

National Health and Nutrition Examination Survey

2005-2006 Data Documentation, Codebook, and Frequencies

Diabetes (DIQ_D)

Data File: DIQ_D.xpt

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Component Description

The diabetes section (prefix DIQ) provides personal interview data on diabetes, prediabetes, use of insulin or oral hypoglycemic medications, and diabetic retinopathy. It also provides self-reported information on awareness of risk factors for diabetes, healthy lifestyle changes to lower risk of certain disease, general knowledge of diabetic complications, and medical or personal care associated with these conditions.

Eligible Sample

All survey participants aged 1 year and older were eligible. The questions asked varied by age and history of diabetes. Please refer to check items in 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 before the physical examination, in the home, using the Computer-Assisted Personal Interviewing-CAPI (interviewer administered) system. Hand cards showing response categories were also used for some questions. When necessary, household interviewers read the hand cards to respondents. Persons 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 individuals who could not answer the questions themselves.

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.

Data Processing and Editing

Frequency counts were checked, "skip" patterns were verified, and the reasonableness of question responses was reviewed. Edits were made to some variables to ensure the completeness, consistency, and analytic usefulness of the data. Edits were also made, when necessary, to address data disclosure concerns. When a variable was modified globally, as part of the editing process, the third letter in the variable name was changed from a Q (i.e. DIQ) to a D (i.e. DID).

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

All responses of age 86 or older were changed to '85' years of age, to be consistent with the coding for the age variable of the sample person 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.

DID250: How many times have you seen doctor in the past 12 months?

If the time was reported as "None", the value was coded as 0.

DID260: How often do you check your blood for glucose or sugar?

This variable was coded as 0 and 666 for participants who reported "Never" and "Unable to do activity (blind)" respectively.

DID270: During the past 12 months, how many times has a doctor checked you for glycosylated hemoglobin or "A1C"?

This variable was coded as 0 and 666 for participants who reported "Not tested in the last 12 months" and "Never heard of A1C test" respectively.

DID320: What was your most recent LDL cholesterol number?

This variable was coded as 5555 and 6666 for participants who reported "Never heard of LDL" and "Never had cholesterol test" respectively.

DID310S/D: What does doctor say your blood pressure should be?
DID330: What does doctor say your LDL cholesterol should be?

If a participant reported "Provider did not specify goal", the value of corresponding variable was coded as 6666.

DID340: During the past 12 months, how many times has a doctor checked your feet for any sores or irritations?

DID350: How often do you check your feet for sores or irritation?

If the time was reported as "None", the value of corresponding variable was coded as 0.

Missing data imputation for variable DID070:

Question "Taking diabetic pills to lower blood sugar" was missing for 103 prediabetics (DIQ010=3). Missing responses to this question were imputed based on reported use of an oral antidiabetic drug from the Prescription Medication section (RXQ) of the household questionnaire. In that part of the interview, respondents reported all drugs used in the month prior to the interview and showed the interviewer the pill bottles, from which the exact drug name was recorded from the medication container label. Based on this census of all reported drugs, we identified those drugs which were oral antidiabetic agents (listed below). A missing response for DID070 was coded as 1 (Yes) if a person with prediabetes reported use any of the below oral antidiabetic agents, and 2 (No) if a person with prediabetes did not report use any of these oral antidiabetic agents.

List of oral anti-diabetic agents:

- Acarbose
- Cholopropamide
- Glimepiride
- Glipizide
- Glucagon
- Glyburide
- Metformin
- Miglitol
- Nateglinide
- Pioglitazone
- Repaglinide
- Rosiglitazone
- Tolazamide
- Troglitazone
- Glipizide; Metformin
- Glyburide; Metformin
- Metformin; Rosiglitazone

Analytic Notes

In the 2005-2006 data, the core questions for the diabetes component, including doctor diagnosed diabetes, duration of diabetes, insulin use, oral diabetic medication, and diabetic retinopathy are the same as the 1999-2004 data. However, analysts should be aware of differences in skip patterns, data processing and editing.

In the 1999-2004 data, question "How old when a doctor first told you that you had diabetes?" was released as two variables (DID040G and DID040Q). In the 2005-2006 data, however, this information was released as one variable (DID040). In addition, participants, who reported having been told they had diabetes less than 2 years ago, were asked a follow-up question to determine the timeframe during which their diabetes was diagnosed. The text of the question, "Was your diabetes diagnosed..." (DIQ220), was followed by response categories ranging from "3 months ago or less" to "more than 12 months ago". There were a few instances in which reported durations of diabetes based on variable DIQ220 were inconsistent with those based on variable DID040. Users should be aware of this inconsistency when analyzing the data.

In the 1999-2004 data, question "For how long have you been taking insulin" was released as three variables (DID060G, DID060Q and DIQ060U). In the 2005-2006 data, however, this information was released as two variables (DID060 and DIQ060U). There were a few instances for which the reported duration of insulin use was greater than the duration of diabetes. Users should carefully examine such data and decide whether or not to include these values in a given analysis.

In the 1999-2004 surveys, question "Are you now taking diabetic pills to lower blood sugar?" (DIQ070) was only asked of persons who reported having diabetes. In the 2005-2006 survey, this question was asked both of persons who reported having diabetes, and of persons who reported having prediabetes. Missing values for persons who reported having prediabetes in the leading question (DIQ010=3) were imputed based on the Prescription Medication data (as described in the preceding Data Processing and Editing section). The variable was renamed as DID070.

A number of new questions, including awareness of risk factors for diabetes, healthy lifestyle changes to lower risk of certain disease, general knowledge of diabetic complications, and medical or personal care associated

with diabetes, were first collected during the 2005-2006 survey. The responses to these questions reflect the respondent's knowledge and may not be biologically reasonable.

The analysis of NHANES 2005-2006 diabetes questionnaire 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 itself. However if DIQ data are merged with the MEC examination data or laboratory data, the MEC examination weights should be used for analyses. If DIQ data are merged with laboratory sub-sample data, sub-sample weights should be used for analyses.

Please refer to the Analytic Guidelines for further details on the use of sample weights and other analytic issues. The Analytic Guidelines are available on the NHANES website.

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

DIQ170 - Ever told have health risk for diabetes

Variable Name:DIQ170

SAS Label:Ever told have health risk for diabetes

English Text:{Have you/Has SP} ever been told by a doctor or other health professional that {you have/s/he has} health conditions or a medical or family history that increases {your/his/her} risk for diabetes?

Target:Both males and females 12 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	830	830	
2	No	5898	6728	
7	Refused	0	6728	
9	Don't know	23	6751	
.	Missing	3071	9822	