Table 14. Diabetes prevalence and glycemic control among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, selected years 1988–1994 through 2013–2016

Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm#Table_014.

[Data are based on interviews and laboratory data of a sample of the civilian noninstitutionalized population]

Sex, age, and race and Hispanic origin[3]	Physician-diagnosed and undiagnosed diabetes[1,2]				Physician-diagnosed diabetes[1]				Undiagnosed diabetes[2]			
	1988–1994	1999–2002	2009–2012	2013–2016	1988–1994	1999–2002	2009–2012	2013–2016	1988–1994	1999–2002	2009–2012	2013–2016
20 years and over, age-adjusted[4]	Percent of population											
All persons[5]	8.8	10.8	12.6	13.9	5.2	6.6	8.4	9.7	3.6	4.2	4.2	4.2
Male	9.6	12.1	14.3	15.8	5.5	7.3	9.0	10.8	4.1	4.8	5.3	5.1
Female	8.2	9.7	11.0	12.2	5.1	5.9	7.8	8.8	3.2	3.8	3.2	3.4
Not Hispanic or Latino:												
White only	7.7	9.5	10.1	12.3	4.8	5.5	6.6	8.5	2.9	4.0	3.4	3.8
Black or African American only	16.3	15.0	18.7	18.0	9.1	9.2	13.3	14.0	7.2	5.8	5.4	4.0
Asian only	- - -	- - -	- - -	16.1	- - -	- - -	- - -	10.9	- - -	- - -	- - -	5.2
Hispanic or Latino	- - -	- - -	19.3	19.7	- - -	- - -	12.4	13.6	- - -	- - -	7.0	6.1
Mexican origin	15.6	15.1	21.7	20.5	10.7	10.8	13.9	13.9	5.0	*4.3	7.9	6.6
Percent of poverty level:[6]												
Below 100%	14.2	15.4	18.2	19.6	8.8	9.0	12.1	13.8	*5.4	6.4	6.1	5.8
100% or more	8.1	10.3	11.7	13.2	4.8	6.4	7.8	9.1	3.3	3.9	3.9	4.0
100%–199%	9.7	14.2	15.5	16.7	5.2	9.4	11.4	10.7	4.4	4.7	4.1	6.0
200% or more	7.8	9.1	10.3	12.0	4.7	5.5	6.5	8.7	3.1	3.7	3.8	3.3
200%–399%	7.8	11.0	12.7	14.8	4.3	7.3	8.4	9.9	3.6	3.7	4.3	4.9
400% or more	7.8	8.0	8.4	10.3	5.3	4.3	*5.2	8.0	2.5	3.6	3.2	2.3
20 years and over, crude												
All persons[5]	8.3	10.8	13.3	15.0	4.9	6.6	8.9	10.5	3.4	4.2	4.4	4.5
Male	8.6	11.6	14.6	16.7	4.9	7.1	9.1	11.4	3.7	4.5	5.5	5.3
Female	8.0	10.1	12.1	13.5	5.0	6.1	8.7	9.7	3.1	3.9	3.4	3.8
Not Hispanic or Latino:												
White only	7.6	9.9	11.5	14.4	4.7	5.6	7.6	10.0	2.9	4.3	3.9	4.4
Black or African American only	13.3	13.4	17.7	17.7	7.2	8.3	12.5	13.7	6.1	5.0	5.2	3.9
Asian only	- - -	- - -	- - -	14.8	- - -	- - -	- - -	9.8	- - -	- - -	- - -	5.0
Hispanic or Latino	- - -	- - -	16.2	16.5	- - -	- - -	9.9	11.1	- - -	- - -	6.3	5.4
Mexican origin	10.4	10.3	16.9	17.2	6.3	7.2	10.1	11.3	4.1	3.1	6.8	5.9
Percent of poverty level:[6]												
Below 100%	11.6	14.1	15.2	17.3	7.2	8.4	9.8	12.0	4.4	5.8	5.3	5.3
100% or more	7.6	10.2	12.8	14.6	4.5	6.3	8.6	10.2	3.1	3.8	4.3	4.4
100%–199%	9.1	14.0	16.6	17.3	5.2	9.3	12.3	11.2	3.9	4.7	4.2	6.1
200% or more	7.1	9.0	11.5	13.7	4.3	5.4	7.3	9.9	2.8	3.6	4.3	3.9
200%–399%	6.8	10.6	13.6	15.9	3.7	7.0	9.0	10.7	3.1	3.6	4.6	5.2
400% or more	7.6	7.7	9.8	11.9	5.2	4.1	*5.8	9.2	*2.5	3.6	4.0	2.7
Age												
20–44 years	*2.1	4.6	4.0	5.0	*	3.2	2.1	3.0	1.1	*1.4	2.0	1.9
45–64 years	14.0	14.2	17.5	20.3	7.9	8.3	11.4	14.2	6.0	5.9	6.1	6.1
65 years and over	19.4	22.9	28.6	28.3	12.7	13.7	21.2	20.9	6.7	9.2	7.3	7.4

Table 14. Diabetes prevalence and glycemic control among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, selected years 1988–1994 through 2013–2016

Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm#Table_014.

[Data are based on interviews and laboratory data of a sample of the civilian noninstitutionalized population]

Sex, age, and race and Hispanic origin[3]	Poor glycemic control (A1c greater than 9%) among persons with physician-diagnosed diabetes			
	1988–1994	1999–2002	2009–2012	2013–2016
20 years and over, age-adjusted[4]	Percent of population with physician-diagnosed diabetes			
All persons[5]	26.3	24.7	21.3	17.7
Male	22.4	27.7	26.2	19.2
Female	29.4	*20.3	16.5	16.3
Not Hispanic or Latino:				
White only	23.7	*22.9	*	11.0
Black or African American only	38.9	25.4	28.8	23.8
Asian only	- - -	- - -	- - -	*
Hispanic or Latino	- - -	- - -	32.2	27.9
Mexican origin	29.8	28.0	32.5	28.9
Percent of poverty level:[6]				
Below 100%	37.2	30.6	23.6	26.7
100% or more	22.8	*22.6	21.2	15.6
100%–199%	*	*	*20.0	17.2
200% or more	21.2	*25.6	*22.0	14.8
200%–399%	*24.2	*27.0	*21.4	17.0
400% or more	*	*	*	*
20 years and over, crude				
All persons[5]	23.3	18.4	13.8	14.5
Male	20.2	20.2	14.8	15.3
Female	25.8	16.7	12.8	13.7
Not Hispanic or Latino:				
White only	20.6	13.6	9.5	10.7
Black or African American only	34.2	25.4	19.6	17.6
Asian only	- - -	- - -	- - -	*
Hispanic or Latino	- - -	- - -	23.8	25.2
Mexican origin	29.2	26.8	23.5	25.3
Percent of poverty level:[6]				
Below 100%	30.2	25.6	19.8	21.5
100% or more	21.4	15.9	11.9	13.3
100%–199%	24.2	*14.9	12.4	13.0
200% or more	20.0	16.4	11.7	13.4
200%–399%	*21.2	*17.5	12.3	16.4
400% or more	*18.3	*	*11.1	10.2
Age				
20–44 years	29.5	*32.7	30.1	20.6
45–64 years	26.0	19.9	14.4	18.7
65 years and over	18.0	*10.2	8.0	7.5

Table 14. Diabetes prevalence and glycemic control among adults aged 20 and over, by sex, age, and race and Hispanic origin: United States, selected years 1988–1994 through 2013–2016

Excel version (with more data years and standard errors when available): *https://www.cdc.gov/nchs/hus/contents2018.htm#Table_014*.

[Data are based on interviews and laboratory data of a sample of the civilian noninstitutionalized population]

- - - Data not available.

* Estimates are considered unreliable. Starting with 2013–2016 data, the reliability of survey percentage estimates was assessed using new multistep National Center for Health Statistics data presentation standards for proportions. Prior to 2013–2016 data, the reliability of estimates was evaluated based on relative standard errors (RSE). Data preceded by an asterisk have an RSE of 20%–30%. Data not shown have an RSE greater than 30%. For more information, see Appendix II, Data presentation standards for proportions; Relative standard error (RSE).

[1]Physician-diagnosed diabetes was obtained by self-report and excludes women who reported having diabetes during pregnancy.

[2]Undiagnosed diabetes is defined as a fasting plasma glucose (FPG) of at least 126 mg/dL or a hemoglobin A1c of at least 6.5% and no reported physician diagnosis. Pregnant females are excluded. Participants had fasted for at least 8 hours and less than 24 hours. Periodically, the location of and instruments used in laboratory testing changed from previous years. In these instances, the National Health and Nutrition Examination Survey (NHANES) conducted crossover studies to evaluate their impact on laboratory measurements, including measurements of FPG and A1c. Based on their studies, NHANES recommended adjustments to the FPG data. The forward adjustment method was incorporated into the data presented here. For more information, see the 2015–2016 documentation (https://wwwn.cdc.gov/Nchs/Nhanes/2015-2016/GLU_I.htm), the 2007–2008 documentation (https://wwwn.cdc.gov/Nchs/Nhanes/2007-2008/GLU_E.htm), and the 2005–2006 documentation (https://wwwn.cdc.gov/nchs/nhanes/2005-2006/GLU_D.htm). Also see Appendix II, Diabetes.

[3]Persons of Hispanic and Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity* and are not strictly comparable with estimates for earlier years. The non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race, or if they reported more than one race, identified one race as best representing their race. See Appendix II, Hispanic origin; Race.

[4]Estimates are age-adjusted to the year 2000 standard population using three age groups: 20–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See Appendix II, Age adjustment.

[5]Includes persons of all other races and Hispanic origins not shown separately.

[6]Percent of poverty level was calculated by dividing family income by the U.S. Department of Health and Human Services' poverty guideline specific to family size, as well as the appropriate year, and state. Persons with unknown percent of poverty level are excluded (7% in 2013–2016). See Appendix II, Family income; Poverty.

NOTES: Excludes pregnant women. Fasting weights were used to obtain estimates of total, physician-diagnosed, and undiagnosed diabetes prevalence. Examination weights were used to obtain the poor glycemic control estimates. Estimates in this table may differ from other estimates based on the same data and presented elsewhere if different weights, age adjustment groups, definitions, or trend adjustments are used. Standard errors are available in the spreadsheet version of this table. Data for additional years are available. See the Excel spreadsheet on the *Health, United States* website at: https://www.cdc.gov/nchs/hus.htm.

SOURCE: NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).