

National Health and Nutrition Examination Survey

August 2021-August 2023 Data Documentation, Codebook, and Frequencies

Diabetes (DIQ_L)

Data File: DIQ_L.xpt

First Published: September 2024

Last Revised: NA

Component Description

The diabetes questionnaire (DIQ_L) data file provides personal interview data on diabetes, prediabetes, and use of insulin and/or oral hypoglycemic medications.

Eligible Sample

All survey participants aged 1 year and older in the NHANES August 2021–August 2023 sample are included in this dataset. The questions asked varied by age and history of diabetes. Please refer to the diabetes questionnaire and corresponding codebook for question-specific details about the eligible target group.

Interview Setting and Mode of Administration

These questions were asked in the home or on the phone, by trained interviewers using the Computer-Assisted Personal Interview (CAPI) system. Help screens were provided for some medical terms in the questionnaires. When necessary, household interviewers read the help screen to survey participants.

Participants 16 years of age and older and emancipated minors were interviewed directly. A proxy provided information for survey participants who were under 16 years of age and for participants who could not answer the questions themselves.

The NHANES August 2021-August 2023 questionnaires are available on the NHANES website.

Quality Assurance & Quality Control

The CAPI system is programmed with built-in consistency checks to reduce data entry errors. CAPI also uses online help screens to assist interviewers in defining key terms used in the questionnaire. Interviewers were required to audio-record interviews. The recorded interviews were reviewed by interviewer supervisors and NCHS staff.

Data Processing and Editing

Frequency counts were checked, “skip” patterns were verified, and the reasonableness of question responses was reviewed. Edits were made to ensure the completeness, consistency, and analytic usefulness of the data. Edits were also made, when necessary, to address data disclosure concerns.

DID040: How old when a doctor first told you that you had diabetes?

All responses of age 80 years and older are coded as "80", to be consistent with the coding for the participant age variable in the demographics file. Also, the onset of diabetes at age less than 1 year was coded as 666.

DID060: For how long have you been taking insulin?

Taking insulin less than 1 month was coded as 666.

Analytic Notes

The core questions including doctor diagnosed diabetes, duration of diabetes, prediabetes, and oral diabetes medication are the same as the previous public use data. The insulin use question (variables DIQ050, DID060, DIQ060U) was only asked for participants with diagnosed diabetes in the DIQ_L data. The questions about the participants' knowledge of their own levels of A1C, blood pressure, and cholesterol and knowledge of appropriate target levels, as suggested by their physicians were not collected in this survey cycle.

The analysis of NHANES August 2021–August 2023 DIQ data must be conducted using the appropriate survey design variables, sample weights, and the basic demographic variables. Interview weights should only be used if questionnaire data are analyzed by themselves. However, if DIQ data are merged with the MEC examination data or laboratory full sample data, the MEC examination weights should be used for analyses. If DIQ data are merged with the laboratory fasting glucose data, fasting subsample weights should be used for analyses.

Please also refer to the [NHANES Analytic Guidelines](#) and the on-line [NHANES Tutorial](#) for details on the use of sample weights and other analytic issues.

Codebook and Frequencies

SEQN - Respondent sequence number

Variable Name:	SEQN
SAS Label:	Respondent sequence number
English Text:	Respondent sequence number
Target:	Both males and females 1 YEARS - 150 YEARS

DIQ010 - Doctor told you have diabetes

Variable Name: DIQ010

SAS Label: Doctor told you have diabetes

English Text: The next questions are about specific medical conditions. {Other than during pregnancy, {have you/has SP}/{Have you/Has SP}} ever been told by a doctor or health professional that {you have/{he/she/SP} has} diabetes or sugar diabetes?

English Instructions: CAPI INSTRUCTION: IF SP AGE < 15, DISPLAY "HAVE SP" FOR THE FIRST DISPLAY AND "SP HAS" FOR THE SECOND DISPLAY. IF SP IS FEMALE AND AGE >= 20, DISPLAY "OTHER THAN DURING PREGNANCY, {HAVE YOU/HAS SP}".

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	1081	1081	
2	No	10371	11452	DIQ159
3	Borderline	284	11736	DIQ159
7	Refused	0	11736	DIQ159
9	Don't know	4	11740	DIQ159
.	Missing	4	11744	

DID040 - Age when first told you had diabetes

Variable Name: DID040

SAS Label: Age when first told you had diabetes

English Text: How old {was SP/were you} when a doctor or other health professional first told {you/him/her} that {you/he/she} had diabetes or sugar diabetes?

English Instructions: ENTER AGE IN YEARS.

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1 to 79	Range of Values	1050	1050	
80	80 years or older	7	1057	
666	Less than 1 year	0	1057	
777	Refused	0	1057	
999	Don't know	24	1081	
.	Missing	10663	11744	

DIQ159 - CHECK ITEM

Variable Name: DIQ159

English Instructions: BOX 4. CHECK ITEM DIQ.159: IF ANY AGE AND DIQ.010 = 1 (YES), GO TO DIQ.050. IF AGE ≥ 12 AND DIQ.010 = 3, GO TO DIQ.180. IF AGE < 12, GO TO END OF SECTION. OTHERWISE, CONTINUE.

Target: Both males and females 1 YEARS - 150 YEARS

DIQ160 - Ever told you have prediabetes

Variable Name: DIQ160

SAS Label: Ever told you have prediabetes

English Text: {Have you/Has SP} ever been told by a doctor or other health professional that {you have/SP has} any of the following: prediabetes, impaired fasting glucose, impaired glucose tolerance, borderline diabetes or that {your/her/his} blood sugar is higher than normal but not high enough to be called diabetes or sugar diabetes?

English Instructions: CAPI INSTRUCTION: HELP SCREEN: PREDIABETES, IMPAIRED FASTING GLUCOSE, IMPAIRED GLUCOSE TOLERANCE, OR BORDERLINE DIABETES OCCURS WHEN BLOOD SUGAR (GLUCOSE) LEVELS ARE HIGHER THAN NORMAL BUT NOT HIGH ENOUGH TO BE DIABETES. HAND CARD DIQ1.

Target: Both males and females 12 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	918	918	
2	No	7089	8007	
7	Refused	0	8007	
9	Don't know	15	8022	
.	Missing	3722	11744	

DIQ180 - Had blood tested past three years

Variable Name: DIQ180

SAS Label: Had blood tested past three years

English Text: {Have you/Has SP} had a blood test for high blood sugar or diabetes within the past three years?

English Instructions: INTERVIEWER INSTRUCTION: DO NOT INCLUDE URINE TESTS.

Target: Both males and females 12 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	3370	3370	DIQ065
2	No	4667	8037	DIQ065
7	Refused	2	8039	DIQ065
9	Don't know	265	8304	DIQ065
.	Missing	3440	11744	

DIQ050 - Taking insulin now

Variable Name: DIQ050

SAS Label: Taking insulin now

English Text: {Is SP/Are you} now taking insulin

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	344	344	
2	No	737	1081	DIQ065
7	Refused	0	1081	DIQ065
9	Don't know	0	1081	DIQ065
.	Missing	10663	11744	

DID060 - How long taking insulin

Variable Name: DID060

SAS Label: How long taking insulin

English Text: For how long {have you/has SP} been taking insulin?

English Instructions: ENTER NUMBER (OF MONTHS OR YEARS).

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1 to 60	Range of Values	332	332	
666	Less than 1 month	3	335	
777	Refused	0	335	
999	Don't know	8	343	
.	Missing	11401	11744	

DIQ060U - Unit of measure (month/year)

Variable Name: DIQ060U

SAS Label: Unit of measure (month/year)

English Text: UNIT OF MEASURE

English Instructions: ENTER UNIT.

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Months	35	35	
2	Years	297	332	
.	Missing	11412	11744	

DIQ065 - CHECK ITEM

Variable Name: DIQ065

English Instructions: BOX 0. CHECK ITEM DIQ.065: IF DIQ.010 = 1 (YES) OR DIQ.010 = 3 (BORDERLINE OR PREDIABETES) OR DIQ.160 = 1 (YES) CONTINUE. OTHERWISE, GO TO END OF SECTION.

Target: Both males and females 1 YEARS - 150 YEARS

DIQ070 - Take diabetic pills to lower blood sugar

Variable Name: DIQ070

SAS Label: Take diabetic pills to lower blood sugar

English Text: {Is SP/Are you} now taking diabetic pills to lower {{his/her}/your} blood sugar? These are sometimes called oral agents or oral hypoglycemic agents.

Target: Both males and females 1 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	885	885	
2	No	1389	2274	
7	Refused	0	2274	
9	Don't know	7	2281	
.	Missing	9463	11744	

