at diagnosis of diabetes is 16.2 years in IDDM and 51.1 years in NIDDM. In persons with NIDDM, mean age at diagnosis is oldest in whites (52.2 years) and youngest in Mexican Americans (45.3 years). Among persons with NIDDM, the highest proportion live in the southeastern United States (39.2%), particularly blacks (60.1%), whereas IDDM and nondiabetic persons are more evenly distributed throughout four regions (i.e., the Northeast, Southeast, Midwest, and West) of the country. Persons with NIDDM most frequently live in or just outside a central city (particularly blacks and Mexican Americans), compared with IDDM and nondiabetic persons, who are more likely to live just outside city bounds. Of those living in urban areas, most diabetic and nondiabetic persons (87.4%-90.5%) live in areas with a population of at least 250,000. Most diabetic and nondiabetic persons (59.1%-64.7%) are married. However, there are more widowed persons in NIDDM (22.1%), compared with nondiabetic groups (6.7%), explained at least in part by their older age. Consistent with the older age of persons with NIDDM, family size is smaller in NIDDM than IDDM and nondiabetic persons. The proportion who have completed at least some college education is 50.6% among IDDM, 21.0% among NIDDM, and 40.3% among nondiabetic groups. The proportion with family income ≥$40,000 is 37.7% in IDDM, 15.6% in NIDDM, and 32.8% in nondiabetic persons; the proportion with family income <$10,000 is 11.6% in IDDM, fully 27.9% in NIDDM, and 12.6% in nondiabetic persons. Even after accounting for age, persons with NIDDM have less education and lower income levels. Likewise, at every age, persons with NIDDM are less likely to be employed. Most IDDM (73.9%) and nondiabetic (66.2%) persons were employed in 1989, whereas most persons with NIDDM were not in the labor force (67.3%). Of all diabetic and nondiabetic persons who were working, most (68.4%-77.2%) worked for private companies as opposed to working for a government or being self-employed. Compared with IDDM and nondiabetic persons, particularly at age 18-44 years, there are more persons with NIDDM who are military veterans.

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INTRODUCTION

Understanding the sociodemographic characteristics of people with diabetes in the United States is important for many activities, including health care planning, health education, and public health research. Before developing diabetes-related health care products or programs, health care planners must know the age, income, and other demographic characteristics of the target population they hope to reach. When health educators are preparing diabetes-related educational materials or activities, they need to know the demographic profile of the target audience, so that appropriate programs or efforts are made available. Research projects may wish to examine the comparability of their data to those of the United States, requiring an assessment of the demographic features of diabetic persons in the United States.

Previous reports have described the sociodemographic characteristics of people with diabetes. One of the most detailed reports, which focused on adults age ≥20 years, was the first edition of *Diabetes in America*[1]. As presented in that report, people with diabetes in the United States were more likely to be older, female, members of a race or ethnic minority, less educated, and have lower incomes compared with people without diabetes. In this chapter, we reexamine these and other factors using more current data.

SOURCES OF DATA

The primary data source for this chapter is the 1989 NHIS, a cross-sectional household interview survey of a representative sample of the U.S. civilian, noninstitutionalized population[2]. It has been conducted annually since 1957 by the National Center for Health Statistics, and the survey methods and quality control measures have been described[3-5]. Interviews are conducted by trained interviewers from the U.S. Bureau of the Census, and response rates have been 95%-98%.

The NHIS includes a basic questionnaire that remains unchanged from year to year and additional questionnaires on special health topics that vary annually. In 1989, the total interviewed sample age ≥18 years for the basic questionnaire was 84,572 persons from 45,711 sampled households. These persons were given a questionnaire about demographic characteristics, use of health services, weight and height, and health conditions.

Unlike other years when the NHIS asked respondents

from one-sixth of the households if any household member had been diagnosed as having diabetes, the 1989 NHIS attempted to identify all persons age ≥18 years with diagnosed diabetes by administering a screening question to a household respondent. This resulted in 2,829 persons who were reported to have diabetes. Detailed follow-up questions were asked of all identified cases; nonresponse was 4.5%. These questions eliminated 10.5% of individuals (n=295) who either did not have or no longer had diabetes (e.g., gestational diabetes that subsided postpartum). The respondents also verified that their diabetes had been diagnosed by a physician, yielding 2,405 confirmed cases of diagnosed diabetes. A special health topic questionnaire on diabetes was then administered, consisting of questions about the diagnosis of diabetes, medical care received, and personal health practices. Self-response was obtained for all diabetic persons.

In 1989, in addition to the special health topic questionnaire given to persons with diabetes, another special questionnaire was administered to an ~one-quarter probability sample of persons who did not report a medical history of diabetes (82.2% self-response, 17.8% proxy response). The questions related to frequency of diabetes screening, risk factors for diabetes, and certain health conditions. Of 22,592 persons identified as nondiabetic, the questionnaire was completed by 20,131 persons (89.1%); self-response was obtained for all of these subjects. This nondiabetic population has been used as a comparison group for the diabetic population throughout the chapter.

Diabetic persons were designated as having IDDM (n=124) if all of the following criteria were met: 1) body mass index (weight [kg] divided by height [m] squared, calculated from self-reported height and weight) <27 in men and <25 in women; 2) age at diagnosis of diabetes <30 years; and 3) continuous insulin treatment since diagnosis. Missing data for these criteria precluded assigning 13 individuals to IDDM or NIDDM categories. The remaining 2,268 persons were considered to have NIDDM; of these, 922 were treated with insulin. Figures and appendices in the chapter providing estimates for all diabetic persons and the total population include the 13 persons not classified as having IDDM or NIDDM.

The NHIS samples households from the noninstitutionalized population and therefore does not include people in the military or living in institutions. While data from the 1985 National Nursing Home Survey[6] estimated that 12.4% of people in nursing homes have diabetes, this represents <3% of all persons age ≥18 years in the United States with diagnosed diabetes.

Likewise, the number of personnel with diabetes in the military is likely to be small because they are young and healthy, and because the military represents a small proportion of the population. Persons age <18 years were not included in the 1989 NHIS special health topic questionnaire on diabetes. However, others have reported that this group comprises ~2% of all people with diabetes in the United States[7].

Diabetic status in the NHIS is based only on self-report. No laboratory testing was used to confirm this diagnosis or to identify undiagnosed diabetic cases. Therefore, the sociodemographic characteristics discussed in this chapter relate only to people with diagnosed diabetes. This information is useful for planning the extent and target of products and services for persons known to have diabetes. The Second National Health and Nutrition Examination Survey (NHANES II), conducted in 1976-80, employed an oral glucose tolerance test in addition to a questionnaire that queried persons about previously diagnosed diabetes[8]. These data demonstrated that ~50% of all diabetes is undiagnosed[9].

Since diabetes was self-reported, the NHIS does not include persons who would not admit or had not been told that they had diabetes. However, the rate of agreement between diabetes based on self-report from interview and medical records is exceptionally good[10-12], being >95% in some studies[10,11]. Medical records are relatively accurate for the diagnosis of diabetes[13]. Evidence against a reporting bias by sex[11] and race[14] has been reported.

Stratified analyses of diabetic subjects by race/ethnicity was possible based on adequate sample size only for non-Hispanic whites (n=1,585), non-Hispanic blacks (n=600), and Mexican Americans (n=104). The small number of IDDM subjects among non-Hispanic blacks (n=7), Mexican Americans (n=0), and in older age groups (e.g., n=102 for age 18-44 years; n=19 for age 45-64 years, and n=3 for age ≥65 years) did not allow stratification by these factors. Hispanic persons were excluded from white and black races to allow comparison of more homogeneous groups. The proportion of Hispanic persons was 8.0% (n=1,401) among whites and 1.5% (n=50) among blacks. Among persons of other races, 6.9% (n=41) were of Hispanic non-Mexican origin; because of their small number, this heterogeneous group was not examined separately. The proportion of Hispanics in each racial group was similar in diabetic and nondiabetic persons.

All analyses were performed using appropriate sampling weights to provide estimates that reflect the U.S.

population. The weights were based on the inverse of the selection probability of each participant, with adjustments made for undercoverage and nonresponse to ensure the representiveness of the sample[2].

Since the 1989 NHIS only included persons age ≥18 years, this may exclude a large proportion of all persons with IDDM. Analyses of age, duration of diabetes, and age at onset of diabetes have been supplemented with data from the Pittsburgh IDDM Registry[15]. The registry contains data on 1,585 predominantly white (90.6%) IDDM patients diagnosed at age <20 years during 1965-89 in Allegheny County, PA.

DEMOGRAPHIC CHARACTERISTICS

AGE DISTRIBUTION

The age distribution of diabetic adults is very different than that of the total adult population (Figure 6.1). In 1989, whereas 57.9% of diabetic adults were age ≥60 years, only 21.9% of all adults were in this age category; 89.6% of diabetic adults were age ≥40 years, compared with 51.2% of the total population. The median age for the diabetic population was 63 years, very different from the median of 40 years for all adults. Figure 6.2 contrasts the age distributions of IDDM, NIDDM, and nondiabetic populations. The distribution of nondiabetic persons falls between the younger distribution of IDDM and older distribution of NIDDM persons. Median age among persons age ≥18 years was 32 years for IDDM, 64 years for NIDDM, and 40 years for nondiabetic persons.

Figure 6.1

Age Distribution of All Diabetic Persons and the Total Population Age ≥18 Years, U.S., 1989

Diabetes includes both IDDM and NIDDM. See Appendix 6.2 for further details.

Source: 1989 National Health Interview Survey
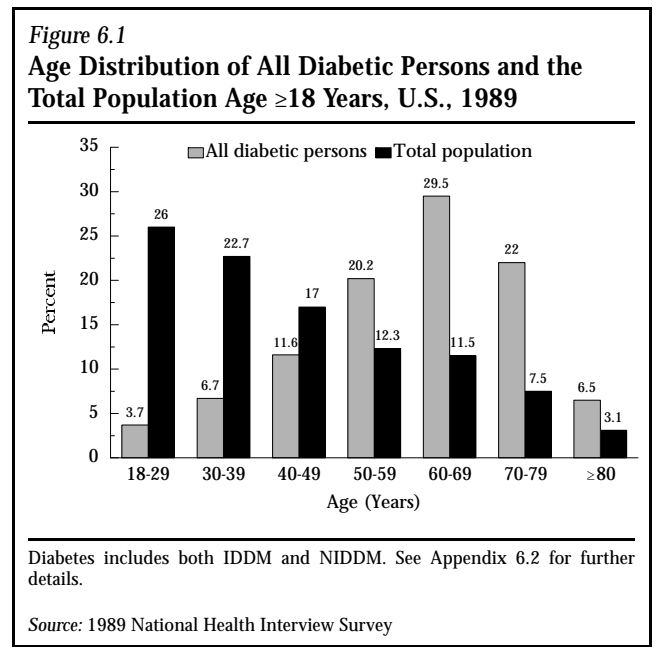
Figure 6.2

Age Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, U.S., 1989
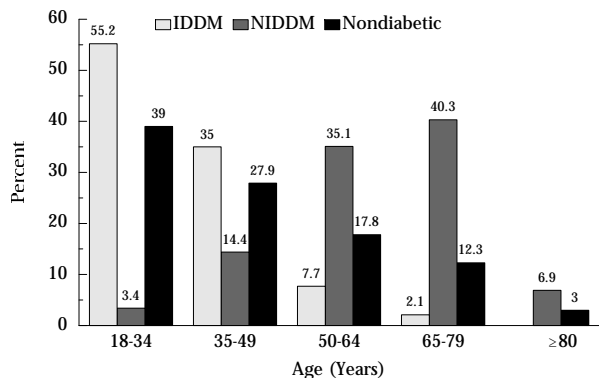
See Appendix 6.2 for further details.

Source: 1989 National Health Interview Survey

The age distribution for IDDM patients diagnosed at age <20 years in Allegheny County, PA during 1965-89 is shown in Figure 6.3. These persons were diagnosed with IDDM at age <20 years during 1965-89. The age range is 0-44 years, with most (22%) age 25-29 years. The distribution is approximately the same in males and females. Age distributions are shown for NIDDM men and women among non-Hispanic whites, non-Hispanic blacks, and Mexican Americans in Figure 6.4. Whereas most NIDDM whites are age ≥65 years (51.7%), most NIDDM blacks and an even higher proportion of NIDDM Mexican Americans are age 45-64 years (46.5% and 55.3%,

respectively). A higher proportion of NIDDM women than men are age ≥65 years among whites and blacks, but there is little difference by sex among Mexican Americans. Detailed age distributions in Allegheny County, PA IDDM subjects and in U.S. IDDM, NIDDM, nondiabetic, and total populations age ≥18 years are shown in Appendices 6.1 and 6.2 according to sex and race.

Figure 6.3

Age Distribution of Persons with IDDM, Allegheny County, PA, 1989
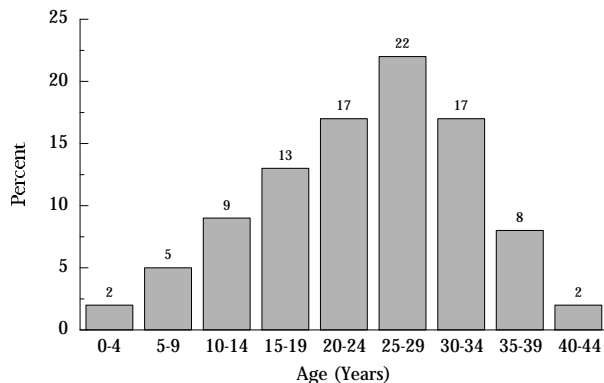
Incident cases of IDDM during 1965-89 and at age <20 years. See Appendix 6.1 for further details.

Source: Pittsburgh IDDM Registry

Figure 6.4

Age Distribution of Men and Women with NIDDM Age ≥18 Years by Race, U.S., 1989
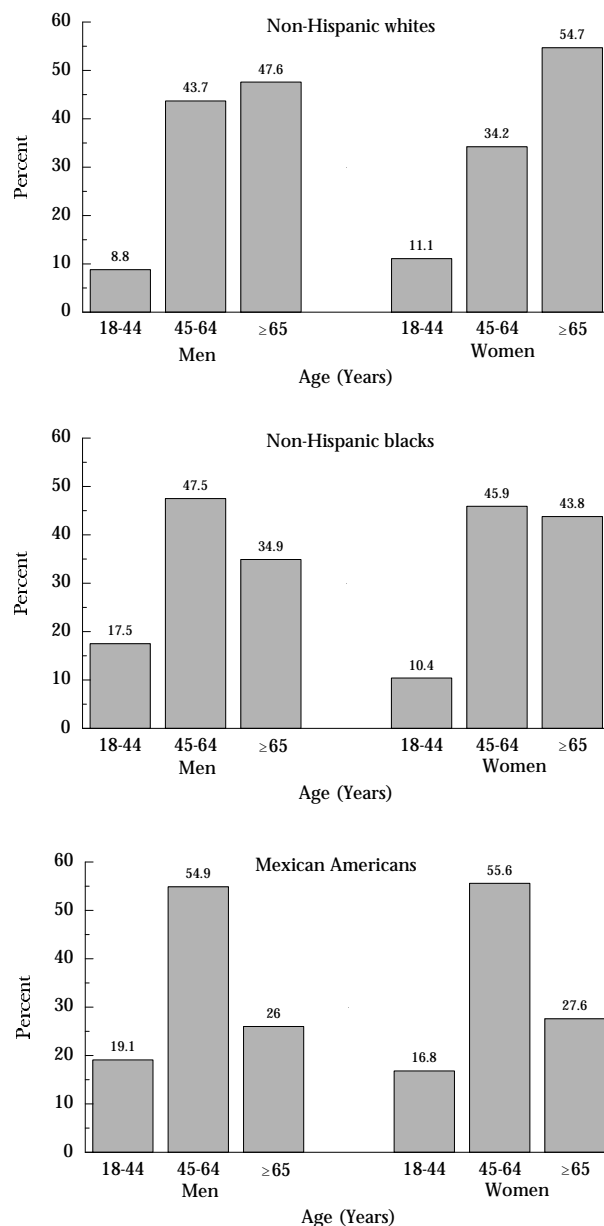
See Appendix 6.2 for further details.

Source: 1989 National Health Interview Survey

Figure 6.5

Sex Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, U.S., 1989
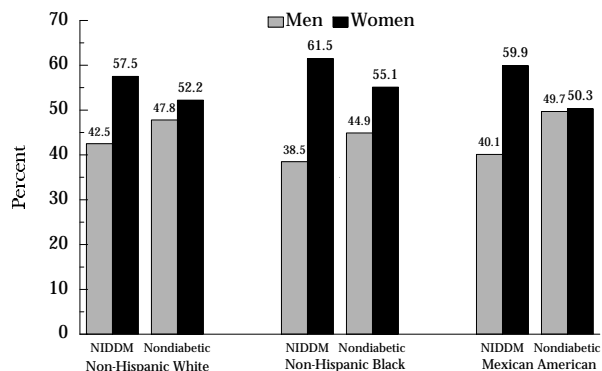
Source: 1989 National Health Interview Survey

SEX DISTRIBUTION

A higher proportion of adults with NIDDM are women (58.4%) than men (41.6%). Similarly, although less pronounced, a higher proportion of non-diabetic adults are women (52.4%) than men (47.6%). These higher proportions of women are found for non-Hispanic whites, non-Hispanic blacks, and Mexican Americans (Figure 6.5). The difference is greatest for NIDDM blacks, and little difference occurs for nondiabetic Mexican Americans. Among U.S. whites age ≥18 years with IDDM, a slightly higher proportion are men (53.4%) than women (46.6%). These proportions are almost the same as the proportion of males (53.2%) and females (46.8%) among IDDM patients from Allegheny County, PA.

Figure 6.6

Race/Ethnic Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, U.S., 1989
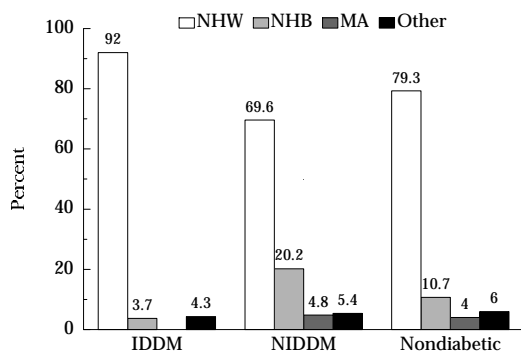
NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American.

Source: 1989 National Health Interview Survey

RACE DISTRIBUTION

Among adults with NIDDM, 69.6% are non-Hispanic white, 20.2% are non-Hispanic black, 4.8% are Mexican American, and 5.4% are of other races (Figure 6.6). This contrasts to the proportion of whites (79.3%), blacks (10.7%), and Mexican Americans (4.0%) in the nondiabetic population and illustrates the higher prevalence of NIDDM in blacks and Mexican Americans compared with whites. Most adults with IDDM are non-Hispanic white (92.0%). Race distributions in IDDM, NIDDM, and nondiabetic groups are virtually the same when examined separately in men and women.

DIABETES CHARACTERISTICS

DURATION OF DIABETES

Duration of diabetes among IDDM patients in Allegheny County, PA is shown in Figure 6.7. Duration is evenly distributed according to 5-year groups and there is little difference according to sex (Appendix 6.3). Duration of diabetes in U.S. diabetic adults age ≥18 years is shown in Figure 6.8. Consistent with the younger age at onset of IDDM, about 60.8% of those with IDDM and 27.4% of those with NIDDM have durations of ≥15 years. In persons with NIDDM, duration of diabetes increases with age (Appendix 6.4). There is little difference in duration between men and women with NIDDM (Appendix 6.4). A somewhat higher proportion of Mexican Americans have longer durations of NIDDM, compared with non-Hispanic

Figure 6.7

**Distribution of Persons with IDDM by Duration of Diabetes, Allegheny County, PA, 1989**
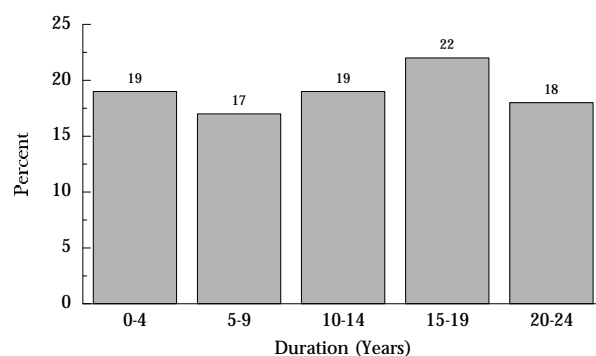
Incident cases of IDDM during 1965-89 and at age <20 years. See Appendix 6.3 for further details.

Source: Pittsburgh IDDM Registry

Figure 6.8
Distribution of IDDM and NIDDM Populations Age ≥18 Years by Duration of Diabetes, U.S., 1989
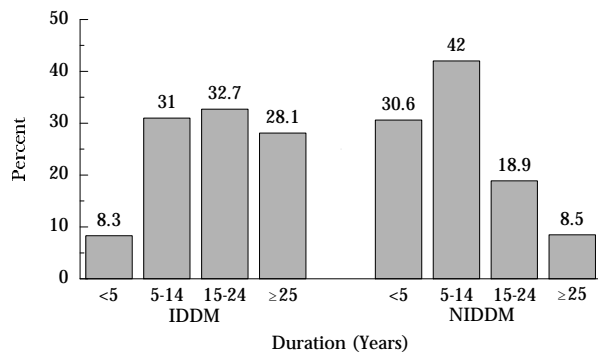
See Appendix 6.4 for further details.

Source: 1989 National Health Interview Survey

Figure 6.10
Mean Age at Diagnosis of Diabetes in IDDM and NIDDM Populations Age ≥18 Years by Sex and Race, U.S. 1989
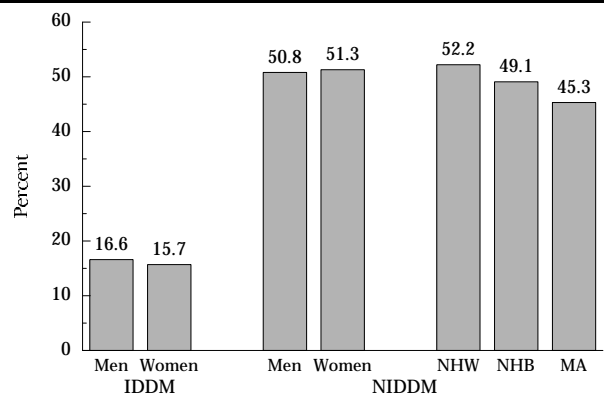
NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.6 for further details.

Source: 1989 National Health Interview Survey

whites and non-Hispanic blacks; durations of ≥15 years occur in 33.9% of Mexican Americans, 27.8% of whites, and 24.6% of blacks (Appendix 6.4).

AGE AT DIAGNOSIS OF DIABETES

Figure 6.9 and Appendix 6.5 show the distribution of age at onset of IDDM in Allegheny County, PA. Onset is most frequently at age 10-14 years, with a slightly older age at onset in males than females. For U.S. adults age ≥18 years, mean age at diagnosis is 16.2 years in IDDM and 51.1 years in NIDDM (Appendix 6.6). Mean age at diagnosis is virtually the same in

Figure 6.9
Distribution of Persons with IDDM by Age at Onset of Diabetes, Allegheny County, PA, 1989

Incident cases of IDDM during 1965-89 and at age <20 years. See Appendix 6.5 for further details.

Source: Pittsburgh IDDM Registry

men and women in both IDDM and NIDDM (Figure 6.10). Among persons with NIDDM, mean age at diagnosis is oldest in non-Hispanic whites (52.2 years) and youngest in Mexican Americans (45.3 years) (Figure 6.10). Mean age at diagnosis does not differ by sex in NIDDM whites, blacks, and Mexican Americans (Appendix 6.6).

PLACE OF RESIDENCE

REGION OF THE UNITED STATES

An approximately equal proportion (26.8%-29.0%) of adults with IDDM live in the Midwest, South, and West, while 15.9% live in the Northeast (Appendix 6.7). In NIDDM, most live in the South (39.2%), similar proportions live in the Northeast (21.8%) and Midwest (25.3%), and fewest live in the West (13.7%). A similar pattern is found in nondiabetic adults, although a somewhat higher percent lives in the West. Among persons with NIDDM, a substantially higher percent of non-Hispanic blacks (60.1%) live in the South, compared with non-Hispanic whites (34.4%) and Mexican Americans (44.5%) (Figure 6.11). A much higher percent of Mexican Americans live in the West (49.2%), compared with whites (11.9%) and blacks (6.3%). Similar patterns by race are found in nondiabetic adults. Among adults with IDDM, a higher percent of women (22.2%) than men (10.4%) live in the Northeast; no differences in regional distribution are found by sex in NIDDM and nondiabetic persons (Appendix 6.7).

Regional Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years by Race, U.S., 1989

NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.7 for further details.

Source: 1989 National Health Interview Survey

URBAN/RURAL RESIDENCE

Among adults with IDDM, the majority live in (23.8%) or just outside (52.0%) a central city (Appendix 6.8). Similarly, in NIDDM, most live in (32.4%) or just outside (39.8%) a central city. The proportion living in or near a city is also similar for nondiabetic persons. There are substantial differences by race in the distribution of urban/rural residence among both NIDDM and nondiabetic persons (Figure 6.12). Regardless of diabetes status, most non-Hispanic whites

(45.5%-50.4%) live just outside a central city, whereas most non-Hispanic blacks and Mexican Americans (51.8%-57.2%) live in a central city. In all groups, a small percent (≤2.5%) live on farms. Differences by age and sex are minimal (Appendix 6.8). Among persons with NIDDM, there is a suggestion that men (45.2%) are more likely than women (35.8%) to live just outside a central city; in contrast, women are more likely to live in a central city or nonfarm area than men.

POPULATION SIZE OF URBAN AREA

Figure 6.13 and Appendix 6.9 show the distribution of adults living in or just outside a central city according to population size of the urban area. Among persons with IDDM, 40.4% live in a metropolitan area of ≥1 million population, while 25.9% live in an area of 250,000-1 million (Appendix 6.9). Patterns are similar both in persons with NIDDM and nondiabetic persons. Among persons with NIDDM, differences are evident by race (Figure 6.13). Among NIDDM non-Hispanic whites, there is an equal distribution of persons living in areas with 250,000-1 million population (30.3%) and in areas with ≥1 million (30.9%). In contrast, non-Hispanic blacks (47.2%) and Mexican Americans (54.4%) are most likely to live in metropolitan areas with ≥1 million residents. There is a similar pattern by race among nondiabetic persons. In all groups, few persons (<9.6%) live in cities with a population of <250,000. Appendix 6.9 shows little if any differences by age or sex.

Urban/Rural Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years by Race, U.S., 1989
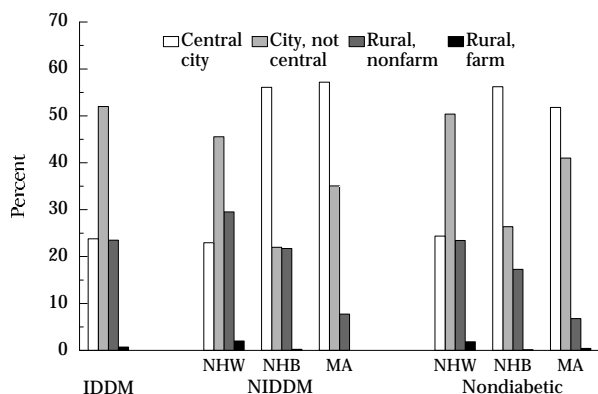
NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.8 for further details.

Source: 1989 National Health Interview Survey

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years by Size of Urban Population, U.S., 1989

Size of population is in thousands. NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.9 for further details.

Source: 1989 National Health Interview Survey

MARITAL STATUS

Except in women age ≥65 years, the majority of IDDM, NIDDM, and nondiabetic persons are married (59.1%-64.7%) (Appendix 6.10 and Figure 6.14). Per-

sons are more likely to have never been married at young ages compared with older ages and more likely to be widowed at old ages compared with young ages. The proportion of persons divorced or separated is higher in young and middle ages compared with old ages. A substantially higher proportion of women than men are widowed at age 45-64 years (9.4%-15.6% in women versus 1.7%-2.0% in men) and age

Figure 6.14

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, by Marital Status and Sex, U.S., 1989

See Appendix 6.10 for further details.

Source: 1989 National Health Interview Survey

Figure 6.15

Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Marital Status and Race, U.S., 1989

NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.10 for further details.
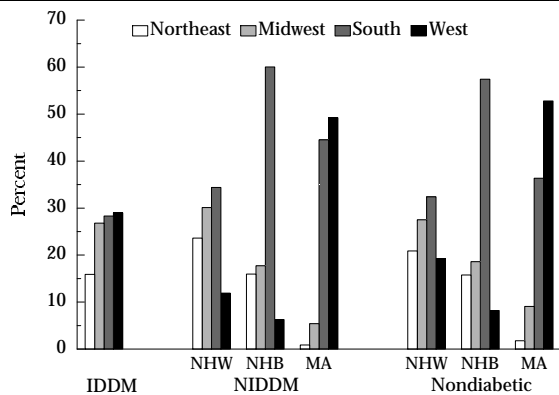
Source: 1989 National Health Interview Survey

≥65 years (45.4%-54.8% in women versus 9.4%-15.6% in men); this corresponds to a substantially lower proportion of women who are married at these same ages (35.2%-72.2% in women versus 76.0%-83.4% in men).

Consistent with the older age of persons with NIDDM, overall, a higher proportion of NIDDM than nondiabetic persons are widowed and a lower proportion have never been married (Appendix 6.10). At age 18-44 years, nondiabetic persons (29.2%) are more likely than those with NIDDM (15.7%) to have never been married, whereas a slightly higher percent of persons with NIDDM are married (67.1% versus 61.1%) or divorced/separated (15.7% versus 9.3%) (Figure 6.14). Among women age 45-64 years, a higher percent of nondiabetic persons (72.2%) are married relative to persons with NIDDM (58.3%), and a slightly higher percent of persons with NIDDM are widowed (15.6% versus 9.4%), or divorced/separated (19.3% versus 14.5%); no difference by diabetes status is found among men. Among women age ≥65 years, there is also a higher percent of nondiabetic persons (43.2%) relative to NIDDM persons (35.2%) who are married, and a higher percent of persons with NIDDM who are widowed (54.8% versus 45.4%); these differences are not observed in men.

At age 18-44 years, non-Hispanic blacks are the least likely to be married (41.2%) relative to other race/ethnic groups (64.9%-65.5%), and a higher percent of blacks have never been married (43.6% versus 26.3%-27.5%), primarily among nondiabetic persons (Figure 6.15). At ages 45-64 years and ≥65 years, both in NIDDM and nondiabetic groups, a higher percent of

blacks are divorced/separated or widowed and a lower percent are married. In addition, at age ≥65 years, a higher percent of Mexican Americans are married (70.8%), compared with non-Hispanic blacks (39.3%) and whites (58.3%).

TYPE OF COHABITATION

Figure 6.16 and Appendix 6.11 show the living arrangements for IDDM, NIDDM, and nondiabetic adults according to whether they live alone, live only with a non-relative, live with a spouse (which may include also living with another relative or non-relative), or live only with a relative other than a spouse. Few differences are evident by diabetes status, regardless of age. For all diabetic adults, most (58%-60%) live with a spouse. In both NIDDM and nondiabetic groups, persons age ≥65 years are more likely to live alone (15.9%-18.2%), compared with younger ages (8.2%-13.3% at age 18-44 years). Living relationships are shown for men and women in Figure 6.17. For adults with NIDDM, a smaller proportion of women (46.8%) than men (78.5%) live with a spouse, and a larger proportion of women live with a relative other than a spouse (22.1% versus 7.4%) or live alone (30.2% versus 13.0%). These differences by sex are similar in nondiabetic adults. Among both NIDDM and nondiabetic groups, a smaller proportion of non-Hispanic blacks (43.3%-48.7%) relative to non-Hispanic whites (62.3%-67.2%) and Mexican Americans (65.2%-69.6%) live with a spouse; instead a relatively larger proportion of blacks live with another relative (Figure 6.18). These differences by race are similar in all age groups (Appendix 6.11).

FAMILY SIZE

Overall, most adults with IDDM (30.4%) live in families with four or more persons, most adults with NIDDM (41.6%) live in families with two persons, and most adults without diabetes live either in families with two persons (30.8%) or four or more persons (31.8%) (Appendix 6.12). Family size within a household decreases with age similarly in both NIDDM and nondiabetic persons. There is little difference in family size according to diabetes status when examined separately in age groups. In both NIDDM and nondiabetic adults, there is little difference by sex in all age groups, except in persons age ≥65 years in whom women are more likely to live in households with smaller size. Family size is larger in non-Hispanic blacks than non-Hispanic whites, and in Mexican Americans than blacks and whites.

Figure 6.16

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, by Cohabitation and Age, U.S., 1989

All IDDM are age ≥18 years. See Appendix 6.11 for further details.

Source: 1989 National Health Interview Survey

Figure 6.17
Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Cohabitation and Sex, U.S., 1989

See Appendix 6.11 for further details.
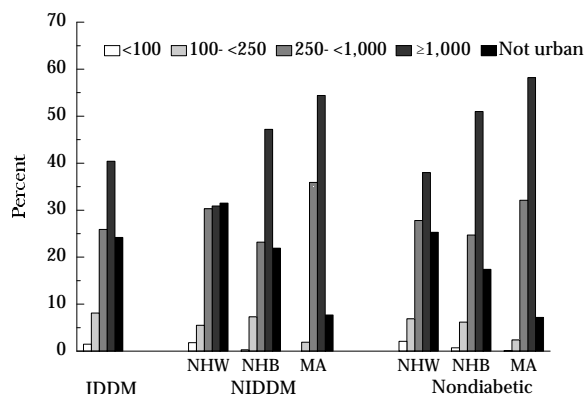
Source: 1989 National Health Interview Survey

Figure 6.18
Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Cohabitation and Race, U.S., 1989
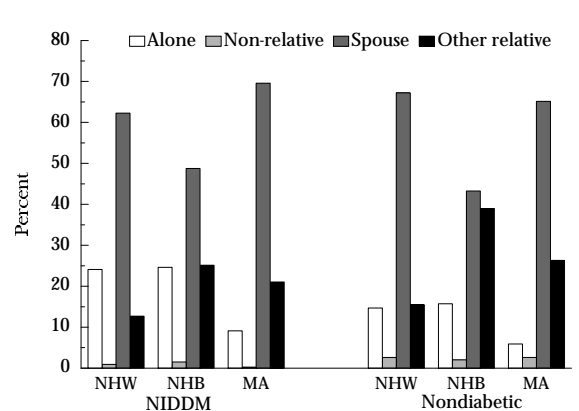
NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.11 for further details.
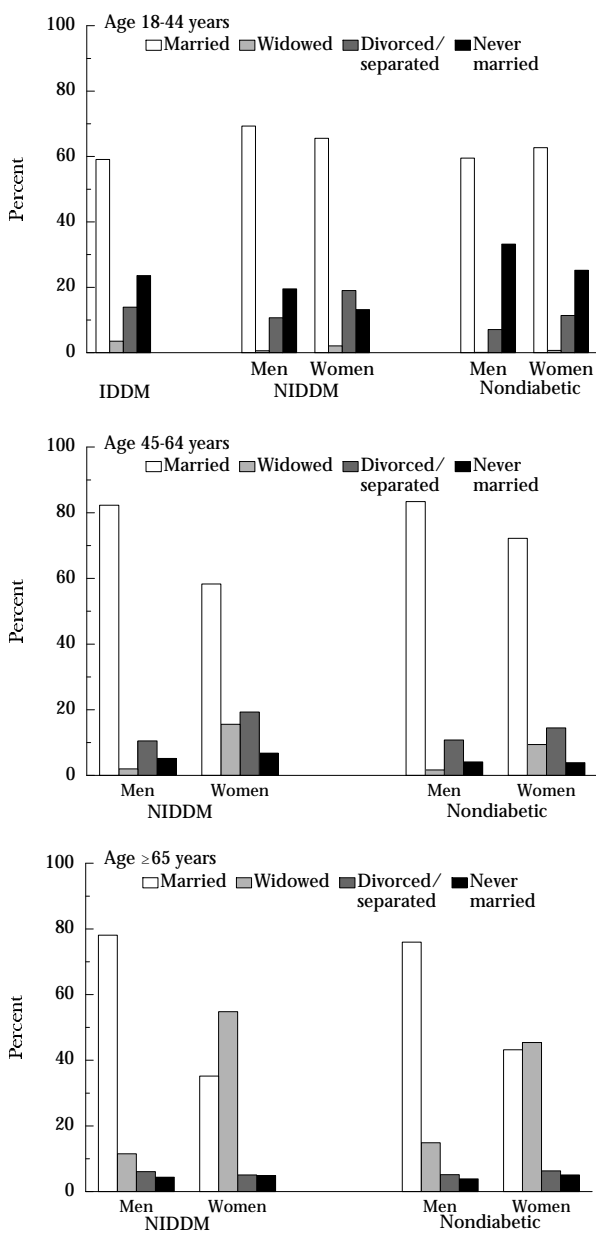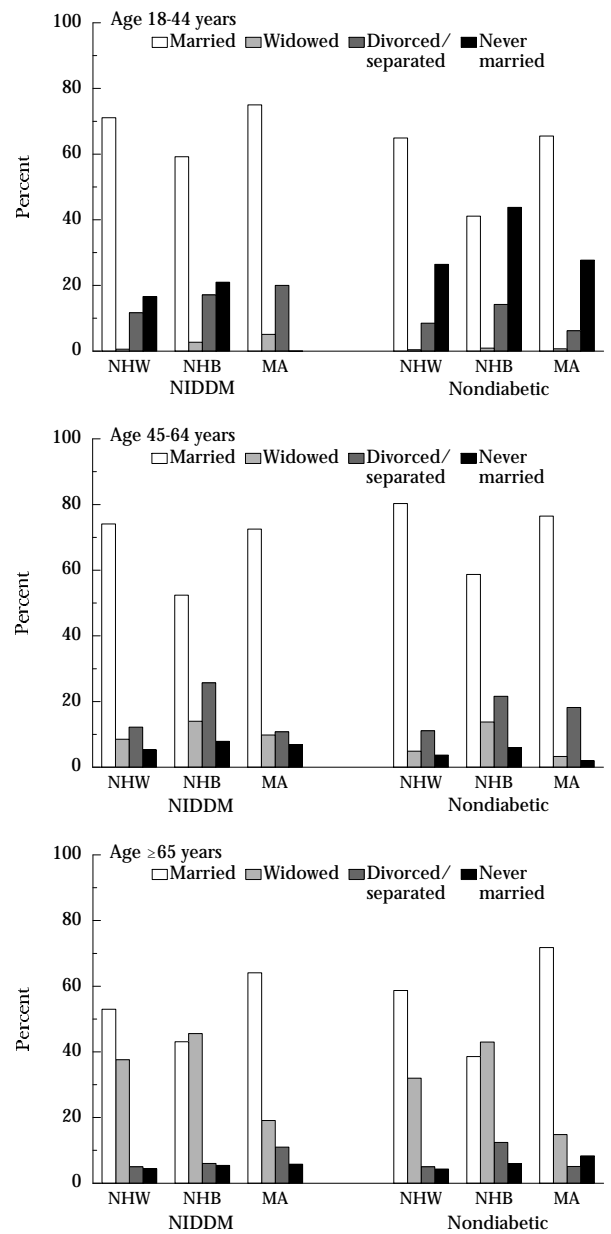
Source: 1989 National Health Interview Survey

EDUCATION

For all adults, the proportion completing at least some college education is 50.6% among IDDM, 21.0% among NIDDM, and 40.3% among nondiabetic groups (Appendix 6.13 and Figure 6.19); the proportions who have completed college are 20.4%, 9.5%, and 19.3%, respectively. In every age group, the proportion with <9 years education is greater for NIDDM

(9.2%-35.7%) than nondiabetic (3.8%-26.9%) persons and the proportion with some college is greater in nondiabetic (23.4%-46.5%) than NIDDM (16.6%-37.3%) persons (Figure 6.20). The percent distribution by education level is similar in IDDM over all ages (82.3% of whom are age 18-44 years), compared with nondiabetic persons age 18-44 years (Figure 6.20). Education level decreases as age increases in all groups (Figure 6.20). The proportion with some college education is lower in women than men at all ages

Figure 6.19
Percent of NIDDM and Nondiabetic Men and Women Age ≥18 Years with >12 Years Education, by Age, U.S., 1989
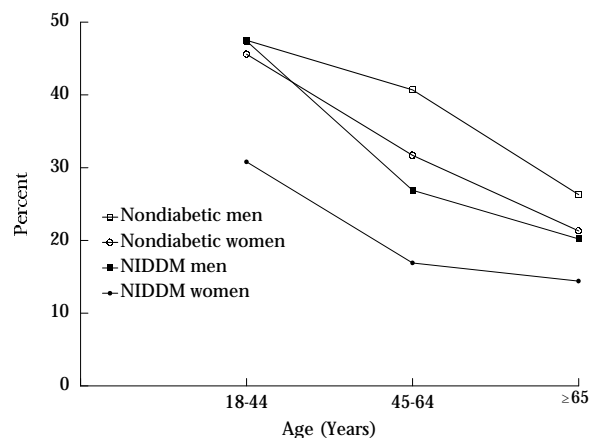
See Appendix 6.13 for further details.

Source: 1989 National Health Interview Survey

in both NIDDM and nondiabetic groups (Figures 6.19 and 6.20), particularly in persons age 18-44 years with NIDDM (30.8% in women and 47.4% in men). In both NIDDM and nondiabetic groups at all ages, the proportion with some college education is highest in non-Hispanic whites, intermediate in non-Hispanic blacks, and lowest in Mexican Americans (Figure 6.21). For example, among NIDDM persons age 18-44

years, the proportion is 41.8%, 35.4%, and 17.6% in whites, blacks, and Mexican Americans, respectively.

FAMILY INCOME

In persons with IDDM, 76.6% had a family income of

Figure 6.20

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, by Years of Education and Sex, U.S., 1989
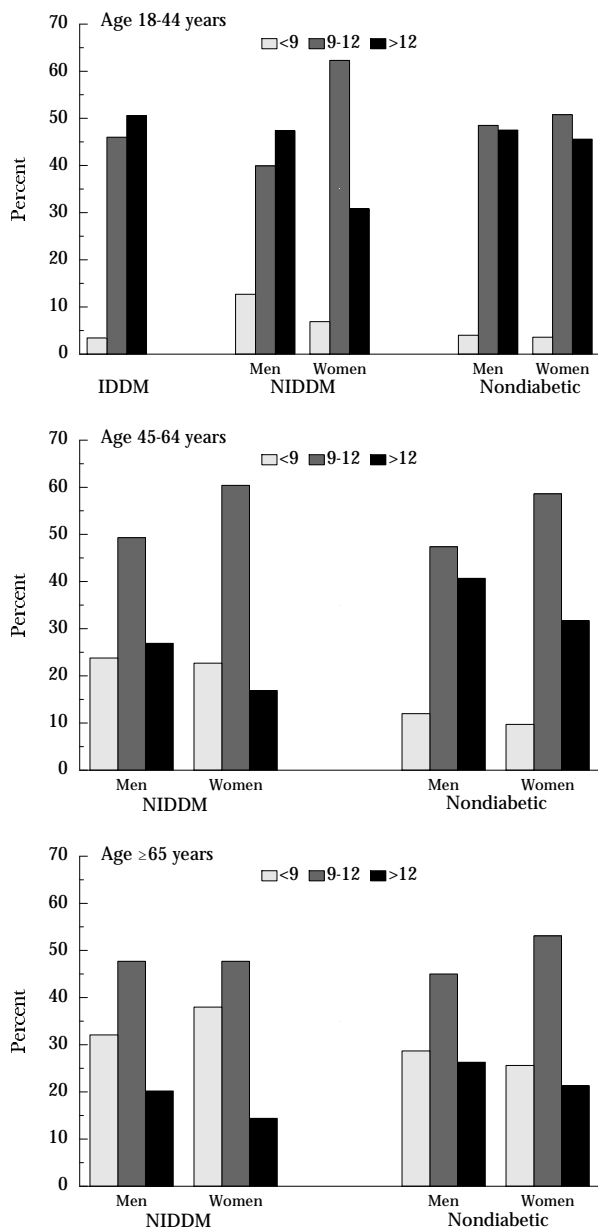
All IDDM are age ≥18 years. See Appendix 6.13 for further details.

Source: 1989 National Health Interview Survey

Figure 6.21

Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Years of Education and Race, U.S., 1989
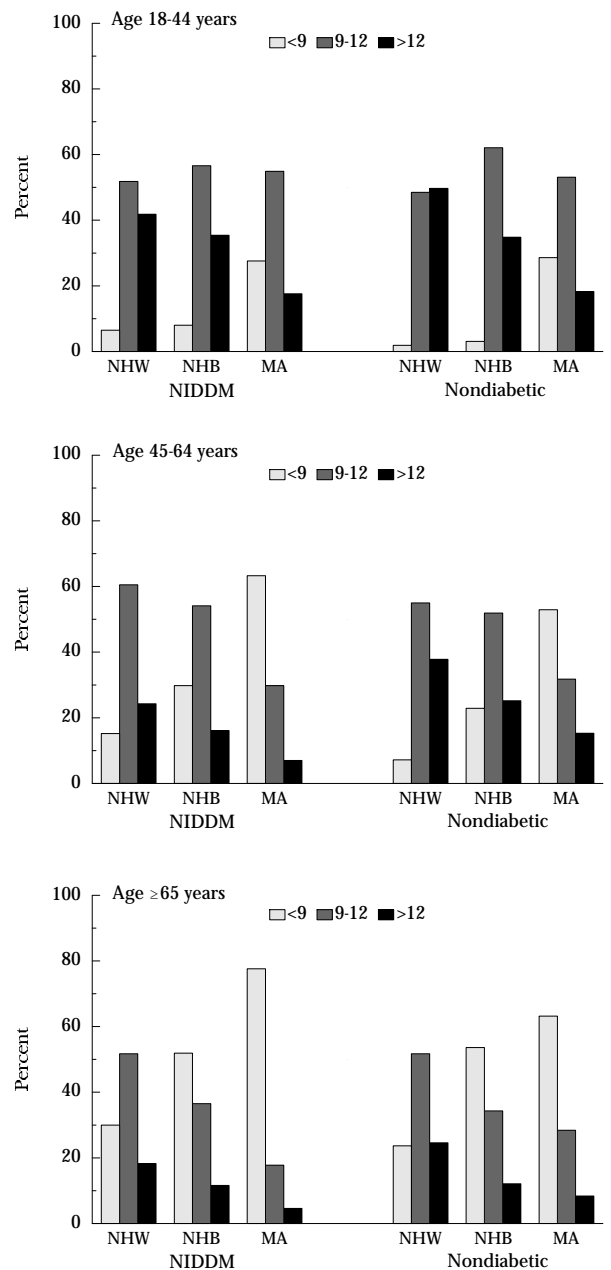
NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.13 for further details.

Source: 1989 National Health Interview Survey

≥$20,000 in 1989 and 37.7% had an income of ≥$40,000 (Appendix 6.14 and Figure 6.22); these percentages were 42.9% and 15.6% for adults with NIDDM and 67.5% and 32.8% for adults without diabetes, respectively (Appendix 6.14). At all ages in both men and women, a greater percent of persons with NIDDM were at lower income levels than per-

Figure 6.22

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, by Family Income and Sex, U.S., 1989
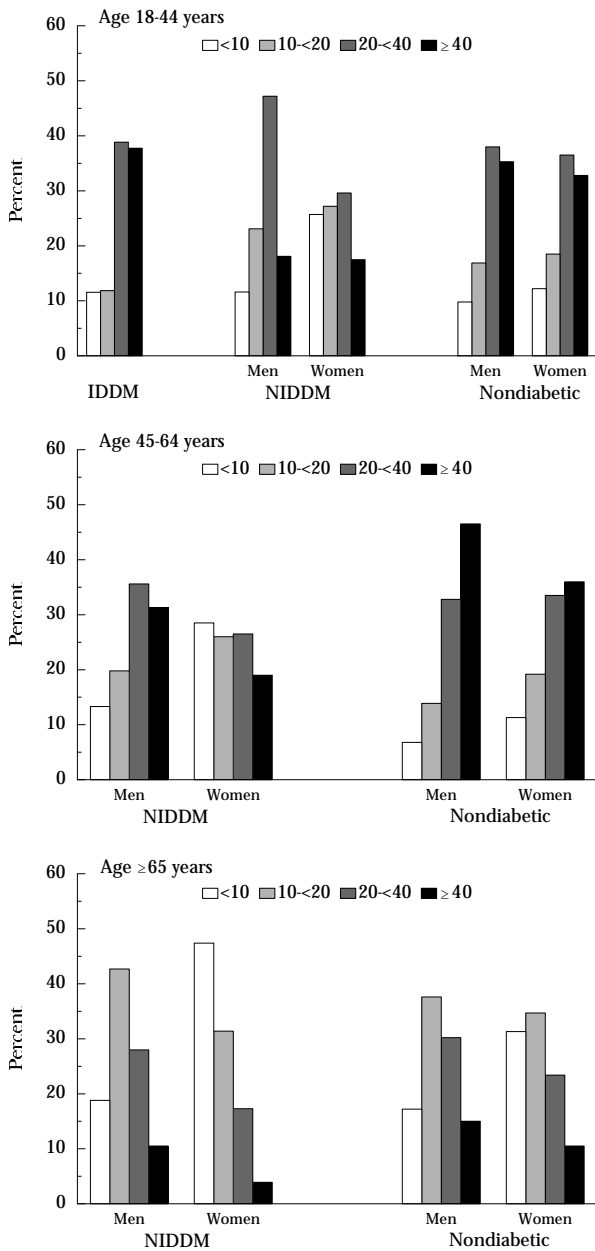
All IDDM are age ≥18 years. Income is in thousands of dollars. See Appendix 6.14 for further details.

Source: 1989 National Health Interview Survey

Figure 6.23

Percent of NIDDM and Nondiabetic Men and Women Age ≥18 Years with Family Income <$10,000, by Age, U.S., 1989
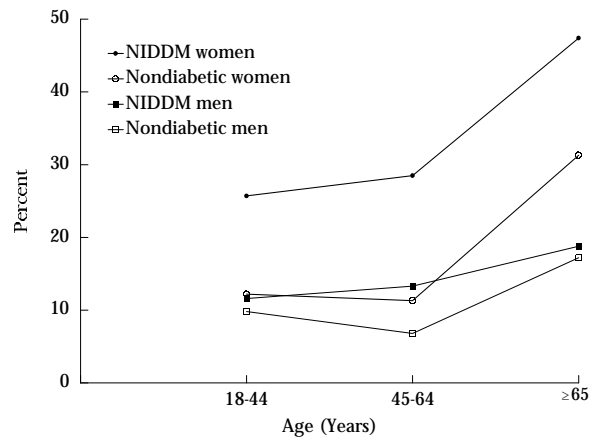
See Appendix 6.14 for further details.

Source: 1989 National Health Interview Survey

sons without diabetes (Figure 6.22). Fully 47.4% of NIDDM women age ≥65 years and 18.8% of NIDDM men had family incomes of <$10,000 in 1989 (Figures 6.22 and 6.23). Among both NIDDM and nondiabetic groups, income levels were highest in those age 45-64 years (e.g., 31.3%-46.5% at ≥$40,000), intermediate in those age 18-44 years (e.g., 18.1%-35.3% at ≥$40,000), and lowest in those age ≥65 years (10.5%-15.0% at ≥$40,000). At all ages in both NIDDM and nondiabetic groups, a higher proportion of women than men had lower income levels, but the discrepancy by sex was more marked in NIDDM than in nondiabetic persons (e.g., at <$10,000, 37.3% in women and 15.4% in men) (Figure 6.23). In all age groups in both NIDDM and nondiabetic persons, income levels were highest in non-Hispanic whites and lower in non-Hispanic blacks and Mexican Americans (Figure 6.24). For example, among NIDDM persons age 18-44 years, the proportion was 20.9%, 15.1%, and 5.4% in whites, blacks, and Mexican Americans, respectively.

IMMIGRANT STATUS AND YEARS OF U.S. RESIDENCE

The percent of persons reporting that they are immigrants is highest in the nondiabetic population (9.8%), followed by NIDDM (7.7%) and IDDM (2.5%) groups (Appendix 6.15). Among persons with NIDDM, immigrant status is similar by sex and age. In persons without diabetes, a smaller proportion of

Figure 6.24

Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Family Income and Race, U.S., 1989
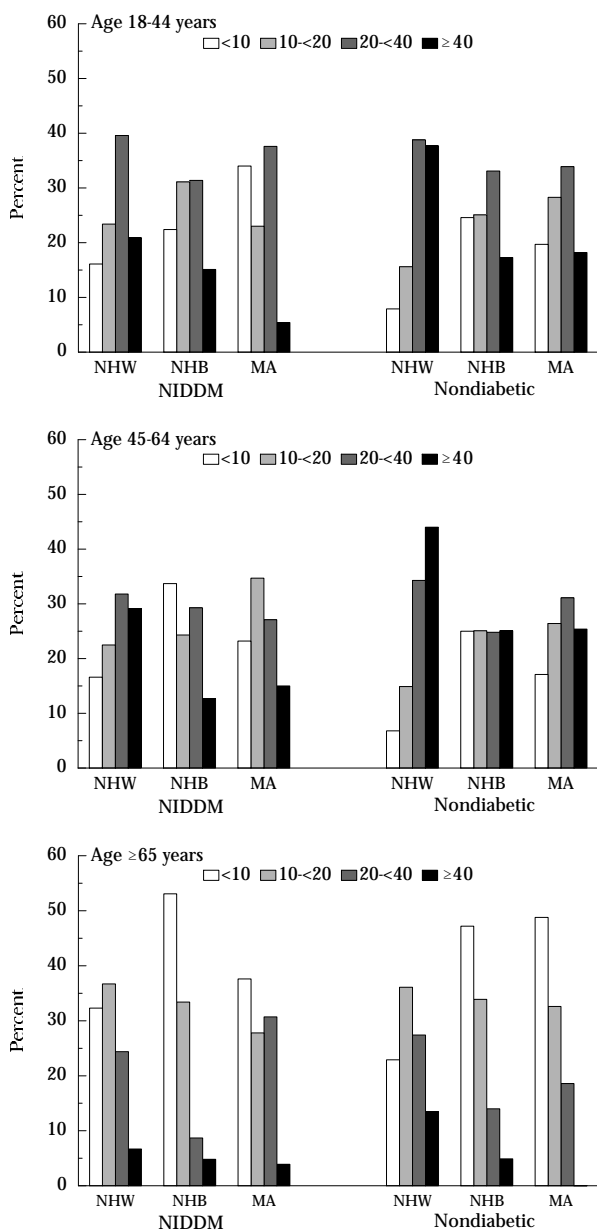
Income is in thousands of dollars. NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.14 for further details.

Source: 1989 National Health Interview Survey

women age ≥65 years (6.3%) are immigrants, compared with younger women and men at all ages (9.8%-10.7%). Relative to non-Hispanic blacks and non-Hispanic whites, a higher percent of Mexican Americans report being an immigrant in both NIDDM and nondiabetic groups, but this is particularly dramatic in the nondiabetic population (45.5% in Mexican Americans relative to 6.4% in blacks and 4.5% in whites).

Overall, 52.3% of immigrants have lived in the United States for ≥15 years (Appendix 6.16). At age 18-64 years, this proportion is higher in immigrants with NIDDM (69.7%) than immigrants without diabetes (46.6%), but there is no difference at age ≥65 years (85.1% in NIDDM and 89.4% in nondiabetic immigrants). In both diabetic and nondiabetic immigrants, non-Hispanic whites are more likely to have lived in the United States for ≥15 years, compared with non-Hispanic blacks and Mexican Americans (Appendix 6.16). For example, among nondiabetic persons, the proportion is 71.0% in whites, 35.3% in blacks, and 46.6% in Mexican Americans.

EMPLOYMENT CHARACTERISTICS

EMPLOYMENT STATUS IN PAST 2 WEEKS

Persons were characterized as to whether they were employed, unemployed through job layoff, or not in the labor force due to reasons such as retirement or being a homemaker. In 1989, most IDDM (73.9%) and nondiabetic (66.2%) persons were employed, whereas most NIDDM persons were not in the labor force (i.e., 32.7% were employed) (Appendix 6.17). Much of this difference may be due to the older age distribution of persons with NIDDM, a time when persons are likely to be retired. Within age groups, however, employment was still lower in NIDDM than in persons without diabetes (Figure 6.25). The unemployment rate was 5.6% for IDDM and 8.1% for NIDDM age 18-44 years, compared with 3.8% of nondiabetic adults age 18-44 years. In both NIDDM and nondiabetic persons, women were less likely to be employed, particularly at age 18-44 years (Figure 6.25); for example, among NIDDM persons age 18-44 years, the employment rate was 52.1% in women and 77.3% in men. At age 18-64 years, the highest employment rates were found in non-Hispanic whites (51.1%-82.0% versus 39.9%-70.7% in blacks and 29.2%-69.2% in Mexican Americans); at age 45-64 years and in nondiabetic persons age ≥65 years, Mexican Americans had the lowest rates (Figure 6.26).

USUAL ACTIVITY IN PAST 12 MONTHS

When queried about their usual activity in the past 12 months, persons with IDDM (72.1%) and persons without diabetes (63.4%) were most likely to be working (Appendix 6.18). In contrast, persons with NIDDM were as likely to be keeping house (34.7%) or doing something else (34.4%) as working (30.3%). Some of this difference is due to the older age of the

NIDDM group and the greater proportion of females. With older age, the proportion working or going to school decreased in all groups and was counterbalanced by a higher proportion keeping house or doing something else. Compared with men of all groups, women were more likely to keep house (36.3%-67.2% versus 1.6%-7.3%) and less likely to work or be doing

something else. There was little difference by race. In all adults, only a small proportion were going to school. More detailed estimates by age, sex, and race/ethnicity are given in Appendix 6.18.

Figure 6.25

Distribution of IDDM, NIDDM, and Nondiabetic Populations Age ≥18 Years, by Employment Status and Sex, U.S., 1989
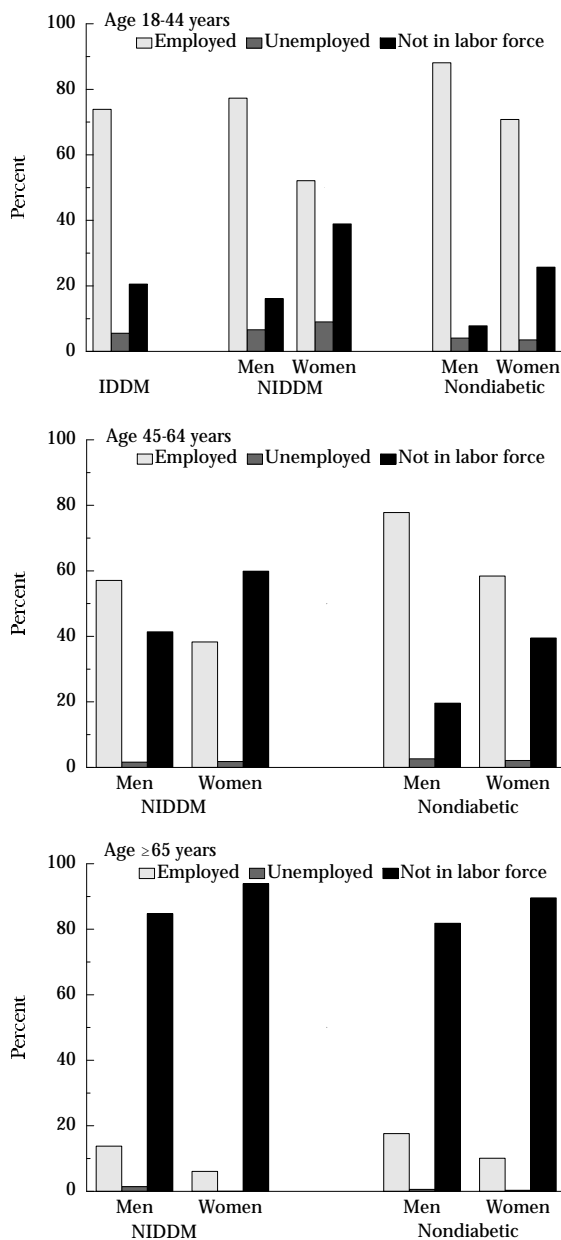
All IDDM are age ≥18 years. Employment status was obtained for the past 2 weeks. See Appendix 6.17 for further details.

Source: 1989 National Health Interview Survey

Figure 6.26

Distribution of NIDDM and Nondiabetic Populations Age ≥18 Years, by Employment Status and Race, U.S., 1989
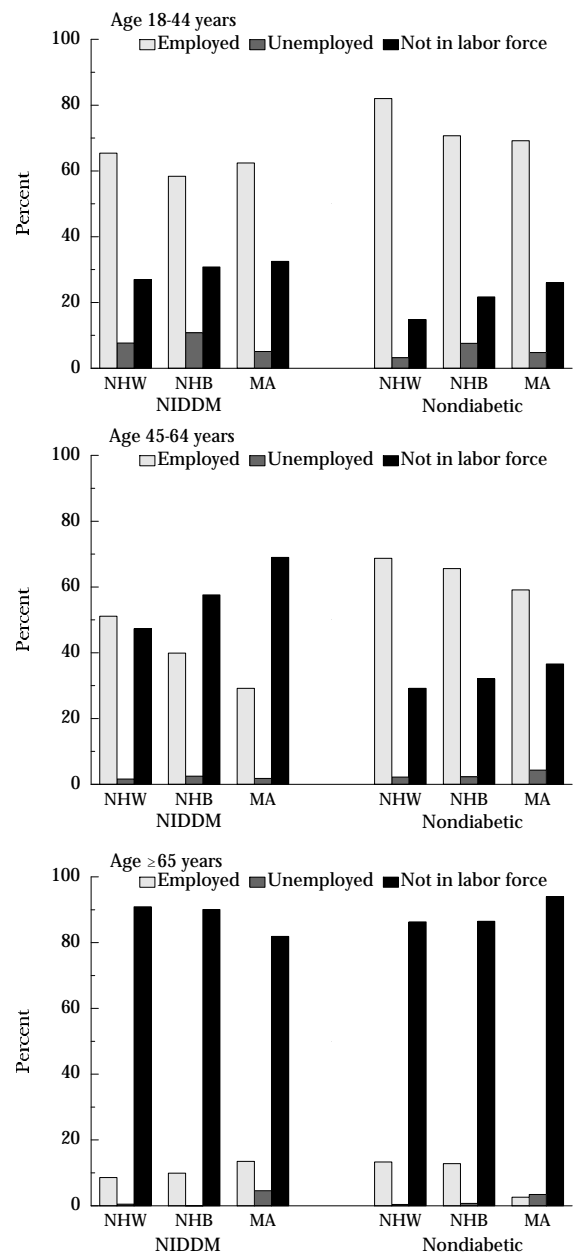
Employment status was obtained for the past 2 weeks. NHW, non-Hispanic white; NHB, non-Hispanic black; MA, Mexican American. See Appendix 6.17 for further details.

Source: 1989 National Health Interview Survey

TYPE OF EMPLOYER FOR WORK IN PAST 2 WEEKS

As discussed above, 74% of IDDM, 33% of NIDDM, and 66% of nondiabetic groups were employed. These individuals were asked about their employers. In 1989, most (68.4%-77.2%) worked for private companies; there was little difference in type of employer by diabetes status or sex (Appendix 6.19). In both NIDDM and nondiabetic persons, younger persons more frequently worked for private companies and older persons more frequently worked for a government employer or were self-employed. More non-Hispanic blacks (2.5%-39.0%) and Mexican Americans (9.4%-54.5%) worked for a government employer than did non-Hispanic whites (8.5%-19.0%). Blacks were the least likely to be self-employed (4.0% versus 12.2% in whites and 6.2% in Mexican Americans).

VETERAN STATUS

Regardless of diabetes status, only a small percent of women (1.0%-1.6%) are military veterans (Appendix 6.20). In men, persons with IDDM are least likely to be veterans (12.7%), whereas persons with NIDDM are most likely to be veterans (53.2%); nondiabetic persons fall in between (32.6%). The difference in the overall percent between NIDDM and nondiabetic persons is due to the higher percent of veterans among NIDDM persons age 18-44 years. In both NIDDM and nondiabetic male groups, there is a higher percent of veterans among whites (35.7%-58.9%), followed by blacks (25.5%-42.8%), and Mexican Americans (15.7%-35.5%).

COMPARISONS WITH DIABETES IN 1979-81

Certain sociodemographic characteristics of people with diagnosed diabetes have changed since the previous edition of *Diabetes in America*[1], which considered the years 1979-81. While it is not possible to consider all the factors discussed in this chapter, several comparisons are possible. Compared with diabetic adults in 1979-81, U.S. adults with diagnosed diabetes in 1989 are somewhat older, have attended slightly more years of school, and a larger proportion is black. The median age for diabetic adults age ≥18 years was 63 years in 1989, compared with 61 years in 1979-81. In 1989, more than 22% of persons with diabetes attended some college, whereas in 1979-81, only 17.7% attained this level. Regarding race, 20.2% of adults with diabetes were black in 1989, compared with 15.4% in 1979-81. While women with diabetes

were somewhat more likely to be working in 1989, compared with 1979-81 (23.8% versus 20.8%), men with diabetes were less likely to be working (40.6% versus 47.9%). Adults with diabetes in 1989 were less likely to be married (60.7%), compared with adults with diabetes in 1979-81 (65.6%). In addition, a larger proportion lived alone in 1989; for example, among those age ≥65 years, 33.8% reported living alone in 1989, compared with 25.8% in 1979-81. Among older persons with diabetes, women are more likely to live alone than men. In 1979-81, 35.5% of diabetic women age ≥65 years lived alone, compared with 11.0% of men. By 1989, the proportion of women was 44.8%, compared with 15.9% of men.

Employment status for people with diabetes has changed only slightly, but there is a suggestion of a sex-related change. In 1979-81, 47.3% of adults age 45-64 years with diabetes reported being in the labor force (i.e., employed or seeking employment). This is nearly identical to the 47.0% of NIDDM reporting this in 1989. However, the percent has decreased for diabetic men age 45-64 years from 64.1% in 1979-81 to 57.1% in 1989 and has increased for women with diabetes during this period from 32.0% to nearly 38.3%.

Family income is lower for people with diabetes compared with the total population, and the difference has increased over time. For example, in 1979-81, 14.0% of the total population age ≥65 years was in the highest income category (≥$25,000), compared with 11.1% of persons with diabetes. By 1989, 12.0% of the total population age ≥65 years was in the highest income category (≥$40,000), compared with only 6.5% of persons with NIDDM. The findings were similar if other categories for high income were considered.

Certainly, many of these sociodemographic changes observed for adults with diabetes are similar to patterns observed in the total U.S. adult population. Nevertheless, the consequences can have significant public health implications. The elderly, racial and ethnic minorities, and lower-income U.S. adults will likely require an increasing share of diabetes-related health care and preventive services. With a greater proportion of diabetic persons being older and poorer, the cost of these services will likely increase in public-supported programs such as Medicare and Medicaid. In addition, with an expanding proportion of people with diabetes living alone, the demand for in-home or assisted-living arrangements may increase. Future efforts should consider the special impact that diabetes will have on U.S. women.

While other comparisions of previous findings with those from 1989 were not possible due to changes in reporting of information, current evidence suggests that a sustained effort is needed to prepare for the increasing public health burden of diabetes. It is hoped that the information provided in this chapter will serve as a resource for public health planners and policy-makers as we enter the 21st century.

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Appendix 6.1
Distribution by Age of Persons with IDDM, Allegheny County, PA, 1989

Race and sex	\\ Age (years)									
	0-4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**Deceased**
All races/sexes	2	5	9	13	17	22	17	8	2	5
Male	2	6	9	12	17	21	18	8	2	5
Female	1	5	10	14	17	23	16	7	1	6
Whites	2	5	9	13	17	23	17	8	1	5
Male	2	6	8	12	17	22	18	8	2	5
Female	1	5	9	14	17	24	17	7	1	5
Nonwhites	1	4	12	18	18	14	14	6	3	10
Male	2	4	12	18	18	14	17	6	5	4
Female	1	4	11	17	19	14	12	5	3	14

Incidence of IDDM during 1965-89 and at age <20 years.

Source: Pittsburgh IDDM Registry

Appendix 6.2
Distribution by Age of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, U.S., 1989

Race and age (years)	IDDM			NIDDM			Nondiabetic			Total		
	Both sexes	**Men**	**Women**	**Both sexes**	**Men**	**Women**	**Both sexes**	**Men**	**Women**	**Both sexes**	**Men**	**Women**
All races												
18-24				0.6	0.6	0.6	14.5	14.9	14.2	14.2	14.6	13.8
25-29				0.9	0.7	0.9	12.1	12.5	11.7	11.8	12.2	11.4
30-34				2.0	1.3	2.5	12.4	12.8	12.0	12.1	12.6	11.7
35-39				3.1	3.4	2.9	10.8	11.4	10.2	10.6	11.2	10.0
40-44				4.7	4.7	4.7	9.6	9.6	9.7	9.5	9.5	9.6
45-49				6.5	7.1	6.1	7.5	7.6	7.4	7.5	7.6	7.3
50-54				9.4	9.8	9.1	6.2	6.4	6.1	6.3	6.4	6.2
55-59				11.5	12.2	11.1	5.9	5.8	6.0	6.1	6.0	6.1
60-64				14.1	17.0	12.0	5.7	5.7	5.7	5.9	6.0	5.8
65-69				17.1	17.5	16.7	5.3	5.1	5.5	5.6	5.3	5.8
70-74				14.8	13.8	15.5	4.0	3.6	4.3	4.2	3.8	4.6
75-79				8.4	7.6	9.0	3.1	2.5	3.7	3.3	2.6	3.8
80-84				5.1	3.3	6.4	1.8	1.4	2.2	1.9	1.4	2.3
≥85				1.8	1.0	2.4	1.2	0.8	1.5	1.2	0.8	1.5
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
18-44	83.3	85.1	81.2	11.3	10.7	11.7	59.4	61.1	57.8	58.2	60.1	56.5
45-64	14.6	12.2	17.4	41.6	46.1	38.3	25.3	25.5	25.1	25.7	26.0	25.5
≥65	2.1	2.7	1.5	47.2	43.2	50.0	15.3	13.3	17.1	16.1	14.0	18.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non-Hispanic whites												
18-29				1.4	1.0	1.7	24.7	25.4	24.1	24.2	24.9	23.6
30-39				4.8	3.9	5.4	22.4	23.7	21.2	22.0	23.3	20.8
40-49				9.8	10.8	9.1	17.3	17.6	17.1	17.2	17.4	16.9
50-69				50.2	55.7	46.1	24.4	24.2	24.5	24.9	24.8	25.0
70-79				25.4	23.7	26.7	7.9	6.7	9.0	8.3	7.0	9.4
≥80				8.4	4.9	11.0	3.3	2.5	4.1	3.4	2.5	4.3
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix 6.2 — Continued next page

Race and age (years)	IDDM			NIDDM			Nondiabetic			Total		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
18-44				10.1	8.8	11.1	56.8	58.8	55.0	55.9	57.9	54.0
45-64				38.2	43.7	34.2	26.2	26.6	25.9	26.5	26.9	26.1
≥65				51.7	47.6	54.7	16.9	14.6	19.1	17.7	15.3	19.9
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non-Hispanic blacks												
18-29				2.2	3.1	1.6	32.7	33.7	32.0	31.3	32.5	30.4
30-39				4.9	6.2	4.1	24.0	23.3	24.6	23.1	22.6	23.6
40-49				14.4	15.8	13.5	16.6	16.8	16.5	16.5	16.8	16.3
50-69				54.3	53.4	54.8	19.3	19.3	19.3	21.0	20.7	21.2
70-79				20.4	17.7	22.2	5.1	5.3	5.0	5.8	5.8	5.9
≥80				3.8	3.8	3.8	2.2	1.6	2.6	2.2	1.7	2.7
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
18-44				13.1	17.5	10.4	66.6	67.3	66.0	64.1	65.3	63.2
45-64				46.5	47.5	45.9	22.2	22.3	22.2	23.4	23.3	23.4
≥65				40.4	34.9	43.8	11.2	10.4	11.8	12.5	11.4	13.5
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mexican Americans												
18-29				0.9	0.0	1.5	38.2	36.4	39.9	37.0	35.6	38.5
30-39				12.3	14.4	10.9	28.5	28.7	28.4	28.1	28.3	27.8
40-49				11.9	11.6	12.0	16.0	15.4	16.6	15.9	15.3	16.4
50-69				62.4	64.9	60.6	14.3	16.6	12.0	15.7	17.8	13.7
70-79				11.8	9.1	13.6	2.3	1.5	3.2	2.6	1.6	3.6
≥80				0.8	0.0	1.4	0.7	1.4	0.0	0.7	1.4	0.1
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
18-44				17.7	19.1	16.8	75.0	72.6	77.4	73.3	71.3	75.3
45-64				55.3	54.9	55.6	19.6	21.5	17.8	20.7	22.3	19.1
≥65				27.0	26.0	27.6	5.4	5.9	4.8	6.0	6.4	5.6
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Other races												
18-29				0.0	0.0	0.0	33.2	36.7	29.8	32.5	36.0	29.1
30-39				3.3	1.9	4.3	28.2	29.5	27.0	27.6	28.9	26.4
40-49				17.8	11.8	22.5	16.3	14.2	18.2	16.3	14.1	18.3
50-69				59.9	71.7	50.6	18.5	17.0	20.0	19.5	18.1	20.7
70-79				15.8	14.6	16.8	3.0	2.1	3.8	3.3	2.4	4.1
≥80				3.2	0.0	5.8	0.9	0.5	1.3	0.9	0.5	1.4
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
18-44				13.3	5.9	19.2	69.8	73.1	66.7	68.6	71.8	65.6
45-64				54.5	65.0	46.2	22.7	20.5	24.8	23.4	21.4	25.3
≥65				32.2	29.1	34.7	7.5	6.4	8.5	8.0	6.9	9.1
				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In cells with no entry, the percent is unreliable due to small sample size. Non-Hispanic whites comprise 92% of all whites; Non-Hispanic blacks comprise 98.5% of all blacks; persons of Hispanic non-Mexican origin comprise 6.9% of all other races.

Source: 1989 National Health Interview Survey

Appendix 6.3
Distribution of Persons with IDDM, by Duration of Diabetes, Allegheny County, PA, 1989

Race and sex	Duration (years)					
	0-4	5-9	10-14	15-19	20-24	Deceased
All races/sexes	19	17	19	22	18	5
Male	20	15	19	23	18	5
Female	17	19	19	21	18	6
Whites	18	16	19	23	19	5
Male	19	15	19	24	18	5
Female	17	18	20	21	19	5
Nonwhites	29	18	16	16	12	9
Male	35	12	18	17	14	4
Female	24	23	14	14	11	14

Incident cases of IDDM during 1965-89 and at age <20 years.

Source: Pittsburgh IDDM Registry

Appendix 6.4
Distribution of IDDM and NIDDM Populations Age ≥18 Years, by Diabetes Duration (Years), U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM			
	<5	5-14	15-24	≥25	<5	5-14	15-24	≥25
All ages	8.3	31.0	32.7	28.1	30.6	42.0	18.9	8.5
18-44					47.9	40.9	9.2	2.0
45-64					32.8	42.1	19.6	5.6
≥65					24.5	42.2	20.6	12.7
Men	9.5	33.1	36.7	20.7	32.8	41.8	18.0	7.5
Women	7.0	28.5	28.0	36.5	29.1	42.1	19.6	9.2
Non-Hispanic whites	8.3	28.5	33.8	29.4	31.0	41.2	19.4	8.4
Non-Hispanic blacks					31.7	43.7	16.5	8.1
Mexican Americans					23.4	42.7	22.4	11.5

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.5
Distribution of Persons with IDDM, by Age at Onset of Diabetes, Allegheny County, PA, 1989

Race and sex	Age at onset (years)			
	0-4	5-9	10-14	15-19
All races/sexes	12	25	38	25
Male	12	24	36	28
Female	11	26	41	22
Whites	12	25	38	25
Male	12	25	35	28
Female	11	26	41	22
Nonwhites	10	19	43	28
Male	12	17	39	32
Female	9	21	46	24

Incident cases of IDDM during 1965-89 and at age <20 years.

Source: Pittsburgh IDDM Registry

Appendix 6.6
Mean Age at Diagnosis of Diabetes in IDDM and NIDDM Populations Age ≥18 Years, U.S., 1989

Race and age (years)	IDDM Both sexes	Men	Women	NIDDM Both sexes	Men	Women
All ages/races	16.2	16.6	15.7	51.1	50.8	51.3
18-44	15.0	15.7	14.0	30.1	31.4	29.3
45-64	22.7		22.4	46.5	47.3	45.8
≥65				60.3	59.6	60.8
Non-Hispanic whites	16.1	16.6	15.5	52.2	51.9	52.4
18-44	14.6	15.6	13.5	29.2	30.9	28.2
45-64	22.7		22.4	46.6	47.3	45.9
≥65				60.9	60.0	61.4
Non-Hispanic blacks				49.1	47.8	50.0
18-44				31.3	31.7	31.0
45-64				46.5	46.9	46.3
≥65				58.5	58.2	58.7
Mexican Americans				45.3	46.2	44.7
18-44				30.8		
45-64				44.3	46.1	43.1
≥65				56.8	57.2	56.6

In cells with no entry, the mean age is unreliable due to small sample size.

Appendix 6.7
Regional Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, U.S., 1989

Race, sex, and age (years)	IDDM Northeast	Midwest	South	West	NIDDM Northeast	Midwest	South	West	Nondiabetic Northeast	Midwest	South	West	Total Northeast	Midwest	South	West
All ages	15.9	26.8	28.3	29.0	21.8	25.3	39.2	13.7	20.0	24.8	34.7	20.5	20.1	24.8	34.8	20.4
18-44					17.4	26.1	41.3	15.2	19.5	25.2	34.6	20.7	19.5	25.2	34.7	20.7
45-64					20.5	24.7	39.8	15.0	19.7	24.6	35.2	20.5	19.8	24.6	35.4	20.3
≥65					24.0	25.6	38.3	12.2	22.8	23.5	33.9	19.9	22.9	23.6	34.2	19.3
Men	10.4	26.9	32.0	30.8	20.9	25.9	38.8	14.4	20.0	25.3	33.6	21.1	20.0	25.3	33.7	21.0
Women	22.2	26.8	24.1	26.9	22.4	24.9	39.5	13.2	20.1	24.3	35.7	20.0	20.1	24.3	35.7	19.8
Non-Hispanic whites	15.2	27.8	27.4	29.6	23.6	30.1	34.4	11.9	20.9	27.5	32.4	19.2	20.9	27.6	32.4	19.1
Non-Hispanic blacks					16.0	17.7	60.1	6.3	15.8	18.6	57.4	8.2	15.8	18.6	57.5	8.1
Mexican Americans					0.9	5.4	44.5	49.2	1.8	9.1	36.4	52.8	1.7	9.0	36.6	52.7

In cells with no entry, the percent is unreliable due to small sample size. Northeast: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania. Midwest: Michigan, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, Nebraska. South: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Texas, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma. West: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Alaska, Oregon, California, Hawaii.

Source: 1989 National Health Interview Survey

Appendix 6.8

Urban/Rural Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM				Nondiabetic				Total			
	Central city	City, not central	Rural, non-farm	Rural, farm	Central city	City, not central	Rural, non-farm	Rural, farm	Central city	City, not central	Rural, non-farm	Rural, farm	Central city	City, not central	Rural, non-farm	Rural, farm
All ages	23.8	52.0	23.5	0.7	32.4	39.8	26.4	1.4	30.5	46.7	21.3	1.5	30.5	46.6	21.4	1.5
18-44					35.3	42.0	22.0	0.7	31.2	47.6	20.0	1.2	31.2	47.6	20.0	1.2
45-64					33.5	38.9	25.7	1.8	28.9	47.4	21.7	2.0	29.1	47.0	21.9	2.0
≥65					30.8	39.9	28.0	1.3	30.1	42.4	25.6	1.9	30.2	42.2	25.8	1.9
Men	21.8	53.2	23.8	1.3	30.2	45.2	22.9	1.7	29.5	47.9	21.1	1.6	29.5	47.8	21.1	1.6
18-44					31.0	49.6	18.5	0.9	30.6	48.2	19.9	1.3	30.6	48.3	19.9	1.3
45-64					32.6	41.1	24.2	2.2	27.0	49.5	21.7	1.8	27.3	49.1	21.8	1.8
≥65					27.4	48.6	22.7	1.4	29.2	42.9	25.4	2.5	29.0	43.4	25.2	2.5
Women	26.1	50.7	23.2	0.0	34.1	35.8	28.9	1.3	31.4	45.7	21.5	1.4	31.5	45.5	21.7	1.4
18-44					38.1	37.1	24.3	0.6	31.9	47.0	20.1	1.0	31.9	46.9	20.1	1.0
45-64					34.4	37.1	27.1	1.5	30.7	45.4	21.7	2.2	30.8	45.1	21.9	2.2
≥65					32.9	34.6	31.3	1.2	30.8	41.9	25.7	1.5	31.0	41.4	26.2	1.5
Non-Hispanic whites	21.5	54.6	23.1	0.8	22.9	45.5	29.5	2.0	24.4	50.4	23.4	1.8	24.3	50.3	23.6	1.8
Men	20.5	54.1	24.0	1.4	21.6	50.5	25.5	2.4	23.7	51.2	23.2	2.0	23.6	51.2	23.2	2.0
Women	22.7	55.2	22.1	0.0	23.9	41.9	32.5	1.7	25.0	49.6	23.7	1.7	25.0	49.4	23.9	1.7
Non-Hispanic blacks					56.1	22.0	21.7	0.2	56.2	26.4	17.3	0.1	56.2	26.2	17.5	0.1
Men					55.4	25.7	18.8	0.0	55.4	27.5	16.9	0.3	55.4	27.4	17.0	0.3
Women					56.5	19.6	23.5	0.4	56.9	25.5	17.6	0.0	56.9	25.2	18.0	0.0
Mexican Americans					57.2	35.1	7.7	0.0	51.8	41.0	6.8	0.4	52.0	40.8	6.8	0.4
Men					49.0	44.3	6.7	0.0	46.9	46.6	6.5	0.0	47.0	46.5	6.5	0.0
Women					62.7	28.9	8.4	0.0	56.6	35.5	7.0	0.9	56.9	35.2	7.1	0.8

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.9

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Size (in Thousands) of Urban Population, U.S., 1989

Race, sex and age (years)	IDDM					NIDDM					Non-diabetic				
	<100	100-<250	250-<1000	≥1000	Not urban	<100	100-<250	250-<1000	≥1000	Not urban	<100	100-<250	250-<1000	≥1000	Not urban
All ages	1.5	8.1	25.9	40.4	24.2	1.4	5.5	28.8	36.5	27.8	1.8	6.4	27.4	41.6	22.8
18-44						2.8	6.7	28.6	39.2	22.7	1.6	6.6	27.6	43.1	21.2
45-64						1.4	4.7	28.3	38.1	27.6	2.1	6.4	27.1	40.8	23.7
≥65						1.0	6.0	29.2	34.5	29.3	2.0	5.7	27.6	37.1	27.5
Men	0.0	9.3	26.3	39.3	25.1	1.3	4.7	29.7	39.7	24.6	1.7	6.6	27.1	42.0	22.7
Women	3.2	6.7	25.3	41.6	23.2	1.5	6.1	28.1	34.3	30.1	1.9	6.2	27.8	41.3	22.9
Non-Hispanic whites	1.6	7.8	27.8	38.9	23.9	1.8	5.5	30.3	30.9	31.5	2.1	6.9	27.8	38.0	25.3
Non-Hispanic blacks						0.3	7.3	23.2	47.2	21.9	0.7	6.2	24.7	51.0	17.4
Mexican Americans						0.0	1.9	35.9	54.4	7.7	0.1	2.4	32.1	58.2	7.2

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Marital Status, U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM				Nondiabetic				Total			
	Married	Widowed	Divorced/ separated	Never married	Married	Widowed	Divorced/ separated	Never married	Married	Widowed	Divorced/ separated	Never married	Married	Widowed	Divorced/ separated	Never married
All ages	59.1	3.5	13.9	23.6	60.7	22.1	10.7	6.5	64.7	6.7	9.6	19.0	64.5	7.1	9.6	18.7
18-44					67.1	1.5	15.7	15.7	61.1	0.4	9.3	29.2	61.2	0.4	9.3	29.1
45-64					69.4	9.3	15.2	6.1	77.6	5.7	12.7	4.0	77.3	5.9	12.8	4.1
≥65					51.6	38.3	5.5	4.7	56.8	32.8	5.8	4.6	56.4	33.2	5.8	4.6
Men	56.8	1.4	15.5	26.4	79.1	6.0	8.6	6.4	67.8	2.5	7.8	21.9	68.1	2.6	7.8	21.5
18-44					69.3	0.6	10.7	19.5	59.5	0.1	7.1	33.2	59.6	0.1	7.1	33.2
45-64					82.3	2.0	10.5	5.2	83.4	1.7	10.8	4.1	83.4	1.7	10.7	4.2
≥65					78.1	11.5	6.1	4.4	76.0	14.9	5.2	3.9	76.1	14.7	5.3	3.9
Women	61.8	5.8	12.1	20.4	47.6	33.6	12.2	6.6	61.8	10.5	11.3	16.4	61.4	11.2	11.3	16.2
18-44					65.6	2.1	19.0	13.2	62.7	0.7	11.4	25.2	62.7	0.7	11.4	25.2
45-64					58.3	15.6	19.3	6.8	72.2	9.4	14.5	3.9	71.6	9.7	14.7	4.0
≥65					35.2	54.8	5.1	4.9	43.2	45.4	6.3	5.1	42.6	46.2	6.2	5.1
Non-Hispanic whites	58.7	3.8	14.8	22.7	62.9	22.7	8.4	6.0	67.9	6.9	8.6	16.7	67.7	7.2	8.6	16.4
18-44					71.1	0.6	11.7	16.6	64.9	0.4	8.5	26.4	64.9	0.4	8.5	26.3
45-64					74.1	8.5	12.2	5.3	80.3	4.9	11.1	3.7	80.1	5.0	11.2	3.7
≥65					53.0	37.6	5.0	4.4	58.7	32.0	5.0	4.3	58.3	32.4	5.0	4.3
Non-Hispanic white men	57.1	1.6	16.2	25.2	81.1	5.7	7.1	6.1	70.7	2.5	7.2	19.6	70.8	2.5	7.3	19.4
18-44					72.3	0.0	8.4	19.3	62.4	0.1	6.8	30.6	62.4	0.1	6.9	30.6
45-64					85.8	0.7	8.0	5.5	84.8	1.3	9.8	4.1	84.8	1.3	9.8	4.1
≥65					78.4	11.3	6.1	4.2	78.1	13.9	4.3	3.7	78.1	13.8	4.4	3.8
Non-Hispanic white women	60.6	6.3	13.1	19.9	49.4	35.3	9.4	5.9	65.3	10.9	9.8	14.0	64.9	11.5	9.8	13.8
18-44					70.4	1.0	13.6	15.0	67.2	0.6	10.1	22.2	67.2	0.6	10.1	22.1
45-64					63.0	15.7	16.2	5.1	76.1	8.2	12.4	3.3	75.7	8.5	12.5	3.4
≥65					36.6	54.5	4.3	4.6	45.0	44.7	5.6	4.7	44.5	45.3	5.5	4.7
Non-Hispanic blacks					49.5	25.3	16.6	8.6	44.7	8.5	15.7	31.2	44.9	9.2	15.7	30.1
18-44					59.2	2.7	17.1	21.0	41.1	0.9	14.2	43.8	41.2	0.9	14.3	43.6
45-64					52.4	14.0	25.7	7.9	58.7	13.8	21.6	5.9	58.1	13.9	21.9	6.1
≥65					43.1	45.6	6.0	5.4	38.6	43.0	12.4	5.9	39.3	43.4	11.5	5.8
Non-Hispanic black men					67.4	9.2	15.3	8.2	52.8	4.0	12.1	31.1	53.4	4.2	12.2	30.2
18-44					58.5	1.8	12.8	27.0	46.0	0.2	10.0	43.9	46.1	0.2	10.0	43.7
45-64					65.3	7.8	22.5	4.3	73.1	5.6	16.6	4.7	72.5	5.8	17.0	4.7
≥65					74.6	14.6	6.8	4.0	53.4	25.4	16.2	5.0	56.0	24.1	15.1	4.9
Non-Hispanic black women					38.5	35.3	17.4	8.8	38.1	12.1	18.6	31.2	38.2	13.3	18.5	30.1
18-44					59.9	3.6	21.8	14.7	37.0	1.5	17.7	43.8	37.2	1.5	17.8	43.6
45-64					44.3	17.8	27.7	10.1	46.9	20.6	25.7	6.9	46.6	20.3	25.9	7.2
≥65					27.4	61.0	5.6	6.0	27.9	55.8	9.7	6.6	27.8	56.7	9.0	6.5
Mexican Americans					70.7	11.5	12.5	5.4	68.0	1.9	8.5	21.6	68.1	2.2	8.6	21.1
18-44					75.0	5.1	20.0	0.0	65.5	0.7	6.2	27.7	65.5	0.7	6.3	27.5
45-64					72.5	9.8	10.8	6.9	76.5	3.3	18.2	2.0	76.2	3.8	17.6	2.4
≥65					64.1	19.1	11.0	5.8	71.8	14.8	5.1	8.3	70.8	15.4	5.9	8.0
Mexican-American men					84.6	2.4	9.9	3.1	66.7	0.9	6.4	26.0	67.2	1.0	6.5	25.4
18-44									61.1	0.2	3.9	34.8	61.2	0.2	4.0	34.6
45-64									80.3	1.3	16.4	2.0	81.1	1.3	15.8	1.9
≥65									87.2	8.6	0.0	4.2	85.5	8.7	0.9	5.0
Mexican-American women					61.3	17.5	14.2	7.0	69.2	2.9	10.6	17.3	68.9	3.4	10.7	16.9
18-44									69.5	1.1	8.3	21.1	69.6	1.1	8.4	20.9
45-64									72.0	5.6	20.4	2.0	70.6	6.7	19.7	3.0
≥65									53.3	22.2	11.3	13.2	54.5	22.7	11.5	11.3

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.11

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Cohabitation, U.S., 1989

Race, sex, and age (years)	IDDM Alone	Non-relative only	Spouse	Other relative only	NIDDM Alone	Non-relative only	Spouse	Other relative only	Nondiabetic Alone	Non-relative only	Spouse	Other relative only	Total Alone	Non-relative only	Spouse	Other relative only
All ages	18.5	1.7	58.0	21.9	23.0	1.1	60.0	15.9	14.4	2.6	63.8	19.2	14.7	2.6	63.7	19.1
18-44					6.9	2.2	66.9	24.0	10.7	3.7	60.3	25.3	10.7	3.7	60.3	25.3
45-64					15.2	1.0	68.6	15.2	12.4	1.1	76.6	9.9	12.5	1.1	76.3	10.1
≥65					33.8	0.8	50.8	14.6	32.1	0.9	55.8	11.2	32.2	0.9	55.5	11.5
Men	19.8	3.1	55.9	21.2	13.0	1.1	78.5	7.4	13.4	3.1	66.9	16.6	13.4	3.1	67.1	16.4
18-44					8.2	2.7	69.3	19.8	13.3	4.5	58.8	23.5	13.3	4.5	58.8	23.5
45-64					11.4	1.0	81.4	6.2	11.3	1.0	82.3	5.4	11.3	1.0	82.2	5.5
≥65					15.9	0.9	77.8	5.5	18.2	0.8	74.8	6.2	18.0	0.8	75.0	6.2
Women	17.0	0.0	60.3	22.7	30.2	1.0	46.8	22.1	15.3	2.2	60.9	21.6	15.8	2.1	60.5	21.6
18-44					6.1	1.9	65.3	26.8	8.3	2.9	61.8	27.0	8.3	2.9	61.8	27.0
45-64					18.4	1.0	57.6	23.0	13.4	1.2	71.5	14.0	13.7	1.2	70.9	14.3
≥65					44.8	0.8	34.1	20.3	41.9	0.9	42.4	14.8	42.1	0.9	41.7	15.2
Non-Hispanic whites	18.8	1.8	58.0	21.4	24.1	0.9	62.3	12.7	14.7	2.6	67.2	15.5	14.9	2.6	67.1	15.4
18-44					5.9	1.8	70.7	21.7	10.8	3.9	64.3	21.1	10.8	3.9	64.3	21.1
45-64					14.2	1.5	73.8	10.5	12.0	1.1	79.7	7.2	12.1	1.1	79.5	7.3
≥65					35.0	0.4	52.1	12.5	32.0	0.8	57.7	9.4	32.2	0.8	57.4	9.6
Non-Hispanic white men	19.1	3.4	57.1	20.4	12.5	1.0	80.7	5.9	13.0	2.9	69.9	14.1	13.0	2.9	70.1	14.0
18-44					6.3	2.4	72.3	19.0	12.9	4.3	61.8	20.9	12.9	4.3	61.8	20.9
45-64					9.2	1.4	85.2	4.3	10.7	1.0	84.0	4.4	10.6	1.0	84.0	4.4
≥65					16.7	0.3	78.1	5.0	17.8	0.6	76.9	4.6	17.8	0.6	77.0	4.6
Non-Hispanic white women	18.5	0.0	59.0	22.5	32.7	0.9	48.7	17.7	16.2	2.4	64.8	16.7	16.6	2.3	64.3	16.7
18-44					5.7	1.4	69.7	23.2	8.7	3.4	66.7	21.2	8.7	3.4	66.7	21.2
45-64					19.0	1.6	63.0	16.4	13.3	1.2	75.7	9.9	13.5	1.2	75.3	10.1
≥65					46.8	0.4	35.4	17.4	42.0	1.0	44.3	12.8	42.3	0.9	43.7	13.1
Non-Hispanic blacks					24.6	1.5	48.7	25.1	15.7	2.0	43.3	39.0	16.2	2.0	43.5	38.3
18-44					12.2	3.4	59.2	25.3	12.0	2.3	39.7	46.0	12.0	2.3	39.9	45.8
45-64					22.4	0.0	50.9	26.7	18.6	1.3	56.8	23.3	18.9	1.2	56.3	23.6
≥65					31.2	2.6	42.9	23.3	32.3	1.7	37.7	28.3	32.2	1.8	38.5	27.5
Non-Hispanic black men					18.4	2.2	66.3	13.2	17.8	3.4	51.9	26.9	17.9	3.3	52.5	26.3
18-44					14.9	4.4	58.5	22.2	16.5	4.0	45.2	34.2	16.6	4.0	45.3	34.1
45-64					23.3	0.0	63.0	13.7	20.0	1.5	71.6	7.0	20.2	1.4	71.0	7.5
≥65					13.5	4.0	74.6	7.9	21.6	3.2	53.2	22.0	20.6	3.3	55.9	20.3
Non-Hispanic black women					28.5	1.1	37.8	32.6	14.0	0.9	36.2	48.8	14.8	1.0	36.3	48.0
18-44					9.3	2.4	59.9	28.5	8.2	0.9	35.1	55.8	8.2	0.9	35.3	55.5
45-64					21.8	0.0	43.0	35.2	17.4	1.2	44.7	36.7	17.9	1.1	44.5	36.6
≥65					40.0	1.9	27.1	31.0	40.0	0.6	26.6	32.7	40.0	0.9	26.7	32.5
Mexican Americans					9.1	0.3	69.6	21.1	5.9	2.6	65.2	26.3	6.0	2.6	65.3	26.2
18-44					0.0	0.0	75.0	25.0	4.3	3.4	62.5	29.8	4.3	3.4	62.6	29.7
45-64					6.4	0.5	72.5	20.6	7.9	0.4	73.7	18.0	7.8	0.4	73.6	18.2
≥65					20.5	0.0	60.1	19.4	21.1	0.0	70.6	8.3	21.1	0.0	69.2	9.8
Mexican-American men					5.4	0.7	84.6	9.3	6.5	4.4	63.2	26.0	6.5	4.3	63.7	25.6
18-44									6.4	5.8	57.7	30.1	6.3	5.8	57.8	30.0
45-64									6.8	0.7	75.0	17.4	6.4	0.8	76.2	16.7
≥65									6.6	0.0	87.2	6.3	8.0	0.0	85.5	6.6
Mexican-American women					11.6	0.0	59.5	28.9	5.3	0.9	67.1	26.7	5.5	0.9	66.9	26.8
18-44									2.4	1.1	67.0	29.5	2.3	1.1	67.1	29.5
45-64									9.2	0.0	72.0	18.7	9.4	0.0	70.6	20.0
≥65									38.7	0.0	50.6	10.7	35.5	0.0	51.1	13.3

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Household Size, U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM				Nondiabetic				Total			
	1	2	3	≥4	1	2	3	≥4	1	2	3	≥4	1	2	3	≥4
All ages	20.2	27.8	21.6	30.4	24.1	41.6	17.1	17.2	17.1	30.8	20.3	31.8	17.3	31.1	20.2	31.5
18-44					9.2	20.3	27.1	43.5	14.5	19.3	22.6	43.7	14.5	19.3	22.6	43.7
45-64					16.2	39.7	22.6	21.5	13.5	43.4	22.4	20.7	13.6	43.3	22.4	20.7
≥65					34.6	48.4	9.9	7.2	33.0	54.9	7.9	4.2	33.1	54.4	8.0	4.4
Men	22.9	27.2	18.4	31.5	14.1	49.3	19.2	17.4	16.6	30.4	20.6	32.5	16.5	30.8	20.5	32.2
18-44					10.9	17.2	28.8	43.1	17.8	18.3	21.2	42.7	17.8	18.3	21.2	42.7
45-64					12.4	40.4	25.1	22.1	12.3	40.2	24.9	22.5	12.3	40.3	24.9	22.5
≥65					16.8	66.7	10.6	6.0	19.0	67.0	9.4	4.6	18.9	67.0	9.5	4.7
Women	17.0	28.5	25.3	29.2	31.2	36.1	15.6	17.1	17.5	31.3	20.0	31.2	17.9	31.4	19.9	30.8
18-44					8.0	22.4	25.9	43.8	11.3	20.2	23.9	44.6	11.3	20.3	23.9	44.6
45-64					19.4	39.0	20.5	21.0	14.6	46.4	20.0	19.0	14.9	46.1	20.0	19.1
≥65					45.6	37.1	9.4	7.9	43.0	46.3	6.8	3.9	43.2	45.6	7.0	4.3
Non-Hispanic whites	20.7	28.7	21.6	29.1	25.1	45.8	16.6	12.5	17.4	33.2	20.3	29.2	17.5	33.4	20.2	28.9
18-44					7.7	23.4	32.3	36.6	14.7	19.8	23.4	42.1	14.7	19.9	23.4	42.1
45-64					15.7	44.0	24.2	16.2	13.1	46.8	22.2	17.9	13.2	46.7	22.3	17.9
≥65					35.4	51.6	7.9	5.2	32.9	56.7	6.8	3.6	33.1	56.4	6.9	3.7
Non-Hispanic white men	22.5	27.8	17.4	32.3	13.5	54.1	19.5	12.9	16.0	32.9	20.9	30.3	15.9	33.3	20.9	29.9
18-44					8.7	21.4	34.6	35.3	17.3	18.9	22.5	41.4	17.3	18.9	22.5	41.4
45-64					10.6	43.9	27.7	17.8	11.7	43.6	24.6	20.1	11.6	43.7	24.7	20.1
≥65					17.0	69.6	9.2	4.3	18.5	69.5	8.2	3.8	18.4	69.5	8.3	3.8
Non-Hispanic white women	18.5	29.7	26.4	25.4	33.6	39.7	14.4	12.3	18.6	33.4	19.7	28.3	19.0	33.6	19.5	27.9
18-44					7.0	24.6	31.0	37.3	12.1	20.8	24.3	42.8	12.1	20.8	24.4	42.7
45-64					20.6	44.1	20.8	14.6	14.5	49.7	20.0	15.8	14.7	49.5	20.0	15.8
≥65					47.2	40.0	7.1	5.7	43.0	47.7	5.8	3.4	43.3	47.2	5.9	3.6
Non-Hispanic blacks					26.1	31.0	17.0	25.9	17.8	22.9	20.4	38.9	18.2	23.3	20.2	38.3
18-44					15.6	17.6	10.7	56.2	14.4	18.8	20.4	46.4	14.4	18.8	20.3	46.5
45-64					22.4	28.3	20.1	29.2	19.9	26.8	22.6	30.8	20.1	26.9	22.3	30.6
≥65					33.8	38.5	15.4	12.3	34.2	39.7	15.8	10.3	34.1	39.5	15.7	10.6
Non-Hispanic black men					20.6	38.6	16.4	24.5	21.3	20.6	19.5	38.7	21.3	21.3	19.4	38.1
18-44					19.3	12.4	15.1	53.3	20.7	16.5	16.7	46.1	20.7	16.5	16.7	46.1
45-64					23.3	33.3	18.2	25.2	21.4	21.5	29.8	27.3	21.5	22.5	28.8	27.2
≥65					17.5	59.0	14.4	9.1	24.8	44.6	15.6	15.1	23.9	46.4	15.4	14.4
Non-Hispanic black women					29.6	26.2	17.4	26.8	15.1	24.8	21.0	39.1	15.8	24.9	20.9	38.5
18-44					11.7	23.1	6.1	59.2	9.2	20.6	23.4	46.7	9.2	20.7	23.3	46.8
45-64					21.8	25.0	21.3	31.9	18.6	31.1	16.7	33.6	19.0	30.5	17.1	33.4
≥65					41.9	28.3	15.9	13.9	41.0	36.2	16.0	6.9	41.1	34.9	15.9	8.1
Mexican Americans					9.4	37.4	20.7	32.6	8.5	17.9	18.3	55.3	8.6	18.5	18.3	54.6
18-44					0.0	15.1	31.3	53.6	7.7	13.4	16.2	62.7	7.6	13.4	16.4	62.6
45-64					6.9	45.6	16.0	31.5	8.3	26.3	24.0	41.4	8.2	27.9	23.4	40.6
≥65					20.5	35.1	23.3	21.0	21.1	50.6	25.7	2.6	21.1	48.5	25.3	5.1
Mexican-American men					6.1	35.7	21.2	37.1	10.9	18.4	18.5	52.2	10.8	18.8	18.6	51.8
18-44									12.2	12.5	15.2	60.1	12.1	12.5	15.3	60.1
45-64									7.5	26.1	28.1	38.3	7.2	27.3	27.4	38.2
≥65									6.6	63.1	25.5	4.8	8.0	60.3	24.8	7.0
Mexican-American women					11.6	38.5	20.3	29.6	6.2	17.5	18.0	58.3	6.4	18.2	18.1	57.3
18-44									3.5	14.3	17.3	65.0	3.5	14.3	17.3	64.9
45-64									9.2	26.5	19.1	45.1	9.4	28.6	18.7	43.4
≥65									38.7	35.5	25.8	0.0	35.5	35.6	26.0	2.9

In cells with no entry, percent is unreliable due to small sample size. Household size is based on interviewer's assessment of related persons (by blood or marriage) living in the same dwelling. Household size is 1 for persons living alone or living with an unrelated individual.

Source: 1989 National Health Interview Survey

Appendix 6.13

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Years of Education, U.S., 1989

Race, sex and age (years)	IDDM <9	9-12	>12	≥16	NIDDM <9	9-12	>12	≥16	Nondiabetic <9	9-12	>12	≥16	Total <9	9-12	>12	≥16
All ages	3.4	46.0	50.6	20.4	27.5	51.5	21.0	9.5	9.1	50.6	40.3	19.3	9.6	50.6	39.9	19.0
18-34					3.7	58.5	37.8	19.3	3.5	52.7	43.8	18.0	3.5	52.7	43.8	18.0
35-44					11.6	51.2	37.1	10.7	4.5	43.9	51.6	28.4	4.6	43.9	51.5	28.3
45-54					17.7	57.2	25.1	9.9	8.0	51.4	40.6	20.9	8.2	51.6	40.2	20.6
55-64					26.6	54.1	19.3	9.6	14.1	55.3	30.6	15.7	14.8	55.3	30.0	15.4
65-74					32.5	50.9	16.6	8.2	21.5	54.9	23.6	11.6	22.4	54.6	23.0	11.4
≥75					42.5	40.9	16.7	8.6	35.1	41.8	23.1	11.1	35.6	41.8	22.7	10.9
18-44					9.2	53.5	37.3	13.3	3.8	49.7	46.5	21.6	3.8	49.7	46.5	21.5
45-64					23.2	55.3	21.5	9.7	10.8	53.2	36.0	18.6	11.3	53.3	35.4	18.2
≥65					35.7	47.7	16.6	8.3	26.9	49.7	23.4	11.4	27.5	49.6	22.9	11.2
Men	3.6	37.3	59.2	28.0	26.2	47.6	26.2	12.8	9.3	47.8	42.9	22.0	9.7	47.7	42.6	21.8
18-44					12.7	39.9	47.4	14.1	4.0	48.5	47.5	23.2	4.1	48.5	47.5	23.2
45-64					23.8	49.3	26.9	13.3	12.0	47.4	40.7	23.0	12.4	47.4	40.2	22.6
≥65					32.1	47.7	20.2	12.1	28.7	45.0	26.3	14.9	28.9	45.2	25.9	14.7
Women	3.2	56.0	40.7	11.8	28.5	54.3	17.3	7.1	8.9	53.1	38.0	16.8	9.4	53.2	37.4	16.5
18-44					6.9	62.3	30.8	12.8	3.6	50.8	45.6	20.0	3.6	50.9	45.5	20.0
45-64					22.7	60.4	16.9	6.7	9.7	58.6	31.7	14.5	10.2	58.7	31.1	14.2
≥65					38.0	47.7	14.4	6.0	25.6	53.1	21.3	9.0	26.6	52.7	20.8	8.8
Non-Hispanic whites	3.7	44.3	52.0	21.2	21.9	55.1	23.0	11.1	7.0	50.7	42.3	20.6	7.3	50.8	41.9	20.4
18-44					6.5	51.8	41.8	17.7	1.9	48.5	49.7	23.8	1.9	48.5	49.7	23.8
45-64					15.2	60.5	24.3	12.0	7.2	55.0	37.8	19.3	7.4	55.2	37.4	19.1
≥65					30.0	51.7	18.3	9.0	23.7	51.7	24.6	11.9	24.1	51.7	24.2	11.7
Non-Hispanic white men	3.9	34.3	61.8	28.6	20.5	51.1	28.4	15.2	7.3	47.5	45.3	23.6	7.5	47.5	45.0	23.4
18-44					13.1	32.8	54.1	18.4	1.9	47.1	50.9	25.4	2.0	47.1	51.0	25.3
45-64					16.7	52.9	30.5	16.7	8.9	48.7	42.4	24.1	9.1	48.8	42.1	23.8
≥65					25.4	52.8	21.8	13.2	26.0	46.5	27.5	15.4	25.9	46.9	27.2	15.2
Non-Hispanic white women	3.5	55.8	40.7	12.8	23.0	58.1	19.0	8.0	6.7	53.7	39.7	17.9	7.1	53.8	39.2	17.7
18-44					2.6	62.9	34.6	17.3	1.8	49.7	48.4	22.3	1.8	49.8	48.4	22.2
45-64					13.8	67.7	18.5	7.7	5.6	60.9	33.6	14.9	5.8	61.1	33.1	14.7
≥65					32.9	51.0	16.1	6.3	22.1	55.3	22.6	9.4	22.8	55.0	22.2	9.2
Non-Hispanic blacks					35.9	47.3	16.8	5.8	13.1	56.8	30.2	10.9	14.2	56.3	29.5	10.7
18-44					8.0	56.6	35.4	7.7	3.1	62.1	34.8	11.6	3.1	62.1	34.8	11.6
45-64					29.8	54.1	16.1	5.8	22.9	51.9	25.2	11.0	23.6	52.0	24.3	10.5
≥65					51.9	36.5	11.6	5.2	53.6	34.3	12.1	6.1	53.4	34.6	12.0	6.0
Non-Hispanic black men					40.7	41.2	18.1	5.9	13.2	56.8	30.0	11.8	14.3	56.1	29.5	11.6
18-44					9.6	50.1	40.3	10.5	3.2	63.1	33.7	12.7	3.3	63.0	33.8	12.7
45-64					41.1	45.5	13.4	4.6	24.3	49.8	25.9	11.3	25.7	49.4	24.8	10.7
≥65					55.8	31.0	13.2	5.5	55.1	30.2	14.7	6.9	55.2	30.3	14.5	6.8
Non-Hispanic black women					32.8	51.1	16.1	5.8	13.0	56.7	30.3	10.2	14.0	56.4	29.5	9.9
18-44					6.3	63.5	30.2	4.8	3.0	61.3	35.7	10.8	3.0	61.3	35.7	10.7
45-64					22.7	59.5	17.9	6.6	21.8	53.6	24.7	10.8	21.9	54.1	24.0	10.4
≥65					49.9	39.3	10.8	5.1	52.6	37.1	10.3	5.5	52.1	37.5	10.4	5.4
Mexican Americans					61.1	30.8	8.1	2.1	35.2	47.6	17.2	5.4	36.0	47.1	16.9	5.3
18-44					27.6	54.9	17.6	0.0	28.6	53.1	18.3	5.2	28.6	53.1	18.3	5.1
45-64					63.3	29.8	7.0	1.5	52.9	31.8	15.3	6.3	53.7	31.6	14.7	6.0
≥65					77.6	17.8	4.6	4.6	63.2	28.4	8.4	5.0	65.1	27.0	7.9	4.9
Mexican-American men					52.0	31.8	16.2	5.3	38.7	43.8	17.5	6.1	39.0	43.5	17.5	6.1
18-44									35.1	50.1	14.9	4.4	35.0	50.0	15.0	4.4
45-64									46.2	26.4	27.5	11.7	46.2	27.2	26.7	11.2
≥65									55.8	31.0	13.2	7.0	58.2	28.7	13.1	7.4
Mexican-American women					67.1	30.1	2.9	0.0	31.8	51.3	16.9	4.7	33.1	50.5	16.4	4.5
18-44									22.6	55.9	21.5	5.9	22.7	56.0	21.4	5.8
45-64									61.0	38.2	0.8	0.0	62.4	36.7	1.0	0.0
≥65									72.0	25.4	2.6	2.6	72.7	25.1	2.2	2.2

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Family Income (in Thousands of Dollars), U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM				Nondiabetic				Total			
	<10	10-<20	20-<40	≥40	<10	10-<20	20-<40	≥40	<10	10-<20	20-<40	≥40	<10	10-<20	20-<40	≥40
All ages	11.6	11.8	38.9	37.7	27.9	29.2	27.3	15.6	12.6	20.0	34.7	32.8	12.9	20.2	34.5	32.3
18-44					20.1	25.6	36.6	17.8	11.0	17.7	37.3	34.0	11.1	17.7	37.3	34.0
45-64					21.2	23.0	30.9	24.9	9.1	16.6	33.2	41.1	9.6	16.9	33.1	40.4
≥65					36.1	35.8	21.5	6.5	25.4	36.0	26.3	12.4	26.2	35.9	25.9	12.0
Men	8.3	10.4	36.1	45.2	15.4	29.7	33.7	21.1	9.9	18.7	35.7	35.6	10.1	18.9	35.7	35.3
18-44					11.6	23.1	47.2	18.1	9.8	16.9	38.0	35.3	9.8	16.9	38.0	35.3
45-64					13.3	19.8	35.6	31.3	6.8	13.9	32.8	46.5	7.1	14.2	32.9	45.9
≥65					18.8	42.7	28.0	10.5	17.2	37.6	30.2	15.0	17.3	38.0	30.1	14.7
Women	15.1	13.4	41.9	29.7	37.3	28.8	22.4	11.5	15.0	21.2	33.7	30.1	15.6	21.4	33.5	29.6
18-44					25.7	27.2	29.6	17.5	12.2	18.5	36.5	32.8	12.3	18.5	36.5	32.7
45-64					28.5	26.0	26.5	19.0	11.3	19.2	33.5	36.0	12.0	19.4	33.3	35.3
≥65					47.4	31.4	17.3	3.9	31.3	34.7	23.4	10.5	32.6	34.5	22.9	10.0
Non-Hispanic whites	10.7	12.4	38.4	38.5	24.3	29.6	29.0	17.1	9.9	18.6	35.9	35.6	10.2	18.8	35.7	35.2
18-44					16.1	23.4	39.6	20.9	7.9	15.6	38.8	37.7	7.9	15.6	38.8	37.7
45-64					16.6	22.5	31.8	29.1	6.8	14.9	34.3	44.0	7.1	15.1	34.2	43.5
≥65					32.3	36.7	24.4	6.7	22.9	36.1	27.4	13.5	23.5	36.1	27.2	13.1
Non-Hispanic white men	9.2	11.5	33.0	46.4	11.0	30.3	35.3	23.4	7.5	16.9	37.3	38.3	7.6	17.1	37.3	38.0
18-44					7.8	24.1	45.5	22.6	7.0	14.4	39.9	38.6	7.0	14.5	39.9	38.6
45-64					8.4	18.7	36.1	36.8	5.3	11.8	34.1	48.9	5.4	12.0	34.2	48.5
≥65					14.3	43.0	32.5	10.3	14.3	37.9	31.6	16.2	14.3	38.2	31.7	15.8
Non-Hispanic white women	12.4	13.4	44.3	30.0	34.6	29.1	24.1	12.2	12.2	20.2	34.5	33.1	12.7	20.4	34.3	32.6
18-44					21.0	23.0	36.2	19.9	8.7	16.8	37.7	36.8	8.8	16.8	37.7	36.7
45-64					24.6	26.2	27.7	21.5	8.3	17.8	34.5	39.4	8.8	18.1	34.3	38.8
≥65					44.4	32.4	18.9	4.2	29.1	34.9	24.4	11.6	30.1	34.7	24.1	11.1
Non-Hispanic blacks					40.0	29.0	21.1	9.8	26.9	26.0	29.3	17.8	27.5	26.1	29.0	17.4
18-44					22.4	31.1	31.4	15.1	24.6	25.1	33.1	17.3	24.6	25.1	33.1	17.2
45-64					33.7	24.3	29.3	12.7	25.0	25.1	24.8	25.1	25.8	25.0	25.2	24.0
≥65					53.1	33.4	8.7	4.8	47.2	33.9	14.0	4.9	48.1	33.8	13.2	4.9
Non-Hispanic black men					29.5	30.2	28.3	12.1	21.1	25.8	31.5	21.6	21.5	26.0	31.3	21.2
18-44					15.5	17.5	50.9	16.0	19.8	25.3	35.0	19.9	19.7	25.2	35.2	19.9
45-64					28.1	25.7	35.2	11.0	16.6	24.8	26.2	32.3	17.8	24.8	26.9	30.5
≥65					38.6	42.6	7.5	11.3	41.4	31.3	18.8	8.5	41.0	32.9	17.2	8.9
Non-Hispanic black women					47.5	28.2	16.1	8.2	31.7	26.1	27.5	14.6	32.5	26.2	27.0	14.3
18-44					30.5	46.9	8.6	14.1	28.6	24.9	31.5	15.0	28.7	25.1	31.3	15.0
45-64					37.8	23.3	24.9	14.0	31.7	25.3	23.7	19.3	32.3	25.2	23.8	18.8
≥65					61.4	28.2	9.3	1.1	51.6	35.9	10.4	2.2	53.3	34.5	10.2	2.0
Mexican Americans					29.3	30.6	30.1	10.1	20.8	28.1	32.5	18.6	21.1	28.2	32.4	18.3
18-44					34.0	23.0	37.6	5.4	19.7	28.3	33.9	18.2	19.8	28.2	33.9	18.1
45-64					23.2	34.7	27.1	15.0	17.1	26.4	31.1	25.4	17.6	27.1	30.8	24.5
≥65					37.6	27.8	30.7	3.9	48.8	32.6	18.6	0.0	47.3	32.0	20.2	0.5
Mexican-American men					22.8	22.7	39.8	14.8	22.7	30.2	28.6	18.5	22.7	30.0	28.9	18.4
18-44									23.5	31.6	28.6	16.3	23.5	31.6	28.7	16.2
45-64									13.1	24.3	32.6	30.0	13.3	24.2	32.7	29.9
≥65									49.4	35.9	14.7	0.0	47.9	34.6	17.6	0.0
Mexican-American women					33.5	35.8	23.7	7.1	18.9	26.1	36.4	18.7	19.5	26.4	35.9	18.2
18-44									16.3	25.2	38.6	19.9	16.5	25.2	38.5	19.8
45-64									23.3	29.6	28.9	18.2	23.8	31.2	28.1	16.9
≥65									47.9	28.3	23.8	0.0	46.6	29.0	23.3	1.1

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.15
Percent of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years Who are Immigrants, U.S., 1989

Race, sex, and age (years)	IDDM	NIDDM	Nondiabetic	Total
All ages	2.5	7.7	9.8	9.8
18-64		7.6	10.2	10.1
≥65		7.9	7.9	7.9
Men		7.8	10.6	10.5
18-64		7.8	10.7	10.6
≥65		7.8	10.0	9.8
Women		7.7	9.2	9.1
18-64		7.5	9.8	9.7
≥65		7.9	6.3	6.5
Non-Hispanic whites		4.5	4.5	4.5
Non-Hispanic blacks		2.1	6.7	6.4
Mexican Americans		23.0	46.2	45.5

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.16
Distribution among Immigrants of NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Years of Living in the U.S., 1989

Race, sex, and age (years)	NIDDM			Nondiabetic			Total		
	<5	5-14	≥15	<5	5-14	≥15	<5	5-14	≥15
All ages	3.1	19.9	77.0	18.3	29.9	51.8	18.0	29.7	52.3
18-64	4.9	25.4	69.7	20.3	33.2	46.6	20.1	33.1	46.9
≥65	1.1	13.8	85.1	4.5	6.1	89.4	4.2	6.7	89.1
Men	0.0	21.2	78.8	18.6	32.9	48.5	18.3	32.7	49.0
18-64	0.0	30.0	70.0	20.8	36.7	42.5	20.6	36.6	42.8
≥65	0.0	9.8	90.2	2.8	6.5	90.7	2.7	6.7	90.7
Women	5.5	18.9	75.6	18.1	26.7	55.2	17.8	26.5	55.7
18-64	9.1	21.6	69.4	19.7	29.5	50.8	19.6	29.4	51.1
≥65	1.8	16.3	81.9	6.3	5.8	87.9	5.9	6.8	87.4
Non-Hispanic whites	0.0	13.4	86.6	11.2	17.9	71.0	10.9	17.8	71.3
Non-Hispanic blacks	6.2	20.3	73.5	25.8	38.9	35.3	25.6	38.6	35.8
Mexican Americans	0.0	26.6	73.4	15.7	37.7	46.6	15.5	37.5	47.0

In adults with IDDM, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey.

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Employment Status in the Past Two Weeks, U.S., 1989

Race, sex, and age (years)	IDDM			NIDDM			Nondiabetic			Total		
	Employed	Unemployed	Not in labor force	Employed	Unemployed	Not in labor force	Employed	Unemployed	Not in labor force	Employed	Unemployed	Not in labor force
All ages	73.9	5.6	20.6	30.8	1.9	67.3	66.2	2.9	30.8	65.4	2.9	31.8
18-44				62.0	8.1	29.9	79.3	3.8	16.9	79.2	3.8	17.0
45-64				47.0	1.7	51.3	67.7	2.3	30.0	66.8	2.3	30.9
≥65				9.1	0.5	90.4	13.2	0.4	86.4	12.9	0.5	86.7
Men	87.7	1.5	10.9	40.6	2.0	57.4	76.1	3.3	20.7	75.3	3.2	21.5
18-44				77.3	6.6	16.1	88.1	4.1	7.8	88.0	4.1	7.8
45-64				57.1	1.6	41.4	77.8	2.6	19.6	77.0	2.6	20.5
≥65				13.8	1.4	84.8	17.6	0.6	81.8	17.4	0.7	82.0
Women	58.0	10.2	31.7	23.8	1.8	74.4	57.3	2.6	40.1	56.4	2.6	41.0
18-44				52.1	9.0	38.9	70.8	3.5	25.7	70.7	3.5	25.8
45-64				38.3	1.8	59.9	58.4	2.1	39.5	57.5	2.1	40.4
≥65				6.1	0.0	93.9	10.1	0.3	89.6	9.8	0.3	89.9
Non-Hispanic whites	75.5	4.8	19.7	30.6	1.7	67.8	66.9	2.5	30.7	66.1	2.5	31.5
18-44				65.4	7.7	27.0	82.0	3.2	14.8	81.9	3.3	14.8
45-64				51.1	1.6	47.3	68.7	2.2	29.2	68.1	2.2	29.7
≥65				8.6	0.5	90.9	13.3	0.4	86.3	13.0	0.4	86.6
Non-Hispanic white men	88.3	1.6	10.1	40.3	1.9	57.8	76.9	2.7	20.3	76.2	2.7	21.0
18-44				81.2	5.5	13.4	90.9	3.4	5.7	90.8	3.4	5.7
45-64				61.3	1.8	36.9	78.8	2.4	18.8	78.2	2.4	19.4
≥65				13.5	1.4	85.1	17.6	0.5	81.8	17.4	0.6	82.0
Non-Hispanic white women	60.8	8.4	30.8	23.4	1.5	75.1	57.6	2.2	40.2	56.8	2.2	41.0
18-44				56.2	8.9	34.9	73.3	3.0	23.7	73.2	3.1	23.7
45-64				41.4	1.4	57.2	59.2	1.9	38.9	58.6	1.9	39.5
≥65				5.5	0.0	94.5	10.2	0.3	89.5	9.9	0.3	89.8
Non-Hispanic blacks				30.2	2.6	67.2	63.1	5.7	31.3	61.5	5.5	33.0
18-44				58.4	10.8	30.8	70.7	7.6	21.7	70.6	7.6	21.8
45-64				39.9	2.5	57.6	65.6	2.3	32.1	63.1	2.4	34.5
≥65				9.9	0.0	90.1	12.8	0.7	86.5	12.4	0.6	87.0
Non-Hispanic black men				36.5	2.3	61.2	70.3	6.1	23.5	68.9	6.0	25.1
18-44				78.2	8.2	13.6	77.5	8.4	14.1	77.5	8.4	14.1
45-64				39.6	1.8	58.6	73.5	1.9	24.6	70.5	1.9	27.6
≥65				11.4	0.0	88.6	17.4	0.7	81.9	16.7	0.6	82.8
Non-Hispanic black women				26.3	2.8	70.9	57.2	5.3	37.5	55.6	5.1	39.3
18-44				37.4	13.6	49.0	65.1	6.9	28.0	64.8	7.0	28.2
45-64				40.1	3.0	56.9	59.2	2.7	38.2	57.2	2.7	40.1
≥65				9.2	0.0	90.8	9.5	0.7	89.7	9.5	0.6	89.9
Mexican Americans				30.9	3.1	66.0	63.6	4.6	31.8	62.7	4.6	32.8
18-44				62.4	5.1	32.5	69.2	4.8	26.0	69.1	4.8	26.1
45-64				29.2	1.8	69.0	59.1	4.3	36.6	56.8	4.1	39.2
≥65				13.5	4.6	81.9	2.6	3.4	94.0	4.1	3.5	92.4
Mexican-American men				42.0	5.3	52.7	75.6	7.5	16.9	74.8	7.4	17.8
18-44							82.3	7.7	10.0	82.1	7.7	10.2
45-64							72.6	7.7	19.6	71.0	7.3	21.7
≥65							4.8	4.0	91.3	6.9	4.7	88.4
Mexican-American women				23.4	1.6	75.0	51.8	1.8	46.4	50.8	1.8	47.4
18-44							57.1	2.1	40.9	57.2	2.1	40.8
45-64							43.0	0.2	56.8	40.5	0.4	59.1
≥65							0.0	2.6	97.4	0.9	2.2	96.9

In cells with no entry, the percent is unreliable due to small sample size. "Unemployed" through job layoff; "not in labor force" due to other reasons, such as retirement.

Source: 1989 National Health Interview Survey

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years, by Usual Activity in the Past 12 Months, U.S., 1989

Race, sex, and age (years)	IDDM				NIDDM				Nondiabetic				Total			
	Working	Keeps house	School	Else	Working	Keeps house	School	Else	Working	Keeps house	School	Else	Working	Keeps house	School	Else
All ages	72.1	10.4	8.5	9.0	30.3	34.7	0.7	34.4	63.4	18.7	6.2	11.7	62.6	19.1	6.1	12.2
18-44					62.2	23.2	5.0	9.6	74.7	12.5	10.2	2.6	74.6	12.6	10.2	2.7
45-64					46.9	26.9	0.1	26.1	67.6	19.9	0.6	11.9	66.8	20.2	0.6	12.5
≥65					7.6	44.5	0.1	47.9	11.6	41.0	0.2	47.2	11.3	41.3	0.2	47.2
Men	81.0	0.0	5.0	14.0	40.5	4.2	0.7	54.6	74.5	1.8	6.6	17.2	73.7	1.8	6.4	18.0
18-44					79.4	3.2	4.1	13.2	85.0	0.9	10.6	3.6	84.9	0.9	10.6	3.6
45-64					57.2	1.6	0.2	41.0	79.2	1.7	0.2	18.9	78.3	1.7	0.2	19.7
≥65					12.5	7.3	0.3	79.9	16.2	6.4	0.1	77.3	16.0	6.4	0.1	77.5
Women	61.8	22.3	12.6	3.3	23.0	56.4	0.7	20.0	53.4	34.1	5.9	6.7	52.5	34.7	5.8	7.0
18-44					51.0	36.3	5.6	7.2	64.8	23.7	9.8	1.7	64.8	23.8	9.8	1.7
45-64					38.1	48.7	0.0	13.2	57.0	36.7	0.9	5.5	56.2	37.2	0.8	5.8
≥65					4.6	67.2	0.0	28.2	8.3	65.8	0.3	25.6	8.0	66.0	0.3	25.8
Non-Hispanic whites	73.3	10.6	8.2	7.9	29.3	35.0	0.8	35.0	63.6	18.9	5.5	12.0	62.9	19.2	5.4	12.5
18-44					61.4	23.7	6.1	8.9	76.7	12.1	9.2	2.0	76.7	12.1	9.2	2.0
45-64					50.9	24.9	0.2	24.1	68.3	19.5	0.6	11.7	67.8	19.6	0.5	12.1
≥65					6.7	44.8	0.1	48.4	11.4	41.3	0.2	47.2	11.0	41.5	0.2	47.2
Non-Hispanic white men	82.9	0.0	5.4	11.7	39.6	4.2	0.8	55.4	75.0	1.7	5.6	17.6	74.3	1.8	5.5	18.4
18-44					78.1	5.6	5.1	11.3	87.2	0.6	9.4	2.7	87.2	0.6	9.4	2.8
45-64					62.0	0.7	0.4	37.0	80.0	1.5	0.2	18.4	79.4	1.4	0.2	19.0
≥65					11.3	7.2	0.3	81.1	16.0	6.8	0.1	77.2	15.7	6.8	0.1	77.4
Non-Hispanic white women	62.2	22.8	11.5	3.6	21.7	57.7	0.7	19.9	53.2	34.6	5.3	6.9	52.4	35.2	5.2	7.2
18-44					51.7	34.3	6.6	7.5	66.4	23.3	9.0	1.2	66.3	23.4	9.0	1.3
45-64					40.4	47.8	0.0	11.8	57.4	36.3	0.9	5.4	56.8	36.7	0.9	5.6
≥65					3.7	68.7	0.0	27.6	8.1	65.8	0.2	25.9	7.8	66.0	0.2	26.0
Non-Hispanic blacks					30.9	34.0	0.5	34.7	62.4	17.3	7.9	12.5	60.9	18.0	7.5	13.5
18-44					66.4	19.6	3.8	10.2	69.6	12.6	11.5	6.3	69.6	12.7	11.5	6.3
45-64					40.3	29.0	0.0	30.7	66.2	20.8	0.6	12.4	63.7	21.6	0.6	14.2
≥65					8.1	44.5	0.0	47.4	11.5	38.5	0.2	49.9	11.0	39.4	0.1	49.5
Non-Hispanic black men					36.7	5.5	0.7	57.1	69.9	3.4	8.3	18.4	68.5	3.5	8.0	20.0
18-44					84.5	0.0	3.8	11.7	76.5	3.1	12.0	8.3	76.6	3.1	11.9	8.4
45-64					38.7	5.7	0.0	55.6	76.2	3.2	0.8	19.9	72.9	3.6	0.7	22.9
≥65					9.9	8.0	0.0	82.1	13.3	5.0	0.0	81.7	12.9	5.4	0.0	81.7
Non-Hispanic black women					27.2	51.8	0.4	20.6	56.3	28.6	7.5	7.6	54.8	29.8	7.1	8.2
18-44					47.3	40.3	3.8	8.6	63.9	20.5	11.1	4.6	63.7	20.6	11.1	4.6
45-64					41.4	43.9	0.0	14.7	58.1	34.9	0.5	6.5	56.4	35.8	0.5	7.3
≥65					7.1	63.0	0.0	29.9	10.2	62.7	0.3	26.9	9.7	62.7	0.2	27.4
Mexican Americans					34.0	38.4	0.0	27.5	64.4	21.4	6.3	7.9	63.5	21.9	6.1	8.5
18-44					73.2	16.6	0.0	10.2	69.7	19.2	7.9	3.2	69.7	19.2	7.9	3.3
45-64					27.6	40.5	0.0	32.0	59.2	25.3	0.9	14.6	56.7	26.5	0.9	16.0
≥65					21.5	48.7	0.0	29.9	9.0	38.5	2.2	50.3	10.7	39.9	1.9	47.5
Mexican-American men					47.6	2.1	0.0	50.3	80.7	0.8	6.5	12.1	79.9	0.8	6.3	13.1
18-44									87.3	0.4	8.9	3.4	87.3	0.4	8.8	3.6
45-64									74.8	1.7	0.0	23.5	72.9	1.6	0.0	25.5
≥65									16.8	2.2	0.0	81.0	19.0	2.8	0.0	78.2
Mexican-American women					25.0	62.8	0.0	12.3	48.5	41.8	6.1	3.7	47.6	42.5	5.8	4.0
18-44									53.3	36.7	7.1	3.0	53.5	36.6	7.0	3.0
45-64									40.5	53.5	2.1	4.0	38.2	54.9	1.8	5.1
≥65									0.0	80.2	4.8	15.0	1.9	79.2	4.0	15.0

In cells with no entry, the percent is unreliable due to small sample size.

Appendix 6.19

Distribution of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years Who Were Employed in the Past 2 Weeks, by Type of Employer, U.S., 1989

Race, sex, and age (years)	IDDM			NIDDM			Nondiabetic			Total		
	Private	Govt.	Self-employed	Private	Govt.	Self-employed	Private	Govt.	Self-employed	Private	Govt.	Self-employed
All ages	77.2	14.5	8.3	68.4	18.3	13.3	74.5	14.7	10.8	74.4	14.7	10.9
18-44				79.6	11.2	9.3	78.5	13.3	8.2	78.5	13.3	8.2
45-64				66.0	21.7	12.3	65.5	19.0	15.5	65.5	19.1	15.4
≥65				59.1	15.5	25.4	53.7	11.2	35.1	54.0	11.4	34.6
Men	72.5	16.9	10.7	66.6	17.9	15.5	74.3	12.8	12.9	74.2	12.9	12.9
18-44				78.6	11.5	9.8	78.8	11.4	9.8	78.8	11.4	9.8
45-64				65.2	20.1	14.7	65.3	16.9	17.8	65.3	17.0	17.7
≥65				55.8	17.2	27.0	46.5	9.5	44.0	47.0	10.0	43.0
Women	84.2	10.9	4.9	70.5	18.9	10.6	74.6	17.0	8.4	74.6	17.0	8.4
18-44				80.5	10.8	8.7	78.2	15.5	6.3	78.2	15.5	6.3
45-64				66.9	23.7	9.3	65.8	21.7	12.6	65.8	21.7	12.5
≥65				64.7	12.5	22.7	63.2	13.4	23.4	63.3	13.3	23.4
Non-Hispanic whites	79.0	12.1	9.0	69.7	14.0	16.3	73.8	14.1	12.2	73.7	14.1	12.2
18-44				78.8	8.5	12.7	78.1	12.7	9.2	78.1	12.7	9.2
45-64				70.1	14.9	15.0	65.0	18.0	17.0	65.1	17.9	17.0
≥65				53.1	19.0	27.9	53.1	11.2	35.7	53.1	11.5	35.4
Non-Hispanic white men	73.5	15.0	11.5	68.8	12.7	18.5	73.4	12.2	14.4	73.4	12.2	14.5
Non-Hispanic white women	87.0	7.8	5.3	70.9	15.7	13.3	74.2	16.4	9.4	74.2	16.4	9.5
Non-Hispanic blacks				66.8	28.5	4.7	75.6	20.5	3.9	75.3	20.7	4.0
18-44				81.8	16.4	1.9	78.3	19.1	2.6	78.3	19.1	2.6
45-64				57.1	39.0	3.9	67.6	26.3	6.1	67.0	27.1	6.0
≥65				81.7	2.5	15.8	59.9	12.0	28.2	62.4	10.9	26.8
Non-Hispanic black men				69.5	25.6	4.9	78.4	16.8	4.9	78.2	17.0	4.9
Non-Hispanic black women				64.5	30.9	4.6	72.7	24.3	3.0	72.5	24.4	3.1
Mexican Americans				63.0	24.8	12.2	82.3	11.5	6.1	82.1	11.7	6.2
18-44				74.7	17.5	7.8	84.5	9.4	6.1	84.5	9.4	6.1
45-64				57.5	29.9	12.6	73.1	20.6	6.3	72.5	21.0	6.6
≥65				50.2	25.5	24.3	45.5	54.5	0.0	46.9	45.7	7.4
Mexican-American men				48.8	33.9	17.3	83.5	12.2	4.3	83.1	12.5	4.4
Mexican-American women				80.0	14.0	6.0	80.5	10.5	9.0	80.5	10.6	8.9

In cells with no entry, the percent is unreliable due to small sample size.

Source: 1989 National Health Interview Survey

Appendix 6.20
Percent of IDDM, NIDDM, Nondiabetic, and Total Populations Age ≥18 Years with Military Veteran Status, U.S., 1989

Race, sex, and age (years)	IDDM	NIDDM	Nondiabetic	Total
All ages	7.6	22.8	16.2	16.3
18-44		12.7	9.4	9.4
45-64		26.9	28.1	28.1
≥65		21.7	22.8	22.7
Men	12.7	53.2	32.6	33.0
18-44		30.0	17.7	17.7
45-64		57.7	57.5	57.5
≥65		54.2	52.9	52.9
Women	1.6	1.0	1.2	1.2
Non-Hispanic white men	13.8	58.9	35.7	36.1
18-44		30.1	19.3	19.3
45-64		64.6	62.1	62.1
≥65		59.0	53.4	53.7
Non-Hispanic black men		42.8	25.5	26.2
18-44		28.2	16.7	16.8
45-64		48.0	40.1	40.6
≥65		43.1	51.1	50.1
Mexican-American men		35.5	15.7	16.2
18-44		35.4	9.9	10.0
45-64		38.9	27.7	28.4
≥65		28.4	41.9	40.5

In cells with no entry, the percent is unreliable due to small sample size

Source: 1989 National Health Interview Survey