

Table A1. Crude and standardized prevalence* of previously diagnosed diabetes, undiagnosed diabetes (based on FPG and 2-hour glucose from an OGTT), total undiagnosed diabetes, total diabetes, and proportion of total diabetes that is undiagnosed, by age, sex, and race/ethnicity—NHANES 1988-1994 and 2005-2006

	Crude				Standardized*			
	1988-1994		2005-2006		1988-1994		2005-2006	
	Percent	95% CI	Percent	95% CI	Percent	95% CI	Percent	95% CI
Diagnosed Diabetes	(n=18,822)		(n=2,289)		(n=18,822)		(n=2,289)	
Combined age groups (yrs)								
≥20	5.1	4.8-5.5	7.7	6.7-8.8	5.4	5.0-5.8	7.6	6.7-8.5
40-74	7.9	7.2-8.7	10.7	9.2-12.2	7.5	6.8-8.3	10.7	9.2-12.1
≥65	12.9	11.7-14.0	17.0	14.9-19.0	12.8	11.6-14.0	16.9	14.8-19.0
Age-specific groups (yrs)								
20-39	1.1	0.8-1.4	2.1	1.5-2.8	1.1	0.8-1.4	2.1	1.5-2.8
40-59	5.5	4.8-6.2	7.9	6.3-9.5	5.5	4.8-6.2	7.9	6.3-9.5
60-74	12.6	11.2-14.0	17.6	14.9-20.3	12.6	11.2-14.0	17.5	14.8-20.3
≥75	13.2	11.7-14.6	14.9	11.1-18.8	13.3	11.7-14.8	14.8	11.1-18.5
Sex by age (yrs)								
Men								
≥20	4.9	4.4-5.3	7.2	5.7-8.7	5.4	4.9-5.8	7.3	5.8-8.8
40-74	7.7	6.9-8.5	10.4	7.9-12.8	7.5	6.7-8.3	10.5	8.3-12.8
Women								
≥20	5.4	4.8-5.9	8.3	6.5-10.0	5.4	4.8-6.0	7.9	6.4-9.3
40-74	8.1	7.0-9.3	11.0	8.9-13.0	7.6	6.5-8.7	10.8	8.8-12.7
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
≥20	5.0	4.5-5.4	6.6	5.3-7.9	4.9	4.4-5.4	6.0	5.0-7.0
40-74	7.2	6.4-8.1	8.5	6.9-10.1	6.8	5.9-7.6	8.3	6.9-9.7
Non-Hispanic Black								
≥20	6.9	6.2-7.7	12.8	10.6-15.1	8.4	7.6-9.3	13.9	12.0-15.9

Diabetes (OGTT)	(n=2,861)		(n=1,171)		(n=2,861)		(n=1,171)	
Combined age groups (yrs)								
40-74	6.1	5.1-7.1	6.6	4.1-9.0	5.7	4.7-6.7	6.5	4.2-8.8
Age-specific groups (yrs)								
40-59	3.8	2.5-5.1	4.2	1.8-6.5	3.8	2.6-5.1	4.2	1.8-6.5
60-74	10.4	8.6-12.2	12.4	6.7-18.2	10.5	8.7-12.3	12.4	6.6-18.3
Sex by age (yrs)								
Men								
40-74	6.8	5.0-8.6	6.3	3.0-9.7	6.5	4.7-8.2	6.4	3.3-9.6
Women								
40-74	5.5	4.4-6.5	6.8	3.8-9.7	5.0	4.0-6.0	6.6	3.7-9.4
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
40-74	5.9	4.7-7.1	7.2	3.8-10.6	5.3	4.1-6.5	7.0	3.8-10.2
Non-Hispanic Black								
40-74	6.2	4.4-8.0	5.4	2.7-8.1	6.3	4.5-8.2	5.8	3.1-8.5
Mexican American								
40-74	9.9	7.6-12.2	7.1	3.5-10.7	10.0	7.7-12.2	8.0	4.2-11.8
Total Undiagnosed Diabetes (FPG or OGTT)	(n=2,861)		(n=1,171)		(n=2,861)		(n=1,171)	
Combined age groups (yrs)								
40-74	7.3	6.3-8.4	6.9	4.4-9.4	6.9	5.8-8.0	6.8	4.6-9.1
Age-specific groups (yrs)								
40-59	4.9	3.6-6.2	4.5	2.1-6.9	4.9	3.6-6.2	4.5	2.1-6.9
60-74	11.9	9.9-13.9	12.8	7.1-18.4	12.1	10.1-14.1	12.8	7.1-18.5
Sex by age (yrs)								
Men								
40-74	8.2	6.3-10.1	6.8	3.4-10.2	7.8	6.0-9.6	6.9	3.8-10.1
Women								
40-74	6.5	5.3-7.7	7.0	3.8-10.2	6.1	5.0-7.3	6.8	3.7-9.9

40-74	<i>48.1</i>	<i>43.4-52.7</i>	<i>39.4</i>	<i>31.1-47.7</i>	<i>47.8</i>	<i>43.1-52.6</i>	<i>38.0</i>	<i>28.9-47.1</i>
Age-specific groups (yrs)								
40-59	<i>47.0</i>	<i>39.3-54.7</i>	<i>36.1</i>	<i>24.5-47.8</i>	<i>47.0</i>	<i>39.3-54.7</i>	<i>36.1</i>	<i>24.4-47.9</i>
60-74	<i>48.6</i>	<i>43.1-54.1</i>	<i>42.6</i>	<i>32.1-53.1</i>	<i>49.0</i>	<i>43.6-54.3</i>	<i>42.7</i>	<i>32.0-53.3</i>
Sex by age (yrs)								
Men								
40-74	<i>51.6</i>	<i>44.9-58.2</i>	<i>39.7</i>	<i>27.6-51.7</i>	<i>51.0</i>	<i>44.2-57.9</i>	<i>38.5</i>	<i>27.9-49.1</i>
Women								
40-74	<i>44.5</i>	<i>39.3-49.8</i>	<i>39.1</i>	<i>27.9-50.3</i>	<i>44.7</i>	<i>39.2-50.2</i>	<i>37.5</i>	<i>23.9-51.2</i>
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
40-74	<i>49.4</i>	<i>43.4-55.5</i>	<i>46.9</i>	<i>34.7-59.1</i>	<i>48.8</i>	<i>42.2-55.3</i>	<i>47.1</i>	<i>33.2-60.9</i>
Non-Hispanic Black								
40-74	<i>38.4</i>	<i>32.7-44.1</i>	<i>25.1</i>	<i>6.6-43.6</i>	<i>39.2</i>	<i>33.3-45.0</i>	<i>22.7</i>	<i>5.7-39.7</i>
Mexican American								
40-74	<i>44.9</i>	<i>38.6-51.2</i>	<i>30.0</i>	<i>19.7-40.2</i>	<i>43.9</i>	<i>37.9-49.9</i>	<i>28.4</i>	<i>17.1-39.6</i>

Diagnosed diabetes determined by self-report on interview, Undiagnosed diabetes (FPG)=fasting plasma glucose ≥ 7.0 mmol/l, Undiagnosed diabetes (OGTT)=2-hour plasma glucose ≥ 11.1 mmol/l.

Values by age alone and by sex include those of race/ethnic groups not listed separately.

*Estimates for the total population age ≥ 20 and 40-74 years and for race/ethnic groups were age- and sex-standardized; estimates for age-specific groups including those age ≥ 65 years were sex-standardized; and estimates for sex groups were age-standardized; all using the 2000 U.S. census population.

†Relative standard error $>30\%$: the confidence interval is wide, relative to the size of the estimate

§Estimates in section appear in italics to highlight the denominator of total diabetes, in contrast to all other estimates having a denominator of the total population.

Table A2. Crude and standardized* prevalence of impaired fasting glucose, impaired glucose tolerance, total prediabetes (IFG or IGT), and total diabetes and prediabetes, by age, sex, and race/ethnicity—NHANES 1988-1994 and 2005-2006

	Crude				Standardized*			
	1988-1994		2005-2006		1988-1994		2005-2006	
	Percent	95% CI	Percent	95% CI	Percent	95% CI	Percent	95% CI
Impaired Fasting Glucose (IFG)	(n=6,626)		(n=2,289)		(n=6,626)		(n=2,289)	
Combined age groups (yrs)								
≥20	24.7	23.1-26.2	25.7	22.3-29.1	25.5	23.9-27.0	25.2	22.4-28.1
40-74	32.1	30.1-34.0	33.2	27.9-38.4	31.8	29.7-33.9	33.3	28.2-38.3
≥65	37.7	34.7-40.7	36.6	32.0-41.2	38.7	35.7-41.6	36.9	32.1-41.7
Age-specific groups (yrs)								
20-39	14.8	12.8-16.8	13.1	10.3-15.9	14.7	12.6-16.7	12.9	10.1-15.7
40-59	29.6	26.7-32.5	31.3	24.3-38.3	29.6	26.8-32.5	31.2	24.3-38.2
60-74	36.7	33.6-39.7	37.9	31.8-43.9	37.1	34.2-40.1	38.2	32.0-44.4
≥75	38.6	35.1-42.1	35.1	30.5-39.7	40.1	36.6-43.5	35.6	31.0-40.2
Sex by age (yrs)								
Men								
≥20	32.1	29.6-34.6	32.1	26.9-37.3	33.2	30.7-35.7	31.9	27.3-36.5
40-74	40.0	36.6-43.4	41.1	33.3-48.9	39.8	36.1-43.4	41.1	33.6-48.7
Women								
≥20	18.0	16.6-19.4	19.8	17.3-22.2	18.2	16.8-19.7	19.0	16.9-21.0
40-74	25.0	22.9-27.1	26.0	21.2-30.8	24.3	22.2-26.4	25.8	21.2-30.4
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
≥20	24.8	22.9-26.7	25.8	21.6-29.9	25.1	23.2-27.0	24.0	20.6-27.4

40-74	31.7	29.3-34.2	33.0	26.6-39.4	31.2	28.6-33.8	32.9	26.6-39.2
Non-Hispanic Black								
≥20	20.8	18.8-22.7	20.5	16.2-24.9	23.3	21.1-25.4	20.9	17.3-24.5
40-74	29.2	25.7-32.6	29.4	22.7-36.2	29.5	26.0-33.1	29.2	22.6-35.9
Mexican American								
≥20	26.5	24.6-28.4	26.8	18.9-34.7	31.2	29.3-33.2	27.8	20.3-35.4
40-74	38.7	35.1-42.2	32.6	21.5-43.8	38.9	35.0-42.7	31.8	21.7-42.0
Impaired Glucose Tolerance (IGT)								
	(n=2,861)		(n=1,171)		(n=2,861)		(n=1,171)	
Combined age groups (yrs)								
40-74	15.7	14.2-17.3	15.6	11.8-19.5	15.2	13.6-16.8	15.7	12.1-19.2
Age-specific groups (yrs)								
40-59	13.0	11.1-14.9	13.3	9.2-17.5	13.0	11.1-14.9	13.3	9.1-17.5
60-74	20.9	18.3-23.4	21.3	15.4-27.3	20.8	18.2-23.4	21.8	15.8-27.7
Sex by age (yrs)								
Men								
40-74	15.2	13.0-17.3	19.2	13.5-24.9	14.9	12.7-17.0	19.4	14.2-24.5
Women								
40-74	16.2	14.0-18.4	12.4	8.6-16.3	15.5	13.3-17.7	12.3	8.5-16.0
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
40-74	15.3	13.4-17.2	15.4	10.1-20.7	14.6	12.7-16.6	15.3	10.4-20.2
Non-Hispanic Black								
40-74	13.5	10.9-16.1	14.0	10.0-18.0	13.5	11.0-16.0	13.8	9.6-18.0
Mexican American								
40-74	19.3	15.8-22.8	15.2	10.6-19.9	19.6	16.2-23.1	15.2	10.9-19.5
Total Prediabetes								
	(n=2,861)		(n=1,171)		(n=2,861)		(n=1,171)	

(IFG or IGT)								
Combined age groups (yrs)								
40-74	36.3	34.1-38.5	35.2	30.4-40.1	35.9	33.7-38.2	35.4	30.7-40.0
Age-specific groups (yrs)								
40-59	34.4	31.4-37.4	34.6	28.2-41.0	34.3	31.3-37.2	34.5	28.2-40.8
60-74	39.8	36.6-43.0	36.8	30.2-43.4	40.1	36.9-43.2	37.4	30.7-44.2
Sex by age (yrs)								
Men								
40-74	42.8	39.4-46.2	44.9	37.8-52.0	42.7	39.1-46.3	44.9	37.9-51.9
Women								
40-74	30.3	27.7-33.0	26.5	21.7-31.3	29.6	27.0-32.2	26.4	21.4-31.4
Race/Ethnicity by age (yrs)								
Non-Hispanic White								
40-74	35.7	32.9-38.5	34.8	29.0-40.5	35.1	32.2-37.9	34.8	29.3-40.4
Non-Hispanic Black								
40-74	32.7	29.2-36.2	34.5	30.0-39.0	33.1	29.4-36.8	34.3	29.6-39.0
Mexican American								
40-74	41.5	38.8-44.2	34.1	25.7-42.5	41.7	38.7-44.6	33.1	26.1-40.2
Total diabetes and prediabetes	(n=2,861)		(n=1,171)		(n=2,861)		(n=1,171)	
Combined age groups (yrs)								
40-74	51.5	49.2-53.9	52.7	46.1-59.3	50.4	47.9-52.8	52.7	46.7-58.8
Age-specific groups (yrs)								
40-59	44.8	41.4-48.2	47.0	39.7-54.3	44.7	41.4-48.0	46.9	39.5-54.3
60-74	64.4	61.2-67.5	66.7	59.8-73.6	64.7	61.6-67.8	67.4	60.6-74.1
Sex by age (yrs)								
Men								
40-74	58.7	54.7-62.7	62.0	53.8-70.3	57.9	53.8-62.1	62.3	55.0-69.6
Women								
40-74	44.9	42.0-47.9	44.3	37.7-50.9	43.3	40.4-46.2	43.8	37.2-50.3

Race/Ethnicity by age (yrs)								
Non-Hispanic White								
40-74	50.0	47.1-52.8	50.6	42.6-58.6	48.3	45.3-51.3	50.3	43.1-57.5
Non-Hispanic Black								
40-74	53.0	49.3-56.7	60.6	55.9-65.2	53.3	49.4-57.2	61.4	56.9-65.8
Mexican American								
40-74	66.2	63.3-69.2	58.5	51.0-66.1	67.1	64.3-69.9	59.8	53.0-66.7

Impaired fasting glucose=fasting plasma glucose 5.6-<7.0 mmol/l, Impaired glucose tolerance=2-hour plasma glucose 7.8-<11.1 mmol/l. Total diabetes includes diagnosed diabetes determined by self-report on interview, and undiagnosed diabetes (FPG)=fasting plasma glucose \geq 7.0 mmol/l or undiagnosed diabetes (OGTT)=2-hour plasma glucose \geq 11.1 mmol/l.

Values by age alone and by sex include those of race/ethnic groups not listed separately.

*Estimates for the total population age \geq 20 and 40-74 years and for race/ethnic groups were age- and sex-standardized; estimates for age-specific groups including those age \geq 65 years were sex-standardized; and estimates for sex groups were age-standardized; all using the 2000 U.S. census population.

Figure A1. NHANES 2005-2006 Analysis Sample. Bolded boxes indicate sample subgroups that were used in the analyses (see Research Design and Methods section).

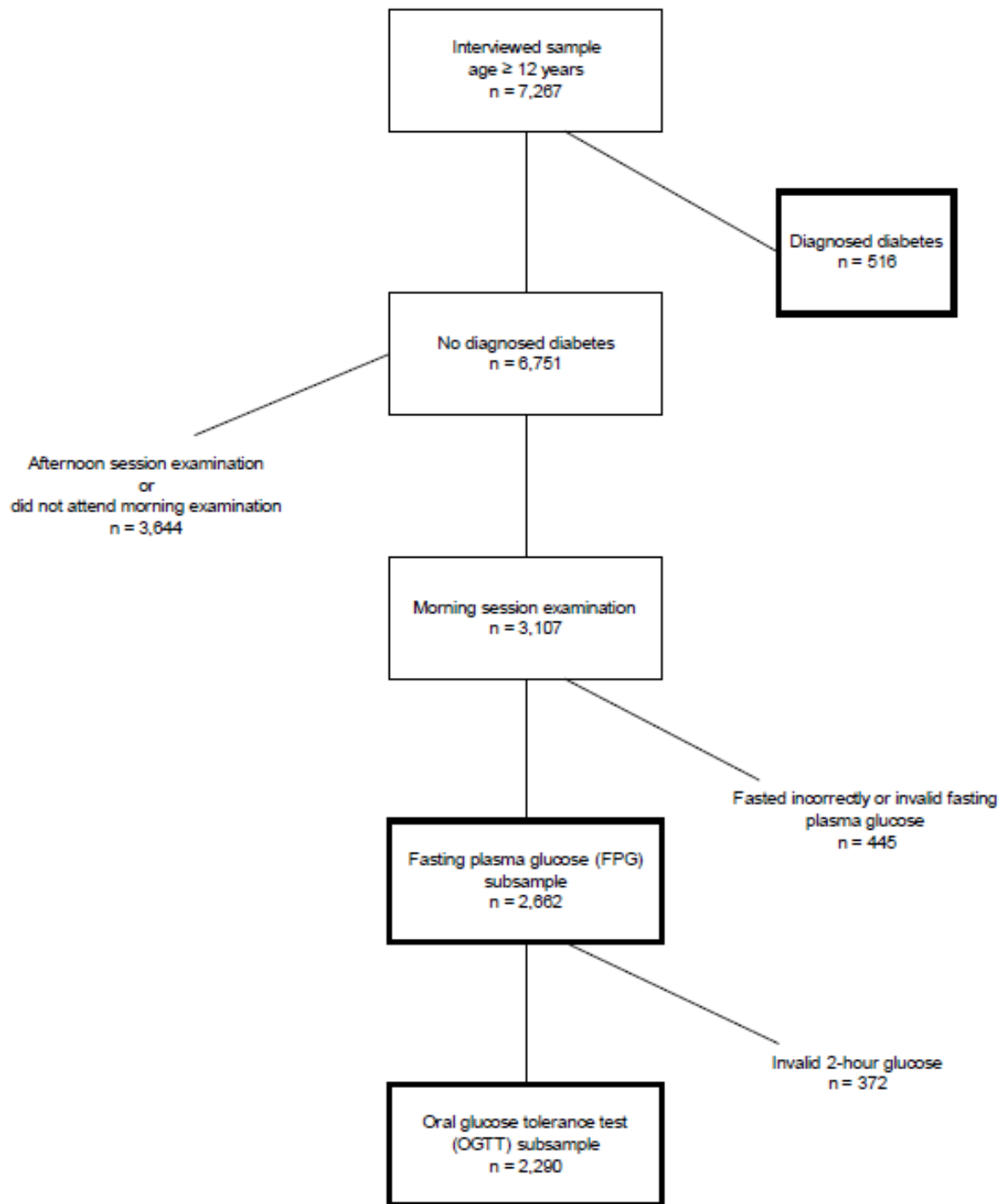


Figure A2. Standardized prevalence (%) of previously diagnosed diabetes, total undiagnosed diabetes (based on FPG or 2-hour glucose from an OGTT), and total prediabetes (IFG or IGT), by age – NHANES 2005-2006. Estimates were sex-standardized to the 2000 U.S. census population. The total height of the bar provides the percent of the age group having any hyperglycemic condition.

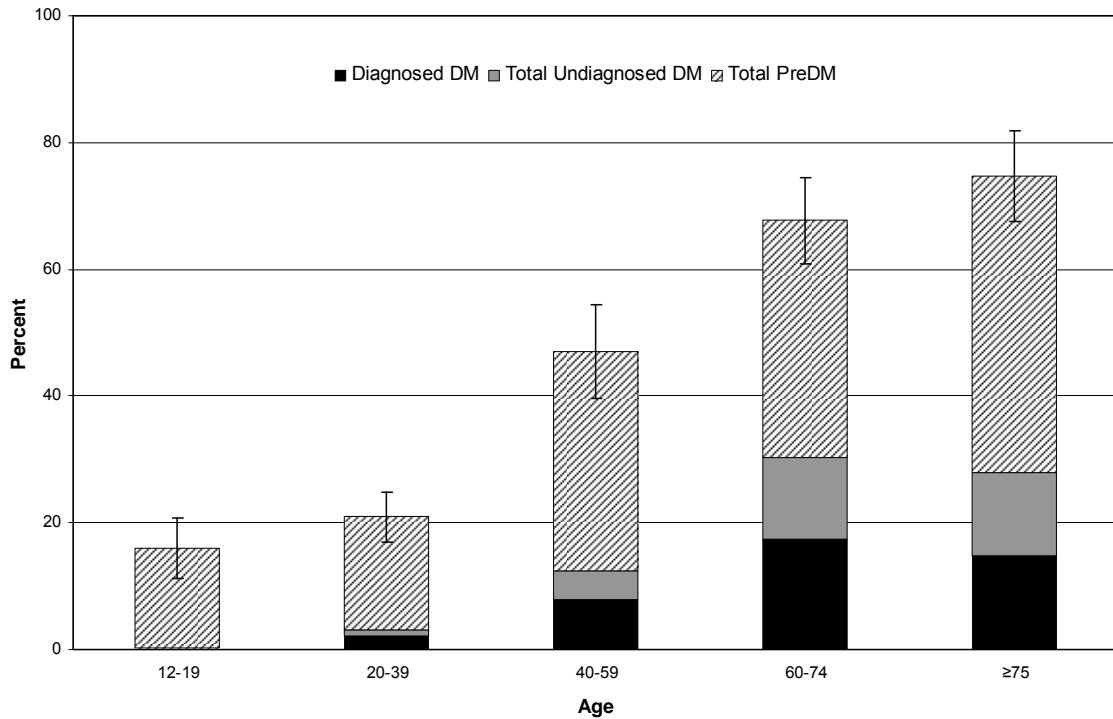


Figure A3. Standardized prevalence (%) of previously diagnosed diabetes, total undiagnosed diabetes (based on FPG or 2-hour glucose from an OGTT), and total prediabetes (IFG or IGT), by sex and race/ethnicity – NHANES 2005-2006. Estimates for sex groups were age-standardized, and for race/ethnic groups were age- and sex-standardized, using the 2000 U.S. census population. The total height of the bar provides the percent of the sex group or race/ethnic group having any hyperglycemic condition.

