Description

of the

Demographic and Health Surveys

Individual Recode

Data File

# DHS II

Version 1.1

(with differences from DHS I)

March 5, 2008

## **Foreword**

During DHS surveys several types of questionnaires are used. A household schedule is used to identify members of the household and to select eligible respondents for the individual interview. These selected women are then interviewed using an individual questionnaire. In addition, data are sometimes collected at the community level, and in some countries husbands are interviewed using a husband's questionnaire. Data are available from DHS for each of these surveys. The most interesting of these data are the individual data, which are available in both raw and recode formats. This document describes the standard individual recode data file.

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<b>Documentation No</b>	te
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In addition to documenting the <u>DHSII</u> Individual Recode Data File, this document also highlights the changes from the DHSI Individual Recode Data File. All modifications or additions to the Recode Data File are shown in shaded text. All deletions from the DHSI Recode Data File are shown with lines though the text.

# **General Description**

#### Introduction

This document contains three parts. The first part is a general discussion of the recode file, including the rationale for recoding; description of the physical structure in which the recode file is available; coding standards used in the data file; location of identification information; use of century month codes for dates and imputation of partial dates; DHS model questionnaires; sections and occurrences. The second part provides a description of each variable in the data file, giving additional information that is not available in the dictionary. The third part consists of a listing of the standard dictionary providing the basic information relating to each variable.

# Rationale for Recoding

The individual data are transformed into a standardized recode dataset for several reasons. First, dates for several key events are imputed as much analysis of the data is based on these events and their dates are often incomplete or missing. The imputed dates are included in the data file to allow analysts to produce results consistent with those published by DHS and to save analysts the time and trouble of creating their own imputation schemes. Second, variables as collected in the original questionnaire are in a form convenient for collection but not always for analysis. Often the same question is asked in several places in the questionnaire, but to different respondents. In the recode file these variables are combined and created in a form that is easy to use for analysis. Third, summary variables are often necessary in analysis and many of these, including the summary variables that are used in the DHS reports, are included in the recode file. Fourth, certain indices, particularly the anthropometric indices from the height and weight data, are calculated from the data and included in the recode file. Finally, and in many ways most importantly, the data in the recode file are in a standardized format allowing easy comparison of data between countries.

The DHS approach to creating standardized individual recode data files for each country is part of the DHS policy to make the data accessible, providing the analyst with the data in the most convenient form for analysis. This approach, while providing easy access to the data, is not without its pitfalls. **DHS strongly suggests that analysts become familiar with the questionnaires used in the surveys they are analyzing.** The questionnaires used in one country, while containing essentially the same information, may be different in many ways from those used in another country. In creating the standardized individual recode data files these differences require special consideration and total standardization is obviously not possible. The recode data file is structured in two parts, standard sections and country-specific sections. The standard sections contain the same variables in the same positions for all countries. The country-specific sections contain all variables specific to the country and so are not standardized across countries.

#### **Data File Structure**

The recode data file is available in three different structures; the structure to use depends on the hardware and software requirements of the analyst:

Flat

Each record of the data file represents one case (respondent), with all variables being placed one after the other on the same record. The repeating sections of the recode file are placed one after the other on the record, with the maximum number of occurrences of each section being represented in the data file. Each variable in a repeating section is placed immediately after the preceding variable of the same occurrence, such that all variables for occurrence 1 precede all variables for occurrence 2 of a section. For example, in the birth history BIDX, BORD, B0, B1 etc. for the first occurrence appear followed by the second occurrence of BIDX, BORD, B0, B1 etc. The length of the records in the data file are fixed, exceeding 2000 characters in total. The total size of the data file is on average approximately 40 M bytes, depending on the sample size, with the largest files being over 100 M bytes in size. the flat file is designed for mainframe users using statistical packages that only support data structures containing a fixed number of records per case. This format is similar to the format of the World Fertility Survey standard recode files. An SPSS/PC+ or SAS data file description is distributed with this file format.

Rectangular

Each case (respondent) in the data file contains a fixed number of records, with each record representing a section of the data file. For repeating sections there is a record for each occurrence of the section, with the maximum number of occurrences of each repeating section being included in the data file. The number of records in a data file will vary from country to country as the number of country-specific sections of the data file varies, but for the standard sections of the data file there are 48 records, excluding the calendar. For data files distributed on magnetic tape the record length of each record will be fixed at the length of the longest record in the data file, but for PC users the record length will vary, with each record terminating with a CR/LF, as for standard DOS text files. The total size of the data file is about 40 M bytes, with the largest files being over 100 M bytes in size. The size of the rectangular file is usually slightly less than the size of the flat file. On magnetic tape the file size is considerably larger. The rectangular file is designed for microcomputer users using software that requires a fixed number of records per case, such as SPSS/PC, but with a maximum record length of less than 200 characters. An SPSS/PC+ or SAS data file description is distributed with this file format.

Hierarchical

The hierarchical data structure is identical to the rectangular data structure, with the exception that records exist only for the occurrences of the sections that are necessary. As an example of the difference, if a woman has 6 children there will be 6 records in the birth history section in the hierarchical structure, but 20 records (the maximum number of occurrences for this section) in the rectangular data structure, with the last 14 occurrences filled with blanks. The record length will be the same as for the rectangular file. The total size of the file is approximately 20 M bytes, depending on the sample size, with the largest files being over 60 M bytes in size. The hierarchical data structure is designed for use with ISSA, the Integrated System for Survey Analysis, available from DHS. An ISSA dictionary is distributed with this file format.

# **Coding Standards**

Special codes are used throughout the data file for certain responses. The general coding scheme is presented below. The codes given apply to 4 digit, 3 digit, 2 digit and 1 digit variables, respectively. If there are other special responses to questions, these are coded in decreasing order from these special codes, i.e., 9996, 996, 96, 6; 9995, 995, 95, 5; etc.

BLANK	Variable is not applicable for this respondent either because the question was not
	asked in a particular country or because the question was not asked of this
	respondent due to the flow or skip pattern of the questionnaire.
9999, 999, 99, 9	This question should have been answered by the respondent, but the questionnaire
	contained no information for this variable (missing data).
9998, 998, 98, 8	The respondent replied "Don't know" to this question.
9997, 997, 97, 7	The answer to this question was inconsistent with other responses in the
	questionnaire and it was thought that this response was probably in error. The
	response was changed to this code to avoid further problems due to inconsistency
	of information. This usually takes place during the secondary editing stage of
	data processing.

In addition a code of 0 is generally used as a negative response in the data file. For example, "No education" is coded 0 for V106, "No problem" is coded 0 for V338, and a simple response of "No" is coded 0 in all standard sections of the data file. In the country-specific sections of the data file, variables are generally coded in the same way as they were on the questionnaire and a "No" answer usually has code 2.

In certain questions a two-digit coding scheme is used in which the first digit, representing the major coding category, is standard, but the second digit is country-specific. This applies to questions such as those relating to water source, toilet facilities, and source of contraception. For example, for source of contraception the major categories are:

- 1 Public Sector
- 2 Private Medical Sector
- 3 Other Private Sector
- 4 Other

The coding scheme for V326 (last source of contraception for current users of modern methods) might use codes such as:

- 11 Government hospital
- 12 Government health center

. . .

- 21 Private hospital or clinic
- 22 Private doctor
- 31 Shop

. .

. . .

In the above coding scheme, the first digit is the standard major category; the second digit is country-specific.

#### **Respondent Identification**

Each record of the data file starts with the identification for each case in the data file, and has the variable name CASEID (see description of CASEID). It occupies the first 15 character positions of each record, irrespective of the type of data file structure.

#### **Record Identification**

For rectangular and hierarchical data files, each record has an identifying code in character positions 16-17 of the record. This record identification identifies the section of the data file that is contained on the record (e.g., 21 for the birth history). Repeating sections will have the same record identification for each occurrence of the section. In the hierarchical data files a variable following the record identification in each section specifies which occurrence of the section the record represents; in the rectangular data files the variable exists for all occurrences that are non-blank.

## **Survey Identification**

For each survey there is a two-character alphabetic country identification code plus a one-digit data structure code in variable V000. The variable V000 occupies positions 16-18 of the record for flat files, and positions 18-20 of the first record of the rectangular or hierarchical data files. The one-digit data structure code is always 2 for DHS II surveys, and for some DHS III surveys that used DHS II Model questionnaires. The country codes are as follows:

#### DHSII:

Brazil	BR	Indonesia	ID	Nepal	NP	Rwanda	RW
Burkina Fas	so BF	Jordan	JO	Niger	NI	Senegal	SN
Cameroon	CM	Madagascar	MD	Nigeria	NG	Tanzania	TZ
Colombia	CO	Malawi	MW	Pakistan	PK	Yemen	YE
Dominican	R. DR	Morocco	MA	Paraguay	PY	Zambia	ZM
Egypt	EG	Namibia	NM	Peru	PE		
••							
II:							

#### DHS III:

Ghana	GH	Kenya	KE	Philippines	PH	Turkey	TR
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# **Century Month Code**

All dates in the data file are expressed in terms of months and years and also as century month codes. A century month code (CMC) is the number of the month since the start of the century. For example, January 1900 is CMC 1, January 1901 is CMC 13, January 1980 is CMC 961, August 1990 is CMC 1088. The CMC for a date is calculated from the month and year as follows:

```
CMC = (YY * 12) + MM
```

for month MM in year 19YY.

To calculate the month and year from the CMC use the following formulae:

```
YY = int((CMC - 1) / 12)

MM = CMC - (YY * 12)
```

# **Imputed Dates**

For key events in the respondent's life, dates have been imputed when the full date of the event was not provided by the respondent or in some cases if dates are inconsistent (e.g. less than 7 months between births). These events are the date of birth of the respondent, the date of birth of each child of the respondent, the date of conception of the current pregnancy (based on the duration of pregnancy), the date of sterilization, and the date of first union or marriage. For each of these dates only the imputed data are available in the recode data file, but a date flag has been included in the file to show what format the information was in prior to imputation, and what basis was used for the imputation. The codes for this date flag are as follows:

- Both month and year of the event were specified and so no imputation was necessary.
- The year of the event was not given, but the month of the event and the age of the respondent or child or, in the case of the date of first union, the respondent's age at first union were specified. In most cases this information uniquely identifies the exact date of the event. In a few cases the year of the event was imputed from a choice of two possible years.
- The year of the event, but not the month, and the age of the respondent or child or, in the case of the date of first union, the respondent's age at first union were specified and only the month of the event was imputed.
- The year of birth, but not the month, and the age of the respondent or child were specified. However, in surveys where it is believed the year of birth is calculated from the age, the year of birth is ignored when the year of birth plus the age add up to the year of interview.
- The year of the event was given but the month of the event was not specified, and neither was the age. The month of the event was imputed.
- Neither the month nor the year of the event were specified, but age was given and the year and month of the event were imputed from the age.
- Only the month of the event was given, without the year or age. The year of the event was imputed from other information. (For current pregnancy, duration of pregnancy was given.)
- No information was given concerning the date of the event. But month and year of the event were imputed from other information. (For current pregnancy, duration of pregnancy was not given.)

For the date of conception of the current pregnancy only codes 7 and 8 are used. The date of interview is required to be fully specified in all cases and so no imputation is necessary for this variable and no format flag exists for the date of interview.

A full description of the imputation process is given in the DHS Data Processing Manual.

#### **Model Questionnaires**

Two core questionnaires were used during the DHS surveys, Model "A" for High Contraceptive Prevalence Countries and Model "B" for Low Contraceptive Prevalence Countries. The two questionnaires contain basically the same information, although there are more questions of contraceptive practices in the Model "A" questionnaire than in the Model "B" questionnaire, and more questions relating to health in the Model "B" questionnaire than in the Model "A" questionnaire. although the Model "A" questionnaire contains a detailed calendar of events in the five years preceding the interview, whereas the Model "B" questionnaire contains a simpler series of questions.

In the variable description section that follows, the column labelled "Model" indicates in which questionnaire the question is asked. An "A" indicates that the variable refers to a question asked only in countries that used a Model "A" questionnaire, and a "B" indicates that the variable relates to a question asked only in countries that used the Model "B" questionnaire. If the column is blank, then the question is asked in both Model "A" and Model "B" questionnaires. If the column contains an "X", then the question is not included in either of the Model questionnaires, but was used in a sufficient number of surveys to justify its inclusion as a standard variable. If the column contains "MM", then the questions come from the maternal mortality module.

#### **Sections and Occurrences**

The data file is broken down into a number of logical sections. These sections translate directly into records for the rectangular and hierarchical data structures. The logical sections are designed to map the sections of the model questionnaires, although some sections of the model questionnaire are split into more than one section in the recode data file. Some of these sections are repeating or multiple occurrence sections while others are single occurrence sections. Single sections contain simple, single-answer variables.

Multiple sections are used to represent sets of questions that are repeated for a number of events. The birth history is an example of a multiple section, where questions relating to children are asked for each child, and each child has an entry in the birth history. Each entry in the multiple section is known as an occurrence of the section. In rectangular and hierarchical data files each occurrence of the section occupies a separate record. Multiple sections are used for sets of questions where the number of occurrences may vary.

In contrast, sets of questions for which there are a fixed number of occurrences are held in a group. A group is similar to a multiple section, but is stored on a single record for rectangular and hierarchical files. In addition single variables may also be included in a section containing a group. In the recode file the contraceptive table (REC31) is stored as a group containing 15 entries, one for each contraceptive method. For the flat files there is no difference between groups and multiple sections.

# Section and Variable Descriptions

The section description following gives an outline of the sections of the recode file and the types of information they contain. The description is based on the rectangular and hierarchical files. The section description gives the name of the section, the section code used to identify the section in the data file, the length of the record for that section, the section class (S for single and M for multiple), the minimum and maximum number of occurrences of the section in each case, and the section label.

The section description is followed by variable descriptions. These are designed to be read with the dictionary listing which follows the variable descriptions. The variable descriptions provide additional background information relating to each variable that is not included in the dictionary listing. The

dictionary listing contains the variable names and their labels, the location of each variable on the record, whether the variable is a single variable within the section or part of a group, the range of values, and their labels.

# Section and Variable Description

Section	Code I	Length	Occuri Class	ences Min	Max	Section label
REC01	01	99	S	1	1	Respondent's Basic Data
REC11	11	107	S	0	1	Respondent's Basic Data
REC21	21	49	M	0	20	Reproduction (Birth History)
REC22	22	82	S	0	1	Reproduction
REC31	31	80	S	0	1	Contraceptive Table
REC32	32	112	S	0	1	Contraceptive Use
REC41	41	93	M	0	6	Maternity
REC42	42	152	S	0	1	Breastfeeding and Health
REC43	43	172	M	0	6	Immunization and Health
REC44	44	106	M	0	6	Height and Weight
REC51	51	57	S	0	1	Marriage/Exposure
REC61	61	47	S	0	1	Fertility Preferences
REC71	71	51	S	0	1	Partner's Characteristics
REC81	81	37	S	0	1	Characteristics of the Interview
REC82	82	97	M	0	9	Calendar
REC83	83	48	M	0	20	Maternal Mortality
REC84	84	37	S	0	1	Maternal Mortality
REC91	91	?	S	0	1	Country-specific - Single variables
REC92	92	?	M	0	20	Country-specific - Birth history
REC94	94	?	M	0	6	Country-specific - Maternity
REC95	95	?	M	0	6	Country-specific - Health
REC96	96	?	M	0	6	Country-specific - Height and Weight
REC97	97	?	?	0	?	Country-specific
REC98	98	?	?	0	?	Country-specific
REC99	99	?	?	0	?	Country-specific

? implies that the entry is country-specific

# Section 01 (REC01)

Respondent's Basic Data

<u>Var</u>	<u>Model</u>	Descri	ption

CASEID

Case identification used to uniquely identify each respondent. In most surveys this is constructed by concatenating the cluster or sample point number, the household number and the respondent's line number, but in some surveys this may be the questionnaire number taken from the front page of the questionnaire.

V000

Alphabetic country code to identify the survey from which the data were collected. The code is based on an international standard code. This variable is now 3 characters in length, with the third character indicating the format of the recode file used for this survey. For all surveys in DHS II this code will be 2. For example: DR2 is the Dominican Republic, MA2 is Morocco, ZM2 is Zambia, ML is Mali, LK is Sri Lanka, and ID2 is Indonesia.

V001

Cluster number is the number identifying the sample point as used during the fieldwork. This variable may be a composite of several variables in the questionnaire. If so, the original variables are included in REC91 as country-specific variables.

V002

Household number is the number identifying the household in which the respondent was interviewed, within the sample point. In some cases, this variable may be the combination of dwelling number and household number within dwelling. In these cases, the original variables are included as country-specific variables.

V003

Respondent's line number in the household schedule.

V004

Enumeration area Ultimate area unit is a number assigned to each sample point to identify the ultimate area units used in the collection of data. This variable is usually the same as the cluster number, but may be a sequentially numbered variable for samples with a more complicated structure.

V005

Sample weight is an 8 digit variable with 6 implied decimal places. To use the sample weight divide it by 1000000 before applying the weighting factor. All sample weights are normalized such that the weighted number of cases is identical to the unweighted number of cases when using the full dataset with no selection. This variable should be used to weight all tabulations produced using the data file. For self-weighting samples this variable is equal to 1000000.

V006 Month of interview. V007 Year of interview.

V008 Century month code of date of interview (see note on century month codes).

V009 Month of birth of respondent (see note on imputed dates).
V010 Year of birth of respondent (see note on imputed dates).

V011 Century month code of date of birth of the respondent (see note on century month codes).

- Current age in completed years is calculated from the century month code of the date of birth of the respondent (V011) and the century month code of the date of interview (V008). In a few cases the age in the data file will be different from that reported by the respondent when the respondent's birthday was in the month of interview, but she had not yet had her birthday. If the respondent correctly reported her age at her last birthday (and not her age at her next birthday) then the calculated age was rounded up from the reported age, to avoid inconsistencies between the age and the century month code for the birth.
- V013 Current age in 5-year groups is produced by grouping V012.
- V014 Completeness of information for the date of birth of the respondent (see note on imputed dates). Codes for DHS II are different from the codes used in DHS I.
- V015 Result of individual interview. Code 1 represents a completed interview. For all other cases, only REC01 will exist in the data file. For flat and rectangular format data files, cases with a result code different than 1 are dropped from the file.
- V016 Day of the month in which the interview took place.
- V017 Century month code for the first month of the calendar and for the cutoff for the health sections of the questionnaire. This is constant for all cases and is the century month code of January of the first year of the calendar/earliest year for inclusion in the health section.
- V018 A Row of calendar representing the month of interview. The calendar is numbered from 1 to 80, with month 80 being January of the first year of the calendar. This variable is coded 0 for incomplete interviews or for questionnaires using the Model "B" questionnaire.
- V019 A Records the length of the calendar to use for this case. V019 is equal to 80-V018+ 1. This variables is coded 0 for incomplete interviews or for questionnaires using the Model "B" questionnaire.
- V020 The ever-married sample indicator is a constant for all cases in the data file. For all woman samples it is code 0, and for ever married samples it is code 1.
- V021 Primary sampling unit is a number assigned to sample points to identify the primary sampling units for use in the calculation of sampling errors. This variable is usually the same as the cluster number and/or the ultimate area unit, but may differ if the sample design required a multistage selection process.
- V022 Sample strata defines the pairings or groupings of primary sampling units used in the calculation of sampling errors when using the Taylor series expansion method (for example, with the package Clusters).
- Sample domain defines the basic geographic units within which the sample was designed. For example, if the sample was designed to be self-weighting within region, this variable would define those regions; if the sample was designed to be self-weighting within major urban areas, other urban areas and rural areas, this variable would define the major urban, other urban and rural areas. If the sample is self-weighted at the national level, this variable is code 0.

<u>Var</u>	Model	<u>Description</u>
V024		<i>De facto</i> region of residence. This is a copy of V101, added to this section to allow for analysis of completion rates by region.
V025		<i>De facto</i> type of place of residence. This is a copy of V102, added to this section to allow for analysis of completion rates by urban/rural residence.
V026		<i>De facto</i> place of residence is the type of place in which the respondent was interviewed. This is a copy of V134, added to this section to allow for analysis of completion rates by type of place of residence.
V027		Number of visits for the interview. This is a copy of V804.
V028		Interviewer identification code. Codes are country-specific. This variable occupies 3 digits for DHSII. This is a copy of V805.
V029		Data entry keyer code. Codes are country-specific. This is a copy of V806.

# Section 11 (REC11)

Respondent's Basic Data

<u>Var</u>	Model	<u>Description</u>
V101		De facto region of residence. Region in which the respondent was interviewed. Codes are country-specific. This variable is now two digits. For de jure region of residence, see V139.
V102		De facto type of place of residence. Type of place of residence where the respondent was interviewed as either urban or rural. Note that this is not the respondent's own categorization, but was created based on whether the cluster or sample point number is defined as urban or rural. See also V134. For de jure type of place of residence, see V140.
V103		Childhood place of residence is classified into city, town and countryside as reported by the respondent. In some countries, additional codes are used for captial/major cities (code 0) and for abroad (code 4).
V104		Number of years the respondent has lived in the village, town, or city where she was interviewed. Visitors to the community are coded 96. For Model "A" countries, this variable relates to the <u>de jure</u> place of residence, and the code for visitors is not used.
V105		Type of place of previous residence is coded as for V103. In some countries, additional codes are used for captial/major cities (code 0) and for abroad (code 4).  BASE: All respondents except those answering "Always" or "Visitor" to V104 (V104 <> 95 & V104 <> 96).
V106		Highest education level attended. This is a standardized variable providing level of education in the following categories: No education, Primary, Secondary, Higher. In some countries the educational system does not fit naturally within this scheme and a different categorization was used for the Final Report. In this case, this variable is constructed as accurately as possible from the country's own scheme and the variable used for the Final Report is included as a country-specific variable.
V107		Highest year of education gives the years of education completed at the level given in V106. BASE: All respondents except those answering "No education" or with missing data for V106 (V106 $<>0$ & V106 $<>9$ ).
V108		Literacy of the respondent. In many countries, respondents with secondary or higher levels of education are coded 1, "Reads easily." The exact criteria for this assumption is country-specific.
V109	A	Whether the respondent usually reads a newspaper or magazine at least once a week.  BASE: Respondents who can read easily or with difficulty (V108 = 1 or V108 = 2).
V110 V111 V112	A X B	Whether the respondent usually watches television every week. Whether the respondent usually listens to a radio every day. Whether the respondent usually listens to a radio every week.
V113		Major source of drinking water for members of the household. Individual codes are

country-specific, but the major categories are standard.

#### Model Description Var V114 Major source of water for household use other than for drinking. Individual codes are country-specific, but the major categories are standard. V115 Time taken to get to the water source for household water. BASE: All respondents except those with household water piped into the residence, yard or plot (V114 < > 11 & V114 < > 21). The actual selection criteria is country-specific. V116 Type of toilet facility in the household. Individual codes are country-specific, but the major categories are standard. This variable is two digits in DHS II. <del>V117 B</del> The age that children first use the household toilet facility. BASE: All respondents except those with no toilet facilities (V116 < > 0). Whether the household has a cake of soap on the premises, but the major categories are V118 standard and the variable is now two digits. Whether the household has: V119 Electricity. V120 A radio. V121 A television. V122 A refrigerator. Whether a member of the household has: V123 A bicycle. V124 A motorcycle. V125 A car. A tractor. (Usually coded 0 "No" for urban residents.) V126 V127 Main material of the floor. Individual codes are country-specific, but the major categories are standard. V128 X Main material of the walls. Individual codes are country-specific, but the major categories are standard. Main material of the roof. Individual codes are country-specific, but the major categories V129 X are standard. V127 to V129 are two-digit variables for DHSII. V130 Religion. Both the question and the codes are country-specific. V131 Ethnicity. Both the question and the codes are country-specific. <del>V132 B</del> Association membership. Both the question and the codes are country-specific. V133 Education in single years. This variable is constructed from the educational level (V106) and the grade at that level (V107) as follows: V106 = >V133 0 = > 1 = > V107 2 V107 + x= >

V107+ y 99

3

- x = years to complete primary education
- y = years to complete primary and secondary education

where both x and y are country-specific.

- V134 De facto place of residence is the type of place in which the respondent was interviewed. Urban areas are classified into large cities (capital cities and cities with over 1 million population), small cities (population over 50,000), and towns (other urban areas), and all rural areas are assumed to be countryside. Note that this classification differs from that used in DHS I.
- Whether the respondent is a usual resident of the household or is just visiting the household. Responses of "Visitor" to V104 are visitors to the city, town or village where the interview took place, but V135 shows respondents who were visitors to the household.
- V136 Total number of household members is the number of usual residents plus the number of visitors who slept in the house the previous night that were listed in the household schedule.
- V137 Number of children resident in the household and aged 5 and under. Visiting children are not included.
- Number of eligible women in the household. Eligible women are usually defined to be women aged 15-49 who slept in the household the previous night, irrespective of whether they usually reside in the household or are visiting the household. In some countries an ever-married sample is used for the individual interview, and so the eligibility criteria is further restricted to ever-married women. In several countries the age range used may be different, e.g., 15-44.
- V139 De jure region of usual residence. For de facto region of residence, see V101.
- V140 De jure type of place of usual residence. For de facto type of place of residence, see V102.
- V141 *De jure* place of residence. In most countries, no differentiation is made between large cities and small cities in this variable.
- Whether the same source of water is used for drinking water as for household water.
- V143 Number of rooms used for sleeping in the household.
- V144 A Whether the respondent lived in one or more than one community since January 198?.
- V145 A Month moved to the place of residence of January 198?.
- V146 A Year moved to the place of residence of January 198?.
- V147 A Type of place of residence moved from, when moving to the place of residence of January 198?.
- V148 Whether the respondent is still in school. This data is taken from the household schedule.

# Var Model Description V149 Educational achievement recodes the education of the respondent into the following categories: None, incomplete primary, complete primary, incomplete secondary, complete secondary, higher education. See related variables V106, V107, V133. V150 Relationship to the head of the household. These data are taken from the household schedule. V151 Sex of the head of the household. V152 Age of the head of the household.

#### <u>Inflation factors for ever-married samples</u>

Variables AWFACTT to AWFACTE are standard inflation factors to be applied to the denominators when using ever-married samples to produce estimates for all women. To produce theses estimates for all women it is necessary to apply the inflation factors to account for the proportion of women never married. Each factor is stored in 5-digit variables, with two implied decimal places. A value of 00128 means an inflation factor of 1.28 should be applied to the individual case to allow for never- married women. This means that for every 100 ever-married women found in the household schedule of a particular age and with the same background characteristic, there are 128 women in total, i. e. 100 ever-married women plus 28 never-married women. These inflation factors are used in the calculation of fertility rates, median ages at first union and first birth, mean number of children ever born, and other all-woman-based estimates. Note that these inflation factors do not need to be used when the denominator for an estimate is not all women. Four factors are standardly produced for ever-married samples. Additional factors may appear as country-specific variables if they were calculated to produce tabulations for the final report of a particular country. Country-specific variables are located in REC91.

AWFACTT All-woman factor for the total population.

AWFACTU All-woman factor for the urban/rural breakdowns.

AWFACTR All-woman factor for the regional breakdowns.

AWFACTE All-woman factor for the educational breakdowns.

# Section 21 (REC21)

Reproduction

The birth history contains up to 20 entries for births, and is ordered in reverse order such that the last birth is given first in the birth history and the first birth is given last. For respondents with more than 20 births, the birth history contains the last 19 births plus the first birth. However, all variables relating to intervals between births are calculated based on the actual births, and not just the birth given in the birth history. The variable V224 contains the count of entries in the birth history, and is thus the index to the last entry in the birth history which contains the information relating to the first birth.

<u>Var</u>	Model	<u>Description</u>
BIDX		Birth history index numbers the entries in the birth history from 1 to n, where the nth birth is the first birth.
BORD	•	Birth order number gives the order in which the children were born and so is the reverse order from BIDX.
В0		Twin code gives an order number for each child of a multiple birth. Code 0 indicates a single birth, code 1-upwards give the number of the child. Twins are ordered in the birth history with the higher twin codes appearing before the lower twin codes. See the example of the birth history structure below.
B1 B2		Month of birth of child (see note on imputed dates). Year of birth of child (see note on imputed dates).
В3		Century month code for the date of birth of the child (see note on century month codes).
B4		Sex of child.
B5		Whether child was alive or dead at the time of interview.
B6		Age at death of the child as reported in the questionnaire. The first digit of the age at death gives the units in which it was reported: 1 - Days, 2 - Months, 3 - Years, 9 - Special responses. The last two digits give the age at death in those units. Age at death is usually reported in days if it was less than one month, in months if it was less than two years and otherwise in years. If the last two digits contain a value greater than 90 then this is a special response. For example, 298 means the age at death was a number of months, and the exact number was unknown, but lies between 1 and 23 months. BASE: Dead children (B5 = 0).
B7		Age at death of the child in completed months gives a calculated age at death from the reported information. If it was reported in days these are truncated to completed months, if reported in months these are used directly, but if reported in years then truncated years are used, i.e., 3 years becomes 36 months. For ages at death that were not specified, an age at death is imputed using a hot deck approach by taking the same age at death as the last child encountered of the same birth order in the data file. Ages at death exceeding 90 months are truncated to 90 months. This variable is no longer truncated at 90 months and now occupies three digits.  BASE: Dead children (B5 = 0).
B8		Current age of the child in single years for all living children. BASE: Living children (B5 = 1).

The person the child usually lives with. The Respondent is coded 0, father coded 1, other relatives coded 2, other people coded 3, and children aged 15 and over who were not asked who they live with are coded 4. Note that this coding is different from DHS I.

BASE: Living children (B5 = 1).

B10 Completeness of information for the date of birth of the child (see note on imputed dates).

Codes for DHS II are different from the codes used in DHS I.

Preceding birth interval is calculated as the difference in months between the current birth and the previous birth, counting twins as one birth.

BASE: All births except the first birth and its twins.

B12 Succeeding birth interval is calculated as the difference in months between the current birth and the following birth, counting twins as one birth.

BASE: All births except the last birth and its twins.

- B13 Flag for age at death is coded as follows:
  - 0 No flag
  - 1 Age at death plus the date of birth would place the death after the interview
  - 2 Age at death is less than the reported duration of breastfeeding
  - 3 Age at death is less than the age the child was first given supplemental foods
  - 4 Age at death is less than age the child was first breastfed
  - Age at death plus the date of birth would place the death before the last vaccination
  - Reported age at death is outside the range expected for the units given
  - Age at death was imputed, however the units were given
  - 8 Age at death was imputed, no units were given

BASE: Dead children (B5 = 0).

#### Example Birth History:

BIDX H	BORD	вО	В1	В2	В3	В4	В5	В6	В7	В8	В9	B10	B11	В12	В13
1	7	2	5	89	1073	1	1			1	0	1	19		
2	6	1	5	89	1073	2	1			1	0	1	19		
3	5	0	10	87	1054	2	0	114	0			5	22	19	0
4	4	0	12	85	1032	1	1			4	0	3	17	22	
5	3	2	7	8 4	1015	2	0	208	8			5	28	17	0
6	2	1	7	8 4	1015	2	1			5	0	5	28	17	
7	1	Ω	3	8.2	987	1	1			8	1	6		2.8	

In this example there are seven children, including two pairs of twins. There are three boys and four girls. Two of the girls have died, one after 14 days and the other after 8 months. Exact dates of birth were available only for the last birth and its twin. For the other births either year only (code 5), year and age (code 3) or age only (code 6) were available. The birth intervals are calculated between births excluding children of multiple births. For example the preceding interval for the first entry is the difference between the CMC for the first entry and the third entry because the second entry is a twin of the first entry.

<u>Var</u>	Model	<u>Description</u>
V201		Total number of children ever born. If there are fewer than twenty births then this is the same as V224 (Number of entries in the birth history), but if there are more than twenty births then this gives the full number, while V224 will be 20.
V202 V203 V204 V205 V206 V207		Total number of sons living at home.  Total number of daughters living at home.  Total number of sons living away from home.  Total number of daughters living away from home.  Total number of sons who have died.  Total number of daughters who have died.  V201 is the sum of variables V202 to V207.
V208		Total number of births in the last five years is defined as all births in the months 0 to 59 prior to the month of interview, where month 0 is the month of interview.
V209		Total number of births in the past year is defined as all births in the months 0 to 12 (not 0 to 11) prior to the month of interview.
V210		Total number of births in the month of interview.
V211		Century month code of the date of first birth is the same as B3 (V224). BASE: All respondents with one or more births (V201 > 0).
V212		Age of the respondent at first birth is calculated from the CMC of the date of first birth and the CMC of the date of birth of the respondent.  BASE: All respondents with one or more births $(V201 > 0)$ .
V213		Whether the respondent is currently pregnant.
V214		Imputed duration of the current pregnancy. In the imputation process a date of conception of the current pregnancy is calculated from the reported duration of the current pregnancy, if known, or imputed from other available information (see note on imputed dates). The imputed duration of pregnancy is then calculated from that date of conception. BASE: Currently pregnant women $(V213 = 1)$ .
V215		Time since last menstrual period as reported by the respondent. The first digit gives the units in which the response was given by the respondent: 1 - Days ago, 2 - Weeks ago, 3 - Months ago, 4 - Years ago, 9 - Special answers. The last two digits give the time since the last period in those units. If the last two digits contain a number greater than 90 then this is a special response. For example, 199 means the response was in days but the number of days was missing on the questionnaire.
V216		Whether the respondent menstruated in the last six weeks is calculated from V215.
V217		Knowledge of the ovulatory cycle indicates when during her monthly cycle the respondent thinks a woman has the greatest chance of becoming pregnant.
V218		Total number of living children is the sum of variables V202 to V205.

<u>Var</u>	Model	<u>Description</u>
V219		Total number of living children including current pregnancy is calculated from V218 by adding 1 if the respondent is pregnant.
V220		Total number of living children including current pregnancy is a grouping of the previous variable, truncating the number to 6 if it was greater than 6.
V221		Interval between the first marriage and first birth in months. If the first birth was prior to the first marriage then this variable is coded 996 "Negative interval."  BASE: Ever-married women who have had one or more births (V501 > 0 & V201 > 0).
V222		Interval between the last birth and the date of the interview in months. BASE: Respondents who have had one or more births $(V201 > 0)$ .
V223		Completeness of information relating to the date of conception of the current pregnancy. This variable indicates whether the date of conception was exactly specified by the duration of the current pregnancy or the duration was imputed from other information (see note on imputed dates). Codes for DHS II are different from the codes used in DHS I.
V224		Number of entries in the birth history (REC21). This variable is also the index to the first birth in the birth history. If there are fewer than twenty births then this is the same as V201 (number of children ever born), but if there are more than twenty births then this will be 20, while V201 gives the full number.
V225		At the time the respondent became pregnant with the current pregnancy, whether the current pregnancy was wanted then, later or not at all. BASE: Currently pregnant women ( $V213 = 1$ ).
V226		Computed time since the last menstrual period. This is computed from the response for V215, with durations exceeding the interval since the last birth (V227 = $7$ , 9) recoded to the response "Before last birth" (code 995) and inconsistent responses flagged on variable V227 (codes 1-6) recoded to 997.
V227		Flag variable indicating inconsistencies found in editing the response for variable V215.  No flag  Duration given is greater than the interval since the last birth and the respondent did not say, in the maternity section, that she was still amenorrheic since her last birth  Duration given plus the duration of amenorrhea after the last birth is greater than the

- d
- Duration given plus the duration of amenorrhea after the last birth is greater than the 2 interval since the last birth
- 3 Duration was reported, but the respondent's period had not returned since the last birth
- Respondent reported her last period was before her last birth, but she had never given
- 5 Respondent reported never having menstruated, but reported in the maternity section that her period had returned after her last birth
- 6 Respondent reported her last period was before her last birth, but reported in the maternity section that her period had returned after her last birth
- Respondent reported a duration since her last period, but this would place her last period during her last pregnancy
- 8 Respondent reported never having menstruated, but she had children
- 9 Duration was reported, but the duration would place her period before her last birth

V228 A Whether the respondent ever had a pregnancy that terminated in a miscarriage, abortion, or still birth, i.e., did not result in a live birth.

#### Pregnancy terminations

Variables V229 to V234 relate to pregnancy terminations (pregnancies that did <u>not</u> result in a live birth).

BASE: Respondents who have had one or more terminated pregnancies (V228 = 1).

- V229 A Month of the last pregnancy termination.
- V230 A Year of the last pregnancy termination. The date of last termination is taken from a single question in the body of the questionnaire.
- V231 A Century month code of the last pregnancy termination. The CMC date of termination is calculated from the preceding questions, or from the calendar, if possible, in cases where an exact date was not given for the date of last pregnancy termination.
- V232 A Date flag for the last terminated pregnancy.
- V233 A Months pregnant when the pregnancy terminated.
  - BASE: Respondents who have had one or more terminated pregnancies since the cutoff date for the calendar/health section (V228 = 1 & V231 > = V017).
- V234 A Whether the respondent had other pregnancy terminations before the last one.

  BASE: Respondents who have had one or more terminated pregnancies since the cutoff date for the calendar/health section (V228 = 1 & V231 > = V017).

#### Calendar related variables

V235 A Birth history index for last child born prior to the start of the calendar. Index is zero if no child was born before the start of the calendar.

#### Section 31 (REC31)

Contraceptive Table

#### <u>Var</u> <u>Model</u> <u>Description</u>

V301

Knowledge of any method is classified into modern, traditional and folkloric methods as follows: Modern methods are Pill, IUD, Injections, Diaphragm/Foam/Jelly, Condom, Female Sterilization, Male Sterilization and Implants. Traditional methods are Periodic Abstinence (Rhythm), Withdrawal, and Abstinence. Folkloric methods are the category "other" and any other country-specific methods. If a respondent knows both a traditional method and a modern method then the modern method takes priority and she is coded as knowing a modern method. Similarly, if a woman knows a traditional method and a folkloric method, the traditional method takes priority.

V302 Ever use of a modern, traditional or folkloric method is created in the same way as V301.

V303

Knowledge of a source for a modern method indicates whether the respondent could name indicated that she knew of a source from which she believed she would be able to obtain a modern method. There is no verification of the existence of a source or whether the source would be able to supply the method.

#### Contraceptive Table

The contraceptive table contains entries for 15 contraceptive methods, and for each entry gives information relating to knowledge of the method, ever use of the method, and knowledge of a source for the method and problems related to using the method. Entries 1 to 12 are standard but entries 13 to 15 are used for country-specific methods. The methods relating to each entry are as follows:

1	Pill	8	Periodic Abstinence (Rhythm)
2	IUD	9	Withdrawal
3	Injections	10	Other methods
4	Diaphragm/Foam/Jelly	11	Norplant <sup>TM</sup> or implants
5	Condom	12	Abstinence
6	Female Sterilization	13	Country-specific method 1
7	Male Sterilization	14	Country-specific method 2
		15	Country-specific method 3

For Diaphragm/Foam/Jelly, if questions about the methods are asked separately (for example, foaming tablets in one set of questions and diaphragm and jelly combined in another set of questions), the original responses are recorded as country-specific variables and the standard variables presented in this section are a composite of the two sets of questions.

The contraceptive table contains variables V304 to V306V309 as follows:

#### <u>Var</u> <u>Model</u> <u>Description</u>

V304A Whether the method is modern, traditional or folkloric.

V304 Knowledge of the method, differentiating between spontaneous responses and probed responses for each method. If questions relating to the method were not asked in a particular country then code 8 "Not asked" is used.

<u>Var</u>	Model Description
V305	Whether the respondent has ever used the contraceptive method. BASE: Respondents who knew of the method, either spontaneously (1) or after probing (being read a description of the method) (2) according to V304.
V306	Source (or source of information on how to use the method for periodic abstinence) known for the contraceptive method. This variable is now a simple Yes/No variable and occupies only one digit.  BASE: Respondents who knew of the method, for modern methods plus periodic abstinence.
<del>V307</del>	Source (or source of information or instruction for periodic abstinence) known for the contraceptive method in standard coding groups is constructed from V306.  BASE: Respondents who knew of the method, for modern methods plus periodic abstinence.
<del>V308</del>	Main problem with using the contraceptive method. Codes are country-specific.  BASE: Respondents who knew of the method, for all methods except "Other method."
<del>V309</del>	Main problem with using the contraceptive method in standard coding groups is constructed from V306.  BASE: Respondents who knew of the method, for all methods except "Other method."

#### **Example Contraceptive Table:**

M 11 D

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Pill	IUD	Inj	Dia	Cond F.	St.M.	St.P	.Ab.	With	Other	Norpl	Abst	CS1	CS2	CS3
V3047	1	1	1	1	1	1	1	2	2	3	1	2	3	3	3
V304	1	0	0	0	1	2	0	1	2	0	8	8	8	8	8
V305	0				1	0		1	0						
V306	1				1	0		0							

In this example the entries in the table are shown across the page while the variables in each entry are shown down the page. The numbers shown above the method names are the occurrence or entry number associated with that method. The respondent knew three methods, Pill, Condom and Periodic Abstinence, without probing and knew two more, Female Sterilization and Withdrawal, after probing by the interviewer. The respondent has used Condoms and Periodic Abstinence. The respondent reported knowing a source of the method for Pill and Condom, but did not know a source for Female Sterilization or for information on how to use Periodic Abstinence. The respondent reported several sources for the methods: Pharmacy for Pill and Condom, Hospital for Female Sterilization, Church for instruction on Periodic Abstinence, and Friends for information about Withdrawal. She believed Pills and Condoms cost too much, and the main problem with Female Sterilization is that the method is permanent. She did not know of any problem with Periodic Abstinence or Withdrawal.

#### Section 32 (REC32)

# Contraceptive Use

<u>Var</u>	Model	<u>Description</u>
V310		Number of living children at the time the respondent first used a contraceptive method. BASE: All respondents who have ever used a contraceptive method (V302 $> 0$ ).
V311		Number of living children at the time of first use is a grouped form of V310, with 4 or more truncated to 4 and respondents who have never used a contraceptive method coded 5.
V312		Current contraceptive method. Pregnant women are coded 0 "Not currently using."
V313		Type of contraceptive method categorizes the current contraceptive method as either a modern method, or a traditional method, or a folkloric method.
<del>V314</del>		Method of periodic abstinence indicates how the respondent determined on which days to abstain from sexual intercourse the last time the respondent used periodic abstinence.  BASE: Ever users of periodic abstinence (V305(8) = 1).

#### Sterilization.

Variables V315 to V322 relate to dates of sterilization.

BASE: Women who are sterilized or whose partner is sterilized (V312 = 6 or V312 = 7).

- V315 A Month of sterilization of the respondent or her current partner (see note on imputed dates).
- V316 A Year of sterilization of the respondent or her current partner (see note on imputed dates).
- V317 A Century month code for the date of sterilization (see note on century month codes).
- V318 A Completeness of information for the date of sterilization of the respondent or her partner (see note on imputed dates). Codes for DHS II are different from the codes used in DHS I.
- V319 A Years since sterilization in 2-year groups, truncated at 10 years.
- V320  $\triangle$  Age at sterilization in 5-year groups < 25, 25-29, 30-34, 35-39, 40-44, 45-49.
- V321 A Marital duration at sterilization in 5-year groups with single women and those sterilized before marriage coded 0.
- V322 A Parity at sterilization, truncated at 5+ children.

#### Pill Use.

Variables V323 and V325 relate to the use of the pill. See variables V372 to V374 for additional information relating to pill use.

BASE: Respondents currently using the pill (V312 = 1).

- V323 Brand of pill currently being used by the respondent. Codes are country-specific.
- V324 A Whether the respondent is using the social marketing pill brand of that country.
- V325 A Cost of pills in the local currency. The width of this field has been increased to six characters to accommodate a variety of currencies. Code 999996 indicates that the pills were provided free and code 999998 indicates that the respondent did not know the price of the pills.

#### Source of modern contraceptive methods.

Variables V326 and V327 relate to sources of contraception for current users of modern methods. See variables V377 to V384 for additional information relating to the source of modern contraceptive methods.

BASE: Respondents currently using a modern method (V312 > = 1 & V312 < = 7 or V312 = 11).

- V326 The last source visited to obtain the current modern contraceptive method. Codes are country-specific, but the major categories are standard.
- V327 The last source visited for users of modern methods in standard coding groups constructed from V326. The standard coding categories for this variable have been changed to separate non-governmental organizations (NGOs) from other private sector sources.

#### V328 A Satisfaction with services received at the last source visited.

BASE: Respondents currently using a modern method who visited a modern medical facility. The actual selection criteria is country-specific, but generally will include those who visited the following facilities: Government Hospital, Government Health Center, Family Planning Clinic, Field Worker, Private Doctor, or Private Hospital or Clinic. Pharmacies, Shops and other similar sources are usually excluded.

#### Source of method or information for users of traditional methods.

Variables V329 to V331 relate to the last source visited for users of traditional methods.

BASE: "A" questionnaire - current users of traditional methods (V312 > = 8 and < > 11).

"B" questionnaire - current users of periodic abstinence (V312 = 8).

V329 Source of information for users of traditional methods. Codes are country-specific.

For countries using the model "A" questionnaire, the respondent is asked whether she visited a source to obtain a method to avoid pregnancy or instructions for using periodic abstinence in the last twelve months, irrespective of which traditional method the respondent is currently using. If the response was "No" code 0 "Did not visit source" was used. If the response was "Yes" the source for the method was recorded. Note that the source does not relate to the traditional method currently being used, but to the last source visited to obtain any method or instruction in the last twelve months.

- V330 Source of information for traditional method users in standard coding groups is constructed from V329.
- V331 A Satisfaction with the services received at the source given in V329.

  BASE: Current users of traditional methods who visited a modern facility (see V328).

#### Source of method or information for past users of contraception.

Variables V332 to V334 relate to the last source visited in the last twelve months for past users of contraception.

BASE: Past users of contraception (V302 > 0 and V312 = 0).

#### <u>Var</u> <u>Model</u> <u>Description</u>

- V332 A Past users of contraception are asked for the last source visited in the last twelve months. If no source was visited in the last twelve months the source is coded 0 "No source visited." Codes are country-specific.
- V333 A Last source visited in the last twelve months for past users in standard coding groups is calculated from V332.
- V334 A Satisfaction with the services received at the source given in V332.

  BASE: Past users of contraception who visited a modern medical facility (see V328).

#### Current use of contraception.

Variables V337 to V339 relate to the current use of contraception.

BASE: Current users of contraception (V312 < > 0).

- V335 A Duration of use of the current contraceptive method months.
- V336 A Duration of use of the current contraceptive method years.

These variables give the duration of use in years and months of the current method for all methods except for female or male sterilization where the date of sterilization is given.

BASE: Current users of contraception except for women who are sterilized or whose partners are sterilized (V312 < > 0 and V312 < > 6 and V312 < > 7).

- Months of use of the current contraceptive method are calculated from the calendar and other variables for model "A" questionnaires, or are taken directly from the questionnaire for model "B" questionnaires preceding variables, and from the date of sterilization for women who are sterilized or whose partners are sterilized. For model "B" questionnaires, if either the years or the months of use are missing, unknown or inconsistent, then this variable is set likewise. If the response to the question of the duration of use of the current method is "Since the last birth," then this variable is set to the length of the interval between the last birth and the date of interview. For Model "B" questionnaires, if the number of months of use exceeds 8 years, it is coded as 96. For Model "A" questionnaires, the month of interview is ignored in calculating the duration of current use.
- V338 A Main problem experienced with using the current contraceptive method. Codes are country-specific.
- V339 A Main problem experienced in standard coding groups is constructed from V338. "Method ineffective" and "Husbands disapproves" have been re-coded as 1 and 2 respectively. "Side effects" has been added as code 3.
- V340 A Other method used during the month before interview.

BASE: Current users of contraception except for women who are sterilized or whose partners are sterilized.

Last method used prior to current method.

V341 A Last method used (since the last birth) before the current method for current users of contraception.

BASE: All current users of contraception (V312 < > 0).

<u>Var</u>	Model Description
	Last use of contraception prior to current method.
	Variables V342 to V349 relate to the last period of contraceptive use prior to the current method.  BASE: Current users of contraception who used a contraceptive method (since the last birth) prior to the current method (V312 < > 0 and V341 > 0).
<del>V342</del> <del>V343</del>	
<del>V344</del>	A Century month code of the date of start of use of the method before the current method. It either the month or year of the start of use is missing, unknown or inconsistent then this variable is set to be the same.
<del>V345</del>	A Completeness of information relating to the date of start of use of the method before the current method.
<del>V346</del> <del>V347</del>	1
<del>V348</del>	A Duration of use of the method prior to the current method in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent ther this variable is set to be the same.
<del>V349</del>	A Main reason the respondent stopped using the method prior to the current method. Codes are country-specific.
	Last method used in the Open Birth Interval for past users.
<del>V350</del>	A Last method used (since the last birth) for past users of contraception.  BASE: Ever users of contraception who are not currently using a contraceptive method (V302)  > 0 and V312 = 0).
	Last use of contraception in the Open Birth Interval (OBI).
	Variables V351 to V358 relate to the last period of contraceptive use (since the last birth) for past users of contraception.  BASE: Ever users of contraception, who have used a contraceptive method (since the last birth), but are not currently using a method (V302 > 0 and V312 = 0 and V350 > 0).
<del>V351</del> <del>V352</del>	A Date of start of use of the last method used in the OBI - month.  A Date of start of use of the last method used in the OBI - year.  No imputation has been performed on the date of start of use of the last method used in the OBI, and incomplete dates remain in the data file.
<del>V353</del>	

set to be the same.

the month or year of the start of use is missing, unknown or inconsistent then this variable is

- V354 A Completeness of information relating to the date of start of use of the last method asked in the OBI.
- V355 A Duration of use of the last method used in the OBI months.
- V356 A Duration of use of the last method used in the OBI years.
- V357 A Duration of use of the last method used in the OBI in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent then this variable is set to be the same.
- V358 A Main reason the respondent stopped using the last method used in the OBI. Codes are country-specific.

#### Last method discontinued in the last five years.

Variables V359 and V360 relate to the last method discontinued in the last five years. The information for these variables is taken from the calendar. The period of five years is taken as an approximate period for the following two variables to allow the classification of the reasons for discontinuation by method. The period of five years cannot be accurately calculated in all cases due to incomplete or missing dates for the start of use of contraceptive methods and incomplete durations for the length of time the method was used. Cases are included if the date of discontinuation of either the method before the current method, for current users, or the last method, for past users, definitely falls within the last five years, or a contraceptive method was used in an interval prior to the birth of a child born in the last five years.

BASE: Respondents who discontinued use of a method in the last five years.

- V359 A Last method discontinued in the last five years.
- V360 A Reason for the discontinuation of the last method discontinued in the last five years.

#### Pattern and intentions for future use.

Variables V361 to V364 relate to the respondent's past contraceptive practice and future intentions for using contraception.

- V361 Pattern of past contraceptive use. For model "B" questionnaires the questions relating to contraceptive use since the last birth are not asked and thus the respondent cannot be categorized as having used a method since the last birth or having only used a method before the last birth. In countries using the model "B" questionnaire, all past users are given code 3.
- V362 Intention to use a contraceptive method in the future is based on two questions in the model questionnaires, and classifies those intending to use a method in the future by whether they intend to use that method in the next twelve months or not. The two "Unsure" categories correspond to replies of unsure about using a method in the future (unsure about use) or, for those intending to use a method in the future, unsure about whether they intend to use that method in the next twelve months (unsure about timing).

BASE: All respondents not currently using contraception (V312 = 0).

# <u>Var</u> <u>Model</u> <u>Description</u>

V363 Preferred future method for respondents intending to use a method in the future.

BASE: Respondents not currently using a method, but intending to use a method in the future (V312 = 0 & (V362 = 1 or V362 = 2 or V362 = 3)).

- V364 Contraceptive use and intention shows current users of modern methods, current users of traditional methods, non-users who intend to use in the future and non-users not intending to use a method.
- V365 A Whether the respondent has heard a family planning message on the radio in the last month. See V384 for media messages on the television.
- V366 Acceptability of family planning messages being provided on radio or television.
- Whether the last child born in the last five years was wanted at that time, later or not at all.

  For countries using the model "A" questionnaire this variable is extracted from the information given in the contraceptive practice table. For countries using the model "B" questionnaire this variable comes from a single question.
- V368 Number of entries in the contraceptive practice table. This will be zero for all countries using the model "B" questionnaire.

#### First contraceptive method used.

Variables V369 to V371 relate to the first contraceptive method ever used.

- V369 A The first contraceptive method ever used by the respondent. Never users are coded 0.
- V370 A Source of the first contraceptive method.

  BASE: Ever users of contraception whose first method was a modern method (V369 < = 7 or V369 = 11).
- V371 A Source of the first contraceptive method in standard groupings is created from V370.

  BASE: Ever users of contraception whose first method was a modern method (V369 < = 7 or V369 = 11).

#### Pill Use.

Variables V372 to V374 relate to the use of the pill.

BASE: Current users of the pill (V312 = 1).

- V372 Whether the package of pills currently being used by the respondent was seen by the interviewer.
- V373 Whether the respondent consulted a doctor or a nurse at the time that she first started using the pill.
- V374 Whether the respondent consulted a doctor or a nurse the last time that she got pills.

#### Reasons for Use or Non-Use of Contraceptive Methods.

- V375 A Reason the respondent decided to use the current contraceptive method rather than some other method of family planning.
  - BASE: Current users of contraception (V312 < > 0).
- V376 Reason the respondent does not intend to use a method of contraception in the future. BASE: All women not currently using a contraceptive method and not intending to use a method in the future (V362 = 5).

#### Sources of Contraception.

- V377 The source of the preferred future method is the source at which the respondent believes the preferred contraceptive method is available.
  - BASE: Respondents who state that they intend to use a modern contraceptive method in the next 12 months (V363 < = 7 or V363 = 11).
- V378 The source of the preferred future method coded in standard coding categories is created from V377.
  - BASE: Respondents who state that they intend to use a modern contraceptive method in the next 12 months (V363 < = 7 or V363 = 11).
- V379 Source of any method of contraception is formed from a combination of responses. For current users of modern methods, it is the source of that method. For women who are not currently using any method, but intend to use a modern method in the next 12 months, it is the source of the method they would prefer to use. For all other women, it is a source from which they know they can obtain family planning methods, if they know any source.
- V380 Source of any method of contraception coded in standard coding categories is created from V379.
- V381 Travel time to the source for a method of contraception refers to the time to get to the source specified in V379. The first digit of the time to the source gives the units in which the time was reported: 1 Minutes, 2 Hours, 9 Special responses. The last three digits give the time to the source in those units. If the last three digits contain a value greater than 990 then this is a special response.
- V382 Travel time to the source for a method of contraception is recoded into the following categories: Source comes to respondent, 0-14, 15-29, 30-59, 60-89, 90-119, 120+ minutes, Don't know the time to the source, Don't know any source.
- V383 Whether the source of contraception referred to in V379 is considered easy or difficult to get to.
  - BASE: Women who know of a source of family planning, and the source does not come to the respondent (V382 < > 8 & V382 < > 0).
- V384 Whether the respondent has heard a family planning message on the television in the last month. See V365 for media messages on the radio.

#### Contraceptive use prior to the start of the calendar.

Variables V385 to V392 refer to the use/nonuse of contraception in the interval between the last birth prior to the start of the calendar and the start of the calendar.

- V385 A Use of contraception prior to the calendar indicates whether the respondent: 1) was using a method in the first month of the calendar; 2) was not using in the first month of the calendar, but used in the interval prior to the calendar, 3) was not using in the first month of the calendar and had not used in the interval prior to the calendar, but had used in an earlier interval, 4) had only used since the start of the calendar, 5) had never used.

  BASE: All women.
- V386 A Date of start of use of the contraceptive method in use in the first month of the calendar -
- V387 A Date of start of use of the contraceptive method in use in the first month of the calendar year.
- V388 A Century month code of start of use of the contraceptive method in use in the first month of the calendar. This variable is constructed from V386 and V387, and from various other constraining information.
- V389 A Months of use of the contraceptive method prior to the first month of the calendar. This variable is used as the exposure prior to the start of the calendar in life table analyses.

  BASE: Women who were using a contraceptive method in the first month of the calendar (V385 = 1).
- V390 A Date of ending use of the contraceptive method last used prior to the first month of the calendar month.
- V391 A Date of ending use of the contraceptive method last used prior to the first month of the calendar year.
- V392 A Century month code of ending use of the contraceptive method last used prior to the first month of the calendar. This variable is constructed from V390 and V391, and from various other constraining information.

BASE: Women who were <u>not</u> using a contraceptive method in the first month of the calendar, but had used in the interval since the preceding birth prior to the calendar (V385 = 2).

The contraceptive practice history contains up to seven entries, relating to births in the five years preceding interview and to the current pregnancy. The entries are ordered in reverse order, such that the entry relating to any current pregnancy will be the first, followed by the entry relating to the last birth in the last five years, and so on. If there is no current pregnancy then the first entry will be that relating to the last birth in the last five years. For multiple births there is only one entry. See the example contraceptive practice history below. If there are more than seven births (including the current pregnancy) then only the last seven are used in the contraceptive practice history. The period of five years covers months 0 to 60 prior to the date of interview, with month 0 being the month of interview. Month 60 is included in this section to allow the calculation of wanted fertility rates based on months 1 to 60 prior to interview.

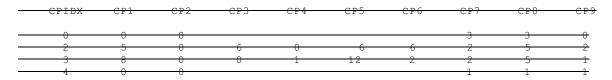
### <u>Var</u> <u>Model</u> <u>Description</u>

- CPIDX A Index to the birth history. For the current pregnancy the index is 0. For births it gives the number of the entry in the birth history. If the birth was a multiple birth then the index points to the birth with the highest index in the birth history. See the example of the contraceptive practice history below.
- CP1 A Last contraceptive method used in the interval before the birth and after the preceding birth.

  CP2 A Method used before the last method in the interval between the birth and the preceding birth.
- CP3 A Duration of use of the last method in the interval months.
- CP4 A Duration of use of the last method in the interval years.
  - BASE: Respondents using a method in the interval (CP1 < > 0).
- CP5 A Duration of use of the last method in the interval in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent then this variable is set to be the same.
- BASE: Respondents using a method in the interval (CP1 < > 0).
- CP6 A Main reason the respondent stopped using the last method in the interval. Codes are country-specific.
- BASE: Respondents using a method in the interval (CP1 < > 0).
- CP7 A Desire for birth is whether the respondent wanted the child at that time, later or not at all.

  Respondents who stopped using the method to get pregnant are coded as wanting the child then.
- CP8 A Fertility planning status classifies the previous variable by whether a contraceptive method was used in the interval.
- CP9 A Outcome of the birth gives the number of children born in this pregnancy, i.e., a single birth is coded 1, twins coded 2, triplets coded 3, etc. If the interval relates to contraceptive use prior to the current pregnancy the outcome is coded 0.

### **Example Contraceptive Practice History:**



In this example, based on the birth history example, there are four entries in the history. The first is for the current pregnancy and the respondent has not used a method in the interval between the last birth and the current pregnancy and the pregnancy is not wanted. The other entries represent the births in the five years preceding the interview (assumed to take place in September 1988). Note that there is no entry for the child with index 1 as this child is a twin of the child with index 2. Before child 2 condoms and, prior to that, periodic abstinence were used. Condoms were used for 6 months and the reason the respondent stopped was because they cost too much (assuming the same codes are used in the Model "A" questionnaire). The birth was not wanted then but was wanted later and the outcome was twins.

Section 41 (REC41) Maternity

The maternity history contains up to six entries, relating to births in the five years preceding interview. The entries are in reverse order, such that the first entry relates to the last birth in the last five years. There is an entry for all children born in the last five years including all twins. The period of five years includes months 0 to 59 prior to the interview, with month 0 being the month of interview. Month 60 is not included in this section, unlike the contraceptive practice history. If there are more than six births in the last five years hen only the last six are included in the maternity history. Each of the following variables, duration of breastfeeding (M5), duration of postpartum amenorrhea (M7) and duration of postpartum abstinence (M9) may have several cases coded 97 "Inconsistent" since the duration of breastfeeding, amenorrhea or abstinence was impossible in the interval between the birth and the following birth or date of interview if the most recent birth (only the date of interview in the case of breastfeeding).

Model Description

Var

MIDX	Index to the birth history. All births in the last five years have entries in this section, and thus the index increases by one each entry. See the example maternity history below. For twins the information in their entries will be identical for all variables relating to prenatal care.
M1	The number of tetanus toxoid injections given during the pregnancy to avoid convulsions after birth. Whether a tetanus injection was given during the pregnancy to avoid convulsions after birth. This variable indicated whether the respondent received a tetanus toxoid injection during the pregnancy for DHS-I countries.
M2	The type of person who gave prenatal care to the respondent prior to the birth. The coding is standardized, but in many surveys no differentiation is made between trained nurses and trained midwives. In these cases code 2 is used for trained nurse/midwife. In other surveys the question asks where the respondent received prenatal care, in which case this variable is blank and a country-specific variable is used for place where treatment was given.
M2A-N	The type of person who gave prenatal care to the respondent prior to the birth. This question has multiple coding categories and each category is recorded separately in these variables. Most of the categories are standard (M2A, B, C, F, G, J, N), however room has been left for country-specific categories (M2D, E, H, I, K, L). Any category not used in a particular country is left blank.
M2A	Doctor.
M2B	Nurse/Midwife.
M2C	Auxiliary Midwife.
M2D	Country-specific health professional.
M2E	Country-specific health professional.
M2F	Trained (traditional) birth attendant.
M2G	Traditional birth attendant.
M2H X	Relative. (non-standard and rarely used).
M2I	Country-specific other person.
M2J	Country-specific other person.
M2K	Other responses - uncoded.
M2L	Country-specific other.
M2M M2N	Country-specific other.  No one.

The type of person who assisted with the delivery of the child. As for M2, trained nurse and trained midwife are combined in many countries. In other countries the question asks for the type of place where the child was delivered, in which case this variable is blank and a country-specific variable is included for the place of delivery. except that the category "Relative" is a standard category for this variable.

M3A-N The type of person who assisted with the delivery of the child. The coding of these variables is the same as for M2A-N, except that the category "Relative" is a standard category for this variable.

The duration of breastfeeding of the child in months. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of interview. Cases which exceeded this duration—were set to code 97 "Inconsistent" were left with the original response, but are coded with one of the flag codes on variable M27 and were set to code 97 "Inconsistent" on variable M5. For Model "A" countries, the code 96 (breastfed until died) is not used.

The calculated months of breastfeeding gives the duration of breastfeeding as in M4, but with the duration calculated if the respondent is still breastfeeding the child or the child was breastfed until it died. Inconsistent durations based on the original reporting of the duration of breastfeeding are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened by one month, consistent with the "Rule of one" applied in DHS I. If the duration of breastfeeding exceeded the age of death of the child, the duration of breastfeeding was changed to the age at death of the child.

The duration of postpartum amenorrhea after the birth of the child in months. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of conception of the following child (date birth less nine months was used for the date of conception) or the date of interview if there was no following birth. Cases which exceeded this duration were set to code 97 "Inconsistent" were left with the original response, but are coded with one of the flag codes on variable M28 and were set to code 97 "Inconsistent" on variable M7.

The calculated months of postpartum amenorrhea give the duration of amenorrhea as in M6, but with the duration calculated if the period did not return after the birth and before the following birth or the date of interview. Inconsistent durations based on the original reporting of the duration of amenorrhea are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened by one month, consistent with the "Rule of one" applied in DHS I. For Model "A" countries, if the duration of postpartum amenorrhea extended into the following pregnancy in the calendar, the duration was shortened to the start of the following pregnancy.

The duration of postpartum abstinence after the birth of the child in months. The maximum period allowed is calculated in the same way as for M6 and cases exceeding this duration were set to code 97 "Inconsistent" were left with the original response, but are coded with one of the flag codes on variable M29 and are coded 97 "Inconsistent" on M9.

The calculated months of postpartum abstinence give the duration of abstinence as in M8, but with the duration calculated if the respondent was still abstaining after the birth. Inconsistent durations based on the original reporting of the duration of abstinence are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened

M4

M6

M7

M8

M9

#### <u>Var</u> <u>Model Description</u>

by one month, consistent with the "Rule of one" applied in DHS I. For Model "A" countries, if the duration of postpartum abstinence extended into the following pregnancy in the calendar, the duration was shortened to the start of the following pregnancy.

- Whether the child was wanted at the time of <u>pregnancy</u>, whether the child was wanted, but later, or whether the child was not wanted at all.
- M11 For women who wanted the child later, how much longer the respondent would have preferred to wait. The first digit gives the units in which the respondent gave her answer, code 1 indicates a response in months, code 2 in years, with 9 meaning a special answer was given. The last two digits give the time in the units given. Any value for time greater than 90 is a special answer.
- Whether the respondent received an antenatal card for the pregnancy. Any woman who did not see anyone for antenatal care is assumed to have not received an antenatal card.
- M13 Timing of first antenatal visit for the pregnancy is given in months from the start of the pregnancy.

BASE: Women who had seen someone for antenatal care (M2N < > 1).

- M14 Number of antenatal visits during the pregnancy. Women who did not see anyone for antenatal care during the pregnancy are coded 0.
- Place of delivery of child. Coding categories are standard and are constructed with a major category for the first digit and a minor category for the second digit. Country-specific codes are added under the respective major coding categories as needed. For example "Home of traditional birth attendant" would be coded 13 since the category relates to a home (major category 1) and categories 11 and 12 are already used as standard categories.
- Whether child was born on time or prematurely.
- M17 Whether child was born by cæsarian section.
- M18 Size of child as reported subjectively by the respondent.
- Weight of child at birth given in kilograms with three implied decimal places (or grams with no decimal places). Children who were not weighed are coded 9996. In some countries, the birth weight was collected in grams, i.e. a total of four digits, whereas other countries collected the weight in kilograms to one decimal place, i.e. a total of two digits. In the latter case, the third and fourth digit are set to zeros. In a few countries, the weight was collected in pounds and/or ounces. For these countries, the original weight variables are stored as a country-specific variable and this variable contains the weight converted to kilograms.
- M20 Reason the respondent did not breastfeed the child.

  BASE: Children who were never breastfed (M4 = 94).

M21 Reason the respondent stopped breastfeeding the child. Children who breastfed until they died are coded 3 (child died) as the reason stopped breastfeeding. Code 97 indicates cases where data was missing on whether the child was ever breastfed.

BASE: Children who are no longer being breastfed, but were ever breastfed (M4 < > 94 & M4 < > 95). Children who are still breastfeeding but whose mothers were asked the reason they stopped breastfeeding the child due to the flow of the questionnaire are coded 95 when it is possible to tell.

- M22 Whether the child was ever given water or anything else to eat or drink other than breast milk. Living children who are not still breastfeeding are assumed to have been given other food.
- M23 The age at which the child was first given baby formula or kinds of milk other than breast milk on a regular basis.
- M24 The age at which the child was first given <u>plain</u> water **on a regular basis**.
- M25 The age at which the child was first given other liquids on a regular basis.
- M26 The age at which the child was first given any solid or mushy foods **on a regular basis**. Children who were never given the food on a regular basis are code 96. In certain countries

the questions relating to plain water and other liquids were asked as a single question. In these cases M24 is left blank and M25 contains the response to the single question.

- M27 Flag variable for breastfeeding, indicating types of problems found in editing the duration of
- breastfeeding.

  M28 Flag variable for postpartum amenorrhea, indicating types of problems found in editing the
- duration of postpartum amenorrhea.
- M29 Flag variable for postpartum abstinence, indicating types of problems found in editing the duration of postpartum abstinence.

Codes for these flag variables are as follows:

- 0 No problem.
- Duration exceeds interval between birth and succeeding birth (for amenorrhea and abstinence) or date of interview (for breastfeeding).
- Duration exceeds interval but only by one month. In DHS I the duration would have been modified to fit the interval in this case. This modification is made to the calculated months of postpartum amenorrhea (M7), postpartum abstinence (M9) or breastfeeding (M5) for DHS II.
- 3 Duration of breastfeeding exceeds the age at death of the child.
- Duration of postpartum amenorrhea, postpartum abstinence or breastfeeding extends into the following pregnancy in the calendar. This code only applies to Model A countries.

#### **Example Maternity History**:

MIDX M1 M2A-N M3A-N M4 M5 M6 M7 M8 M9 M10 M11 M12 M13 M14 M15 M16 M15 M16 M17	1 1 0100000_0 95 15 96 15 07 07 2 118 1 03 03 03 22 1 2 3 3000	2 1 0100000_0 0010010_0 14 14 96 15 07 07 2 118 1 03 03 03 22 1 2 3 2800	3 0 0001000 94 94 16 97 12 12 1 8 04 02 12 1 1 2 4 9996 02	4 8 000100_0 0000110_0 12 12 12 12 12 12 12 12 12 12 12 12 12
	95	07	02	06
M22	1	1	1	1
M23	0 4	0 4	96	03
M24	02	02	0 0	01
M25	05	05	00	05
M26	09	09	96	07
M27	0	0	0	0
M28	0	0	1	0
M29	0	0	0	0

In this example, based on the birth history example, there are four entries representing the four children born in the last five years. The first two entries relate to twins and so all of their prenatal care information is identical. The respondent received a tetanus injection, prenatal care from a trained nurse, and delivery assistance from an auxiliary midwife at a government health center, with the assistance of a relative. One of the twins was still being breastfed, 15 months after the birth, while the other had stopped breastfeeding after 14 months, because it had refused the breast. The respondent's periods had not returned after the last birth and the respondent had abstained from sexual relations for 7 months after the birth. Neither of the twins was wanted at that point in time, but the respondent would have preferred to have had them 18 months later. The respondent received an antenatal card during her antenatal care visits. The first visit was made after three months, and she made three visits in total. The twins were both measured at birth and weighed 3.5 kilos and 3.3 kilos, respectively. For child 3 no tetanus injection was given, prenatal care was from a traditional birth attendant and the child was delivered with the assistance of a relative. The child was never breastfed, the reported duration of postpartum amenorrhea of 16 months was inconsistent with the interval between this birth and the birth after this, and the respondent abstained from sexual relations for 12 months after the birth of this child. The child was smaller than average at birth, but had not been weighed at birth. The child was not breastfed, because it was ill and weak. None of the children was premature and none of the children were born by cæsarian section. All of the children had been given supplemental foods, including the child who died. This child received both plain water and other liquids in the first month of life.

V414A-D

<u>Var</u>	Model	<u>Description</u>
V401	A	Whether the last child born in the last five years was born by caesarean section. BASE: Respondents who have had one or more births in the five years preceding the survey $(V208\overline{V201} > 0)$ .
<del>V402</del>		Whether a tetanus injection was given for the current pregnancy.  BASE: Currently pregnant women (V213 = 1).
<del>V403</del>		Type of person who the respondent saw for a pregnancy checkup for the current pregnancy.  BASE: Currently pregnant women (V213 = 1).
V404		Whether the respondent is currently breastfeeding a child. This is based on the entries in the maternity history for children born in the last five years. If no child was born in the last five years then the respondent is assumed not to be breastfeeding. This variable is created by looking for any child which is still being breastfed, and not just whether the last child is being breastfed.
V405		Whether the respondent is currently postpartum amenorrheic. This variable is created from the maternity history by checking if the period returned after the last birth. If the woman is currently pregnant then she is coded as not currently amenorrheic, irrespective of whether her period returned after the last birth. If there are no births in the last five years then this variable is coded 0 "Not currently amenorrheic."
V406		Whether the respondent is currently postpartum abstaining. This variable is created from the maternity history by checking if the respondent has resumed sexual relations since the last birth. If there are no births in the last five years then this variable is coded 0 "Not currently abstaining."
V407		Number of times the last child was breastfed during the previous night. BASE: Respondents still breastfeeding the last child (V404 = 1).
V408		Number of times the last child was breastfed during the daylight hours the previous day. BASE: Respondents still breastfeeding the last child (V404 = 1).
		Other foods given to the child in the last 24 hours.
V409		Plain water.
V409A		Sugar water.
V410		Juice.
V410A	<b>L</b>	Herbal tea.
V411		Powdered or tinned milk.
V411A	<b>L</b>	Baby formula.
V412		Fresh (cow's or goat's) milk.
V413A	A-D	Country-specific other liquids.
V413		Any other liquid.
-		Variable V413 is used as a combined standard variable to catch all country-specific liquids as
		well as the "Any other liquid" question from the questionnaire. If there are country-specific
		liquids listed in the questionnaire, then these are included as country-specific variables,

together with the original question for "Any other liquid."

Country-specific other solid or mushy food.

V414 Any solid or mushy food. (Only used if no question relating to any other solid or mushy foods is given. Variable "Any other solid or mushy food" should be included as V414D).

BASE: Respondents still breastfeeding the last child (V404 = 1).

V415 Whether any of the liquids or solid foods was given in a bottle with a nipple.

BASE: Respondents whose last child born in the last five years was still alive (V208 > 0 & B5(1) = 1).

BASE: Respondents still breastfeeding the last child who fed the child with any other food or liquid in last 24 hours (V404 = 1 and (V409 = 1 or V410 = 1 or V411 = 1 or V412 = 1 or V413 = 1 or V414 = 1).

Whether the respondent has heard of or seen the special-named oral rehydration product for treating children with diarrhea. This variable is coded 1 if the respondent had used the ORS product to treat a child in the previous two weeks, 2 if the respondent had heard of the ORS product, and 3 if the respondent recognized the ORS product only after being shown the package.

BASE: All respondents, as defined in the Model Questionnaires, although in many countries the question was only asked to respondents who had given birth to a child in the last five years. Respondents who had given birth to a child in the last five years (V208 > 0).

- V417 Number of entries in the maternity history.
- V418 Number of entries in the health history.
- V419 Number of entries in the height and weight table.
- V420 Code assigned to the person measuring the children for the height and weight section. Codes are country-specific.
- V421 Code assigned to the assistant measurer. Codes are country-specific.
- Whether the respondent has ever prepared the special-named oral rehydration solution to treat herself or someone else. This variable is coded 1 if the respondent used the ORS product to treat a child in the two weeks prior to the interview and 2 if the respondent had previously used the package to treat anybody.

BASE: Respondents who had ever heard of or seen the oral rehydration product (V416 = 1 or V416 = 2 or V416 = 3).

Quantity of water used in the preparation of the oral rehydration solution, recorded in milliliters. Responses recorded in fixed categories such as ½ liter, 1 liter, 1½ liters are recoded as 500, 1000, 1500 milliliters. Responses recorded as bottle sizes (e.g., beer bottle, coke bottle) are recoded into their respective sizes (e.g., 333, 250). If the size of a particular container (e.g., a glass) was not known, this is recorded as code 9995. If the respondent said that she followed the instructions on the packet, this response is code 9994. If the whole packet was not used in the preparation of the solution, the code 9993 is given. Other answers are coded 9996. In certain countries, several units for the measurement of water are included in the questionnaire (see the individual questionnaires). The responses to these questions are recorded as country-specific questions, with the units recoded into the coding scheme in this variable.

BASE: Respondents who had ever used the oral rehydration product in preparing a solution for the treatment of diarrhea (V422 = 1 or V422 = 2).

V424A-X The sources known for the oral rehydration product. This question has multiple coding categories and each category is recorded separately in these variables. Most of the categories are standard (V424A, B, C, D, E, J, K, L, M, N, S, T, X). However, room has been left for country-specific categories (V424F, G, H, I, O, P, Q, R, U, V, W). Any category not used in a particular country is left blank. Public Sector. V424A Government Hospital. V424B Government Health Center. V424C Government Health Post. V424D Mobile Clinic. V424E

Community Health Worker. V424F Country-specific public sector. Country-specific public sector. V424G V424H Country-specific public sector. Country-specific public sector. V424I **Medical Private Sector.** 

V424J Private Hospital or Clinic. V424K Pharmacy.

V424L Private Doctor. V424M Mobile Clinic.

V424N Community Health Worker.

V424O Country-specific medical private sector. V424P Country-specific medical private sector. V4240 Country-specific medical private sector. V424R Country-specific medical private sector.

Other Private Sector.

V424S Shop.

V424T Traditional Practitioner.

Country-specific other private sector. V424U V424V Country-specific other private sector. V424W Country-specific other private sector.

V424X Other.

V424Y Whether the respondent knows no source for the oral rehydration product.

> BASE: Respondents who have ever heard of or seen the oral rehydration product (V416 = 1 or V416 = 2 or V416 = 3).

V425 Source of information on the preparation of the recommended home-made fluid for diarrhea treatment. Individual codes are country-specific, but the major codes are standard. In some countries, multiple responses are accepted for this question and the information is stored in country-specific variables.

> BASE: Respondents who gave the recommended home-made fluid to any of their children who had diarrhea in the last two weeks (count(REC43 where H14 = 1 or H14 = 2) > 0).

V426 Time after the birth at which the respondent first breastfed the last child. The first digit gives the units in which the respondent gave her answer. Code 0 means the child was breastfed immediately after birth, code 1 indicates the response was in hours, code 2 in days, with code 9 meaning a special answer was given. The last two digits give the time in the units given. Any value for time greater than 90 is a special answer. The response "Immediately" is recorded as 000.

BASE: Respondents whose last child born in the last 5 years was ever breastfed. (V208 > 0 & M4(1) < 94).

- V427 A The duration in months of breastfeeding of the last child born in the three years preceding the calendar. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of interview. Cases which exceeded this duration were left with the original response, but are coded with one of the flag codes on variable V429 and were set to code 97 "Inconsistent" on variable V428.
- V428 A The calculated months of breastfeeding gives the duration of breastfeeding as in V427. Inconsistent durations based on the original reporting of the duration of breastfeeding are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened by one month, consistent with the "Rule of one" applied in DHS I. If the duration of breastfeeding exceeded the age of death of the child, the duration of breastfeeding was changed to the age at death of the child.
- V429 A Flag variable for breastfeeding, indicating types of problems found in editing the duration of breastfeeding. See V435 for codes.
- V430 A The duration in months of postpartum amenorrhea after the birth of the last child born in the three years preceding the calendar. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of conception of the following child (date birth less seven months was used for the date of conception) or the date of interview if there was no following birth. Cases which exceeded this duration were left with the original response, but are coded with one of the flag codes on variable V432 and were set to code 97 "Inconsistent" on variable V431.
- V431 A The calculated months of postpartum amenorrhea give the duration of amenorrhea as in V430, but with the duration calculated if the period did not return after the birth and before the following birth or the date of interview. Inconsistent durations based on the original reporting of the duration of amenorrhea are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened by one month, consistent with the "Rule of one" applied in DHS I.
- V432 A Flag variable for postpartum amenorrhea, indicating types of problems found in editing the duration of postpartum amenorrhea. See V435 for codes.
- V433 A The duration in months of postpartum abstinence after the birth of the child in months. The maximum period allowed is calculated in the same way as for V430 and cases exceeding this duration were left with the original response, but are coded with one of the flag codes on variable V435 and are coded 97 "Inconsistent" on V434.
- V434 A The calculated months of postpartum abstinence give the duration of abstinence as in V433, but with the duration calculated if the respondent was still abstaining after the birth. Inconsistent durations based on the original reporting of the duration of abstinence are recoded to 97. In cases where the duration was one month longer than the interval the duration was shortened by one month, consistent with the "Rule of one" applied in DHS I.
- V435 A Flag variable for postpartum abstinence, indicating types of problems found in editing the duration of postpartum abstinence.

#### <u>Var</u> <u>Model</u> <u>Description</u>

Codes for the flag variables (V429, V432, V435) are as follows:

- 0 No problem.
- Duration exceeds interval between birth and succeeding birth (for amenorrhea and abstinence) or date of interview (for breastfeeding).
- Duration exceeds interval but only by one month. In DHS I the duration would have been modified to fit the interval in this case. This modification is made to the calculated months of postpartum amenorrhea (V428), postpartum abstinence (V431) or breastfeeding (V434) for DHS II.
- Duration of breastfeeding exceeds the age at death of the child; or the response "Not resumed sexual relations" is inconsistent with later pregnancies.

#### Maternal Anthropometry

Data on maternal anthropometry is only collected for mothers of children born in the five years preceding the survey (months 0 to 59 before the survey).

BASE: Mothers of children born in the preceding 5 years (V208 > 0).

- V436 X Upper arm circumference of the respondent in centimeters. There is one implied decimal place in the arm circumference (decimal points are not included in the data file). To produce the arm circumference in centimeters divide by 10.
- V437 Weight of the respondent in kilograms. There is one implied decimal place in the weight (decimal points are not included in the data file). To produce the weight in kilograms divide by 10.
- V438 Height of the respondent in centimeters. There is one implied decimal place in the height (decimal points are not included in the data file). To produce the height in centimeters divide by 10.
- V439 Height for Age percentile.
- V440 Height for Age standard deviations from the reference median.
- V441 Height for Age percent of reference median.
- V442 Weight for Height percent of reference median based on DHS reference standard.
- V443 Weight for Height percent of reference median based on Metropolitan Life or Foggarty reference standard.
- V444 Weight for Height percent of reference median based on WHO reference standard.

The NCHS/FELS/CDC reference standard only contains data for children up to the age of 18 years. For all women aged 18 and over, the value of 215 months (17 years, 11 months) is used for their age, on the assumption that women are fully grown by the age of 18. Weightfor-age indices are not included as the weight of an adult woman is very dependent on her height. For the weight-for-height indicators, the CDC standard only applies up to a height of 137 centimeters, and almost all adult women are taller than this height. For this reason the weight-for-height Z-scores and percentiles are not available. However, three measures of percent of reference median are included, one based on the Metropolitan Life or Fogarty standard, the second based on the WHO standard and a third based on a DHS standard. These indices have been adjusted for pregnant women according to duration of pregnancy.

The anthropometric indices above are based on the CDC Standard Deviation-derived Growth Reference Curves derived from the NCHS/FELS/CDC Reference Population. The measures

are presented with two implied decimal places (no decimal points are included in the data file). To produce the actual measure, divide the variable by 100. If either the weight or the height of the respondent is missing, then the corresponding measures above are set to the missing code 9999 or 99999. If either the height or the weight is outside of the acceptable range for the calculation of these measures, then the corresponding measures are set to code 9998 or 99998.

- Body mass index (BMI), or Quetlet's index, for the respondent is defined as her weight divided by the square of her height (W/H²). There are two implied decimal place in the BMI (decimal points are not included in the data file). To produce the BMI divide by 100. The BMI has <u>not</u> been adjusted for pregnant women.
- Rohrer's index for the respondent is defined as her weight divided by her height cubed (W/H³). There are two implied decimal place in the Rohrer's index (decimal points are not included in the data file). To produce the Rohrer's index divide by 100. The Rohrer's index has not been adjusted for pregnant women.
- V447 Result of measurement of the respondent. Fully measured women are coded 0, and reasons for not measuring the respondent are coded 2 and above (see HW13).

Section 43 (REC43) Health History

The health history contains up to six entries, relating to living children born in the last five years. All living children born in the last five years, covering months 0 to 59 prior to the interview as for the maternity history, are included. The children who have died are included in this section, whereas in the DHS I individual recode only living children were included. The children who have died are not included in this section. For children who have died, only the variables relating to immunization are applicable in this section, and not the variables relating to morbidity. If there are more than six living children born in the last five years then only the last six are included in the health history. See the example health history below.

#### <u>Var</u> <u>Model</u> <u>Description</u>

H1

H2

HIDX Index to the birth history. All living children born in the last five years have entries in this section. There will be gaps in the numbering as dead children are excluded from the health history. Children of multiple births each have their own entry as in the maternity history.

Whether the respondent has a health card for the child and whether she could produce it for the interviewer. Code 1 means the interviewer saw the health card for the child, whereas code 2 means the respondent reported she had a health card for the child but the interviewer did not see it. Code 3 indicates that the respondent had a health card for the child at some point in time, but no longer has the health card. The health card is used to verify whether specific vaccinations were given and to record the dates of vaccination of the children rather than asking the respondent to report vaccinations. relying on dates reported by the respondent.

Whether a date of vaccination was recorded on the health card for BCG. Code 1 means the child has a date recorded for the vaccination. Code 2 is used to indicate that the respondent reported that the child had received the vaccination although the health card was not seen or did not exist, or the vaccination was not recorded on the health card, but was reported by the mother. Code 3 is used to indicate situations where the health card is clearly marked to indicate that the vaccination was given, but no date was recorded on the health card for the vaccination. In some countries code 2 is used to indicate that the respondent reported that the child had received the vaccination although the health card was not seen or did not exist. This is done in countries where the respondent was asked if the child had received each individual vaccination when the health card was not available.

BASE: Usually the base is living children with health cards seen by the interviewer (H1 = 1), but in countries where the respondent reported whether the child had received the vaccination for each vaccination the base is all living children.

```
H<sub>2</sub>D
                BCG vaccination date - day.
H<sub>2</sub>M
                BCG vaccination date - month.
H<sub>2</sub>Y
                BCG vaccination date - year.
                DPT 1 vaccination.
H3
                                        As for H2, H2D, H2M, H2Y.
H4
                Polio 1 vaccination.
                                        As for H2, H2D, H2M, H2Y.
H5
                DPT 2 vaccination.
                                        As for H2, H2D, H2M, H2Y.
                Polio 2 vaccination.
                                        As for H2, H2D, H2M, H2Y.
H6
H7
                DPT 3 vaccination.
                                        As for H2, H2D, H2M, H2Y.
H8
                Polio 3 vaccination.
                                        As for H2, H2D, H2M, H2Y.
H9
                Measles vaccination.
                                        As for H2, H2D, H2M, H2Y.
```

#### <u>Var</u> <u>Model</u> <u>Description</u>

If the vaccination date reported is inconsistent with the date of birth or the date of interview or with the dates of other vaccinations part or all of the date of vaccination may be set to 97 "Inconsistent."

BASE: Children who have the vaccination recorded on the health card (H2 = 1).

Whether the child ever received any vaccination to prevent him/her from getting diseases. This variable comes from a single question in the model questionnaires, which is used if the respondent does not have a health card for the child, and is <u>not</u> a summary of the preceding variables. In countries where the respondent was asked vaccination by vaccination whether the child had received a vaccination this variable is blank.

BASE: Children whose mother could not produce a health card (H1 = 0 or H1 = 2 or H1 = 3).

#### Diarrhea

Variables H11 to H21 relate to the prevalence and treatment of diarrhea.

BASE: All <u>living</u> children born in the last five years for H11, and children having an episode of diarrhea in the last two weeks (H11 = 1 or H11 = 2) for H11A to H21.

- Whether the child had diarrhea in the last 24 hours or within the last two weeks, but not the last 24 hours. Code 1 indicates that the child had been ill in the last 24 hours, code 2 indicates that the child had been ill with diarrhea in the last two weeks, but not the last 24 hours.
- H11A Duration in days for which the last episode of diarrhea lasted.

BASE: Children having an episode of diarrhea in the last two weeks (H11 = 1 or H11 = 2).

H11B Whether the was any blood in the stools during the last episode of diarrhea.

BASE: Children having an episode of diarrhea in the last two weeks (H11 = 1 or H11 = 2).

The place at which medical treatment or advice was sought for the last episode of diarrhea. This question has multiple coding categories and each category is recorded separately in these variables. Most of the categories are standard (H12A, B, C, D, E, J, K, L, M, N, S, T, X). However, room has been left for country-specific categories (H12F, G, H, I, O, P, Q, R, U, V, W). Any category not used in a particular country is left blank.

**Public Sector.** 

H12A Government Hospital.

H12B Government Health Center.

H12C Government Health Post.

H12D Mobile Clinic.

H12E Community Health Worker.

H12F Country-specific public sector.

H12G Country-specific public sector.

H12H Country-specific public sector.

H12I Country-specific public sector.

**Medical Private Sector.** 

H12J Private Hospital or Clinic.

H12K Pharmacy.

<u>Var</u>	Model	Description
H12L		Private Doctor.
H12M		Mobile Clinic.
H12N		Community Health Worker.
H12O		Country-specific medical private sector.
H12P		Country-specific medical private sector.
H12Q		Country-specific medical private sector.
H12R		Country-specific medical private sector.
		Other Private Sector.
H12S		Shop.
H12T		Traditional Practitioner.
H12U		Country-specific other private sector.
H12V		Country-specific other private sector.
H12W		Country-specific other private sector.
H12X		Other.
H12Y		Whether no treatment or advice was sought for the diarrhea as reported by the respondent.
H12Z		Whether the child was taken to a medical facility for treatment of the diarrhea. This usually includes being taken to all Public Sector facilities and all Medical Private Sector facilities except for Pharmacy. This variable is a summary of these preceding variables as is used in the final reports.
H12		The person providing medical treatment for the last episode of diarrhea. Codes are country-
1112		specific.
H13		Whether the child received a sugar-salt-water solution from a special packet (ORS). H13 is coded 1 if the respondent spontaneously reported giving ORS to treat the diarrhea, and code 2 if it was reported only after probing.
H13A		Duration in days for which the child was given fluid from an ORS packet when he/she had diarrhea.
		BASE: Children receiving ORS (H13 = 1 or H13 = 2).
H14		Whether the child was given the recommended home solution of sugar, salt and water. H14 is coded 1 if the respondent spontaneously reported giving the recommended home solution to treat the diarrhea, and code 2 if it was reported only after probing.
H14A		Duration in days for which the child was given a home-made fluid made from recommended ingredients when he/she had diarrhea.  BASE: Children receiving a recommended home solution (H14 = 1 or H14 = 2).
H15		Whether the child was given other pills or syrups. tablets, injections or syrups.
H15A		Whether the child was given antibiotics.
H15B		Whether the child was given an injection.
H15C		Whether the child was given an IV (Intravenous feeding).
H15D		Whether the child was given home remedies or herbal medicines.
H15E-I	Η	Country-specific other treatments.
H16		Whether the child was given an increase, the same amount, or a decrease in fluids. H16 and
		H17 from DHS I have been merged into this single variable.
<del>H17</del>		Whether the child received a decrease in fluids.

# Var Model Description H18 X Whether the child was given an increase, the same amount, or a decrease in foods. H18 and H19 from DHS I have been merged into this single variable. H19 Whether the child received a decrease in foods. H18A Whether the number of breast feedings for the child was unchanged, increased, reduced, or stopped completely during the episode of diarrhea. BASE: Children having an episode of diarrhea in the last two weeks who were still being breastfed ((H11 = 1 or H11 = 2) and M4 = 95).H20 Whether the child received any other treatment. This is a summary of the "other treatment" question in the questionnaire and any country-specific treatments. All country-specific treatments are included as country-specific variables as is the original "other treatment" variable H21A Whether the respondent reported that the child received no treatment. H21 Whether the child received any treatment or whether advice or treatment was sought for the child. This is a summary of all of the preceding variables H12A to H12Z, H13, H14, H15 to H16 and to H20. It does not take into account H18 or H18A. Fever Variables H22 to H30 relate to the prevalence and treatment of fever.

#### Fever and/or Cough

Variables H22 to H40 relate to the prevalence and treatment of fever and/or cough in the two weeks preceding the interview.

BASE: All living children born in the last five years for H22, and children suffering from fever in the

BASE: All living children born in the last five years for H22 and H31, and children suffering from fever and/or cough in the last two weeks for H32 to H38 (H22 = 1 or H31 = 1 or H31 = 2).

H22 Whether the child had fever in the last two weeks.

last four weeks for H23 to H30 (H22 = 1).

H23 B The person providing medical treatment for the last episode of fever. Codes are country-specific.

		1
H24	В	Whether the child was given antimalarial.
H25	В	Whether the child was given antibiotics.
H26	В	Whether the child was given liquids or syrups.
H27	В	Whether the child was given aspirin.
H28	В	Whether the child was given an injection.
H29	В	Whether the child received any other treatment. This is a summary of the "other treatment"
		question in the questionnaire and any country-specific treatments. All country-specific
		treatments are included as country-specific variables as is the original "other treatment"
		<del>variable.</del>

H30 B Whether the child received any treatment. This is a summary of all of the preceding variables H23 to H29.

### Model Description Var Cough/Breathing Difficulties Variables H31 to H38 relate to the prevalence and treatment of respiratory difficulties. BASE: All living children born in the last five years for H31, and children having an episode of cough or breathing difficulties in the last four weeks (H31 = 1). H31 Whether the child had suffered from a cough and/or breathing difficulties in the last two weeks and whether the child had been ill with the cough in the last 24 hours. Code 1 indicates that the child had been ill in the last 24 hours, code 2 indicates that the child had been ill with the cough in the last two weeks, but not the last 24 hours. H31A The duration in days for which the cough had lasted for those children who had suffered from a cough in the last two weeks. BASE: Child who had suffered from a cough (H31 = 1 or H31 = 2). H31B Whether the child had suffered from rapid breathing when he/she had the cough. BASE: Child who had suffered from a cough (H31 = 1 or H31 = 2). H32 В The person providing medical treatment for the last episode of cough or breathing difficulties. Codes are country-specific. H32A-X The place at which medical treatment or advice was sought for the for the last episode of fever and/or cough. This question has multiple coding categories and each category is recorded separately in these variables. Most of the categories are standard (H32A, B, C, D, E, J, K, L, M, N, S, T, X). However, room has been left for country-specific categories (H32F, G, H, I, O, P, Q, R, U, V, W). Any category not used in a particular country is left blank. Public Sector. H<sub>32</sub>A Government Hospital. H32B Government Health Center. Government Health Post. H32C H<sub>3</sub>2D Mobile Clinic.

H32F	Country-specific public sector.
H32G	Country-specific public sector.
H32H	Country-specific public sector.
H32I	Country-specific public sector.
	Medical Private Sector.
H32J	Private Hospital or Clinic.
H32K	Pharmacy.
H32L	Private Doctor.
H32M	Mobile Clinic.
H32N	Community Health Worker.
H32O	Country-specific medical private sector.
H32P	Country-specific medical private sector.
H32Q	Country-specific medical private sector.

Country-specific medical private sector.

Community Health Worker.

H32E

H32R

<u>Var</u>	Model	<u>Description</u>
		Other Private Sector.
H32S		Shop.
H32T		Traditional Practitioner.
H32U		Country-specific other private sector.
H32V		Country-specific other private sector.
H32W		Country-specific other private sector.
H32X		Other.
H32Y		Whether no treatment or advice was sought for the fever and/or cough as reported by the respondent.
H32Z		Whether the child was taken to a medical facility for treatment of the fever and/or cough. This usually includes being taken to all Public Sector facilities and all Medical Private Sector facilities except for Pharmacy. This variable is a summary of these preceding variables as is used in the final reports.
H33		Whether the child was given antibiotics.
H33A		Whether the child was given an antimalarial.
H34		Whether the child was given cough syrup.
H35		Whether the child was given other pills or syrups.
H35A		Whether the child was given any unknown pills or syrups.
H36		Whether the child was given an injection.
H36A		Whether the child was given a home remedy or herbal medicine.
H37A-	D	Country-specific other treatments.
Н37		Whether the child received any other treatment. This is a summary of the "other treatment" question in the questionnaire and any country-specific treatments. All country-specific treatments are included as country-specific variables as is the original "other treatment" variable.
H38A		Whether the respondent reported that the child received no treatment.
H38		Whether the child received any treatment or sought advice or treatment. This is a summary of all of the preceding variables H32A to H32Z, H33 to H37.

#### Example Health History:

```
HIDX
                                  2
                                                       3
                                                       3
                                                                            2
Н1
            1
                                  1
                                                       0
                                                                             2
Н2
            1
               27 05
                      92
                                  1
                                    27
                                        0.5
                                            92
               24 06 92
                                    24 06 92
            1
                                  1
                                                                             2
Н3
                                                       0
            1 24 06 92
                                  1
                                    24 06 92
                                                       0
                                                                             2
H4
                                                       0
Н5
            1 22 07 92
                                  1
                                                                             0
                                    22 07 92
Н6
            1
               22 07 92
                                  1
                                    22 07 92
                                                       0
                                                                             0
Н7
            0
                                  0
                                                       0
                                                                             0
Н8
            0
                                  0
                                                       0
                                                                             0
Н9
             3
                                  3
                                                       0
                                                                             0
H10
                                                       0
                                                                             1
H11
            2
                                  0
                                                                             0
            00000
H12A-I
H12J-R
            00100
H12S-X
                 0
            01
H12Y,Z
            0.1
H13-H14
            0.0
H15-H20
            0000010
H21A
            0
H21
            1
H22
            0
                                  0
                                                                             1
Н31
            0
                                  2
                                                                             0
                                  00000
H32A-I
                                                                            01000
                                  01000
                                                                             00100
H32J-R
                                  00___
                                                                            00___
H32S-X
                                       0
                                  0.0
H32Y.Z
                                                                            0.1
н33-н37
                                  00000000
                                                                             01000000
H38A
                                                                            0
                                  1
Н38
                                                                             1
                                  05
H39
H40
                                  2
H41
            06
H42
            1
H43
            2
H44
```

In this example, based on the birth history example, there are four entries representing the three living children born in the last five years and one child who died. The first two entries are twins. They both have a health card and have dates reported for BCG, DPT 1 & 2, and Polio 1 & 2 vaccinations, but neither DPT3, nor Polio 3. There was, however, a mark on their health cards, indicating that they had both received a measles vaccination, but no dates had been recorded for them. The dead child had no vaccination card and had received no vaccinations. The other living child has a health card that the respondent could not produce; the child had received some vaccination according to the respondent -- BCG, Polio 1 and DPT 1. In the two weeks prior to the interview, the first child listed had an episode of diarrhea that lasted 6 days, accompanied by blood in the stools, visited a private doctor and also saw a traditional healer; the mother treated the child by increasing the quantity of fluids the child was given, but reduced the number of breastfeedings. The second child had a cough or difficult breathing in the two-four weeks prior to the interview, but was not treated for it, although the respondent did visit a pharmacy for advice or treatment for the diarrhea for the child. The cough lasted five days, but was not accompanied by rapid breathing. The fourth-third child had a fever in the two weeks prior to the interview, visited a government health center and a private doctor, and was treated with antimalarials.

The height and weight table contains information relating to children born in a specified period prior to the interview. The period used is five years, i.e., 0 to 59 months prior to the interview. country-specific, but is usually 3 to 36 months prior to interview. In some countries the period is 0 to 36 months, 3 to 60 months or 0 to 60 months. The entries are in reverse order, such that the youngest child is reported first. All live births in the period are included in the table, including children who have subsequently died.

BASE: Living children for variables HW1-HW12, HW14-HW26 (B5(HWIDX) = 1).

Var	Model	Description

HW14

HWIDX	Index to the birth history. All live births living children born in the specified period have entries in this section.
HW1	Age in months of the child is calculated from the country month code of the date of interview less the century month code of the date of birth of the child.
HW2	Weight in kilograms. There is one implied decimal place in the weight (decimal points are not included in the data file). To produce the weight in kilograms divide by 10.
HW3	Height in centimeters. There is one implied decimal place in the height (decimal points are not included in the data file). To produce the height in centimeters divide by 10. Height is supposed to be the recumbent length for children less than 24 months old and the standing height for children born 24 or more months prior to the interview.
HW4 HW5 HW6 HW7	Height for Age percentile.  Height for Age standard deviations from the reference median.  Height for Age percent of reference median.  Weight for Age percentile.
HW8 HW9 HW10	Weight for Age standard deviations from the reference median.  Weight for Age percent of reference median.  Weight for Height percentile.
HW11 HW12	Weight for Height standard deviations from the reference median.  Weight for Height percent of reference median.
	The measures above were calculated using the CDC Standard Deviation-derived Growth Reference Curves derived from the NCHS/FELS/CDC Reference Population. The measures are presented with two implied decimal places (no decimal points are included in the data file). To produce the actual measure, divide the variable by 100. If either the weight or the height of the child is missing then all of the above measures are set to the missing code 9999 or 99999. If either the height or the weight is outside of the acceptable range for the calculation of these measures then all of the above measures is set to code 9998 or 99998.
HW13	Reason the child was not measured. Fully measured children are coded 0, dead children are coded 1, and other reasons for not measuring the child are coded 2 and above.  BASE: Children not measured (HW2 = 999 and HW3 = 9999).

BCG vaccination in a particular country).

BASE: Living children (B5(HWIDX) = 1).

Whether the child has a BCG scar on his/her left shoulder (or any other location used for the

HW15 Whether the child was measured lying down or standing up. In DHS surveys, children aged less than 24 months are to be measured lying down, children age 24 months or older are to be measured standing up. There may, however, be a considerable discrepancy between policy and practice!

HW16 Day of birth of the child. This is used in conjunction with the date of measurement of the child to more finely calculate the age of the child in days when computing the anthropometric measures. This level of accuracy can be important in very young children. The age of the child calculated from the day of birth information is not used as a background characteristic for tabulations, but purely to produce a more accurate set of anthropometric indices.

HW17 Day of measurement.HW18 Month of measurement.HW19 Year of measurement.

HW20 X Upper arm circumference in centimeters. There is one implied decimal place in the upper arm circumference (decimal points are not included in the data file). To produce the upper arm circumference in centimeters divide by 10.

HW21 X Upper arm circumference for Age percentile.

HW22 X Upper arm circumference for Age standard deviations from the reference median.

HW23 X Upper arm circumference for Age percent of reference median.

HW24 X Upper arm circumference for Height percentile.

HW25 X Upper arm circumference for Height standard deviations from the reference median.

HW26 X Upper arm circumference for Height percent of reference median.

#### Example Height and Weight Table:

HWIDX	1	2	3	4
HW1	15	15		56
HW2	96	94		999
HW3	762	741		9999
HW4	1232	1012		9999
HW5	-116	-127		9999
HW6	9585	9517		99999
HW7	1190	2203		9999
HW8	-118	-77		9999
HW9	8815	9159		99999
HW10	2735	5033		9999
HW11	-60	1		9999
HW12	9514	10007		99999
HW13	0	0	1	4
HW14	1	1		2
HW15	1	1		9
HW16	12	12		25
HW17	14	1 4		14
HW18	0.8	0.8		0 8
HW19	90	90		90
HW20	142	135		160
HW21	862	400		3022
HW22	-136	-175		-52
HW23	8815	8426		9566
HW24	2670	1116		9999
HW25	-62	-122		9999
HW26	9498	8909		99999

In this example, based on the birth history example, four children are included. The first two children are twins aged 15 months, measuring 9.6 kg & 76.2 cm and 9.4 kg and 74.1 cm, respectively. Their anthropometric measures are given to 2 implied decimal places. Both children had BCG scars on the shoulders

and both were measured lying down. The child born immediately preceding the twins had died (as recorded in HW13). The fourth child refused to be measured, although it was ascertained that there was <u>no</u> BCG scar on the child's shoulder. The three living children measured 14.2 cm, 13.5 cm, and 16.0 cm, respectively, for upper arm circumference.

Section 51 (REC51) Marriage

# Var Model Description V501 Current marital status of the respondent. V502 Whether the respondent is currently, formerly or never married (or lived with a partner). Currently married includes married women and women living with a partner, and formerly married includes widowed, divorced, separated women and women who have lived with a partner but are not now living with a partner. V503 Whether the respondent has been married or lived with a man once or more than once. BASE: Ever-married women (V501 < > 0). V504 В Whether the partner lives in the household or is now living elsewhere. BASE: Currently married or in union women (V502 = 1). V505 В Whether the respondent is in a polygynous union and the number of other wives the respondent's partner currently has. BASE: Currently married or in union women (V502 = 1). V506 В The rank of the respondent among the partner's wives. BASE: Currently married or in union women in a polygynous union (V502 = 1 & V505 > 0). First marriage or union Variables V507 to V513 relate to the date of start of the first marriage or union. BASE: Ever-married women (V501 < > 0). V507 Month of start of first marriage or union (see note on imputed dates). V508 Year of start of first marriage or union (see note on imputed dates). V509 Century month code of the date of start of first marriage or union (see note on century month codes). V510 Completeness of information for the date of start of the first marriage or union (see note on imputed dates). Codes for DHS II are different from the codes used in DHS I. V511 Age at start of first marriage or union is calculated from the century month code of the date of start of first marriage or union and the century month code of the date of birth of the respondent. V512 Years since start of first marriage or union is calculated from the century month code of the

respondent is still married to her first partner.

V513

start of first marriage or union and the century month code of the date of interview.

Marital duration is actually the number of years elapsed since the start of the first marriage or union until the date of interview grouped into five-year groups, irrespective of whether the

# Var Model Description Survival status of parents Variables V514 to V524 relate to the survival status of the respondent's parents and her first partner's parents and to the living arrangements after marriage. BASE: Ever-married women (V501 < > 0). V514 Whether the respondent's mother was still alive at the date of interview. V515 Whether the respondent's father was still alive at the date of interview. Whether the respondent's first partner's mother was still alive at the date of interview. V516 V517 Whether the respondent's first partner's father was still alive at the date of interview. V518 Whether the respondent's mother was alive at the date of start of first marriage or union. <del>V519</del> Whether the respondent's father was alive at the date of start of first marriage or union. V520 Whether the respondent's first partner's mother was alive at the date of first marriage/union. V521 Whether the respondent's first partner's father was alive at the date of first marriage/union. V522 The number of years the respondent and her first partner lived with one of their parents after the start of the first marriage or union. BASE: Respondents for whom one of the parents was alive at the date of the first marriage or union (V518 = 1 or V519 = 1 or V520 = 1 or V521 = 1). V523 Whether the respondent and her partner are now living with one of their parents. BASE: Respondents for whom one of the parents was alive at the date of the first marriage or union (V518 - 1 or V519 - 1 or V520 - 1 or V521 - 1). <del>V524</del> Number of localities lived in for six months or more since the date of start of first marriage or union. Sexual intercourse

Variables V525 to V528 relate to age at first intercourse, frequency of intercourse and time since last sexual relations. BASE (for variables V526 to V533): Respondents who have had sexual intercourse (V525 < > 0).

- V525 Age at first sexual intercourse. Respondents who had never had sex are coded 0. The response category "First sexual intercourse at first union" has been added in DHS II.
- V526 Number of times the respondent had sexual intercourse in the four weeks preceding the interview.
- V527 Time since the last sexual relations as reported by the respondent. The first digit gives the units in which the respondent gave her answer: 1 Days ago, 2 Weeks ago, 3 Months ago, 4 Years ago,, with 9 meaning a special answer was given. The last two digits give the time in the units given. Any value for time greater than 90 is a special answer.
- V528 Time since the last sexual intercourse in days is calculated from the preceding variable. Durations of more than 30 days are grouped into one category 31+. If the respondent said she had had sexual relations in the last four weeks, but replied that her last sexual intercourse was one month before the interview, then this is recoded to 30 days. Otherwise, one month is coded 31+ days.

- V529 Computed time since last sexual intercourse. This is computed from the responses for V527, with durations exceeding the interval since the last birth (V530 = 9) recoded as "Before last birth" and inconsistent responses flagged on variable V530 (codes 1-8) recoded to 97.
- V530 Flag variable indicating inconsistencies found in editing the responses for variable V527.
  - 0 No flag
  - Duration given is greater than the interval since the last birth and the respondent did <u>not</u> say, in the maternity section, that she was still abstaining from sexual relations since her last birth
  - 2 Duration given plus the duration of abstinence after the last birth is greater than the interval since the last birth
  - Duration was reported, but the respondent had not resumed sexual intercourse since the last birth
  - 4 Respondent reported her last intercourse was before her last birth, but she had never given birth
  - Respondent reported her last intercourse was before her last <u>birth</u>, but she was currently pregnant
  - Respondent reported her last intercourse was before her last birth, but reported in the maternity section that she had resumed sexual intercourse after her last birth
  - Respondent reported a duration since her last intercourse, but this would place her last intercourse <u>before</u> her last <u>pregnancy</u>
  - Respondent reported a duration since her last intercourse, but this response was inconsistent with her response concerning the number of times she had had sexual intercourse in the four weeks preceding the survey.
  - 9 Duration was reported, but the duration would place her last sexual intercourse before her last birth
- Age at first sexual intercourse imputed. This is the same as V525, except for respondents who reported that their first sexual intercourse was at the time of their union. For these cases, the age at first sex is taken from the age at first union. In cases where the age at first sex was inconsistent with the age at conception of the first child, but only by one year (V532 = 3), the age at first sex was reduced by one year, consistent with the "Rule of one" applied in DHS I. Other cases flagged as inconsistent on variable V532 (codes 1, 2, 4, 5) are recoded as 97 (inconsistent). Cases coded 6 on V532 are not changed.
- V532 Flag variable for inconsistencies found in editing the responses for V525.
  - 0 No flag
  - 1 Respondent reported age at first sexual intercourse that exceeds her current age
  - 2 Respondent reported her age at first sexual intercourse as occurring more than one year after the conception of her first child
  - Respondent reported her age at first sexual intercourse as occurring up to one year after the conception of her first child
  - 4 Respondent reported that her first sexual intercourse was at the time of her first marriage, but the respondent was never married
  - Respondent reported that her first sexual intercourse was at the time of her first marriage, but her first marriage occurred after the conception of her first child
  - 6 Respondent reported her first sexual intercourse as being after her first marriage
- V533 Number of times the respondent <u>usually</u> has sexual intercourse in a month.

#### <u>Var</u> <u>Model</u> <u>Description</u>

<del>V601</del> A

Fertility preferences and certainty of the preferences. This variable is created from a series of questions in the Model "A" questionnaire. Firstly, a question relating to the respondent's desire for a future birth is asked. For each possible response to this question a second question is asked, further classifying the responses to produce nine categories (1-7,12,99). If the respondent is sterilized then a separate series of questions are asked leading to four categories (8-11). The code missing is used only if the answer to the first question on fertility preferences is missing. If the response missing is used for one of the secondary questions then this is coded with the "Unsure" category for that question. Similarly, if the response is missing for the question relating to regret for the sterilization then code 11 is used.

BASE: Currently married women (V502 = 1).

V602

Fertility preferences. This variable comes primarily from a single question in the DHS II questionnaires. This is the same question used in the DHS I Model "B" questionnaire. However, for DHS I Model "A" questionnaires, this variable was constructed from a series of questions. Women who respond that they want another child, but when asked when they would like the next child, respond that they cannot get pregnant, are classified in the "declared infecund category", and not in the "Wants another" category. These women can be identified in variable V616, where the original response to the question asking how long they would like to wait before having another child is recorded. This variable is created in different ways depending upon whether the model "A" questionnaire or the model "B" questionnaire was used in the country. In the first case the variable is created by grouping the codes from V601. In the second case the variable is created directly from the single question asked in the model "B" questionnaire.

BASE: Currently married or in union women (V502 = 1).

V603

Preferred waiting time before the birth of another child is created from two variables, the first asking how long from the date of interview the respondent would like to wait before the birth of the next child. If the respondent answered "Don't know" or gave an "Other" answer when she was asked how long she would like to wait for her next child, then she was asked how old she would like her youngest child to be when the next child is born, and the response to this is converted into a number of years before the next child is wanted. If the respondent replied to the second question that she had no children then the variable is set to missing. In some countries there may be some additional non-numeric responses to the question of how long to wait before the next birth. such as "Wants immediately" to the question of how long to wait before the next birth. These are assigned additional codes on a country-specific basis.

BASE: Currently married or in union women who want another child (V602 = 1). (V502 =

BASE: Currently married or in union women who want another child ( $\sqrt{602} = 1$ ).  $\frac{\sqrt{802} - 1}{1}$ .

V604

The preferred waiting time to the next birth is grouped into 12-month categories with responses of more than six years coded as 6+ years. Non-numeric responses are coded into one group (7 "Non-numeric"), but with "Don't know" and missing responses in their own categories (8 & 9). The additional response "Soon/Now" —In the example above of the additional response "Wants immediately," this non-numeric code is not grouped with the other non-numeric codes, but is recoded as less than one year waiting time.

BASE: Currently married or in union women who want another child (V602 = 1). (V502 = 1).

V605 Desire for more children is a constructed variable classifying respondents who want more children by whether they want the next child soon (less than 2 years) or they want the next child later (2+ years). Sterilized women and women who want no more children are now recorded in separate categories.

BASE: Currently married or in union women (V502 = 1).

V606 Respondent's attitude towards becoming pregnant.

BASE: Non-pregnant women not currently using contraception who have had sexual intercourse since their last birth (V213 = 0 & V312 = 0 & V526 < > 0 & V527 < > 996).

For those women who would not be happy if they became pregnant, the main reason they are not using contraception. Codes are country-specific.

BASE: Women who would not be happy if they became pregnant (V606 < > blank & V606 < > 1).

V608 B Ideal duration for a couple to wait before starting sexual relations after the birth of a child. The first digit gives the units in which the respondent answered, while the last two digits give the time in those units. The units codes are: 1 - months, 2 - years, 9 - special answers. If the units value is 9 then the variable contains a special response, and if the duration value is greater than 90 this also indicates a special response. For example, code 996 is used for "other" answers, and code 299 would mean that the response was given in years but the actual duration was missing on the questionnaire.

BASE: All women interviewed. Currently married women (V502 = 1).

V609 B Whether a mother should completely stop breastfeeding before starting to have sexual relations after a birth.

BASE: All women interviewed. Currently married women (V502 = 1).

V610 B Whether the respondent thinks her partner approves of couples using a method to avoid pregnancy.

BASE: Currently married or in union, non-sterilized women

(V502 = 1 & V312 < > 6 & V312 < > 7).

BASE: Currently married women (V502 = 1).

V611 B How often the respondent discussed family planning with her partner in the past year.

BASE: Currently married or in union, non-sterilized women

(V502 = 1 & V312 < > 6 & V312 < > 7).

BASE: Currently married women (V502 = 1).

V612 B Whether the respondent approves, in general, of couples using a method to avoid pregnancy.

V613 The ideal number of children that the respondent would have liked to have in her whole life, irrespective of the number she already has. In many countries it was possible for a respondent to reply to this question with a range of values, in which case this variable contains the midpoint between these values. If the midpoint is not an exact number then the number is rounded up in half the cases and rounded down for the other half. In situations where a range of values was collected, the original variables are included as country-specific variables. In some countries, additional country-specific categories are included, such as "It depends on God" or "As many as I can support" and are given country-specific codes.

- V614 This variable groups the preceding variable such that 6 or more children are in one category 6+ and all non-numeric responses are coded 7.
- The best number of months or years between the birth of one child and the birth of the next child. The first digit gives the units in which the respondent answered (1 indicates months, 2 indicates years, and 9 indicates a special response), while the last two digits give the time in those units. If the units value is 9 then the variable contains a special response, and if the duration value is greater than 90 this also indicates a special response. For example, code 996 is used for "other" answers, and code 299 would mean that the response was given in years but the actual duration was missing on the questionnaire.
- This variable records the original response to the question "How long would you like to wait from now before the birth of another child?" The first digit gives the units in which the respondent answered (1 indicates months, 2 indicates years, and 9 indicates a special response), while the last two digits give the time in those units. If the units value is 9 then the variable contains a special response, and if the duration value is greater than 90 this also indicates a special response. For example, code 994 is used for the responses "Soon/Now", and code 299 would mean that the response was given in years but the actual duration was missing on the questionnaire.

BASE: Currently married or in union women who want another child (V602 = 1), plus those originally responding that they want another child, but then say they cannot get pregnant (see also V602).

V617 This variable records the original response to the question "How old would you like your youngest child to be when your next child is born?"

BASE: Currently married or in union women who want another child, but respond "Don't Know" or give an "Other" answer to variable V616 (V616 > 996).

V618 Regret for sterilization records whether the respondent regretted the sterilization and, if so, the reason she regretted the sterilization.

BASE: Women who are sterilized or whose partners are sterilized (V312 = 6 or V312 = 7).

Whether the respondent (or her partner) would have the sterilization operation if she were given the chance to do it over again.

BASE: Women who are sterilized or whose partners are sterilized (V312 = 6 or V312 = 7).

Whether the respondent and her partner have ever discussed the number of children they would like to have.

BASE: Currently married or in union, non-sterilized women (V502 = 1 & V312 < > 6 & V312 < > 7).

Whether the respondent believes her partner wants the <u>same</u> number of children, <u>more</u> children or fewer children than she wants herself.

BASE: Currently married or in union, non sterilized women (V502 = 1 & V312 < > 6 & V312 < > 7).

V623 The exposure status variable differentiates between pregnant women, postpartum amenorrheic women, menopausal or infecund women, and fecund women:

- Pregnant women.
- <u>Postpartum amenorrheic</u> women are those whose period has not returned since the last birth in the five years preceding the survey.
- Women are defined as being <u>menopausal</u> if they are not pregnant and not postpartum amenorrheic, are not currently using a contraceptive method, and have not had a period in the six months preceding the survey or report that they are in menopause.
- Women are defined as being <u>infectund</u> if they are not menopausal and not postpartum amenorrheic and not pregnant, have had no birth in the five years preceding the survey, and either (Model "A" countries) have been continuously married and have not used contraception in the five years preceding the survey, or (Model "B" countries) have been married one time and first married five or more years before the survey and have never used contraception.
- <u>Fecund</u> women are all women not included in the preceding categories.

V624 The need for family planning variable categorizes women according to whether they have an unmet need or a met need, to space or to limit their future births:

- <u>Unmet need for spacing</u> includes pregnant women whose pregnancy was mistimed, postpartum amenorrheic women whose last birth was mistimed, and fecund women who are neither pregnant nor postpartum amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth, are undecided about the timing of the next birth, or are undecided whether to have another child.
- <u>Unmet need for limiting</u> includes pregnant women whose pregnancy was unwanted, postpartum amenorrheic women whose last birth was unwanted and fecund women who are neither pregnant nor postpartum amenorrheic and who are not using any method of family planning and who want no more children.
- <u>Met need for spacing</u> includes women who are using some method of family planning and say they want to have another child, are undecided about the timing of the next birth, or are undecided whether to have another child.
- <u>Met need for limiting</u> includes women who are using family planning and who want no more children. Note that the specific methods are not taken into account here.

In Model "A" countries, pregnant and postpartum amenorrheic women whose pregnancy was the result of a contraceptive failure are <u>not</u> included in the category of unmet need, but are categorized as <u>spacing failures</u> or <u>limiting failures</u>. In Model "B" countries, no distinction is made since the information on contraceptive failure is not ascertained.

The remaining cases are those women who have no need for contraceptive methods, either because they <u>desire a child soon</u> (within the next two years) or because they are <u>menopausal or infecund</u>. Note that the infecund or menopausal category on this variable contains fewer cases than variable V623 as those women that are categorized as infecund or menopausal, but are currently using a contraceptive method are recorded in the two "met need" categories.

BASE: Currently married or in union women (V502 = 1).

NOTE: This definition was used in the majority of the DHSII survey reports.

V625

Exposure status (definition 2) reclassifies variable V623, using a more liberal definition of infecundity. There are two differences between this definition and the definition used in V623: 1) For Model "B" countries, it is only possible to say that a women had been continuously married throughout the preceding five years if she was in her first union. This definition has been relaxed in V625, such that the respondent need only have been first married at least five years ago, and not necessarily continuously married throughout the last five years. For Model "A" countries, there is no change to this part of the definition.

2) Two additional variables have been used to declare a woman infecund. If the respondent said she cannot get pregnant when asked about preferences for additional children (V602 = 5), or if she reported that she was menopausal or had a hysterectomy when giving the reason she was not currently using a contraceptive method (V376 = 14), the respondent is coded as infecund.

V626

Unmet need (definition 2) follows exactly the same logic as V624, but uses the definition of fecundity given in V625. This variables was not used in DHSII survey reports, but is likely to be used in future DHS publications.

BASE: Currently married or in union women (V502 = 1).

# Section 71 (REC71)

# Partner's Characteristics and Women's Work

<u>Var</u>	Model	<u>Description</u>
V701		The current or most recent husband or partner's highest level of education attended. See variable V106. BASE: Ever-married women (V501 $<>$ 0).
V702		Highest year of education gives the years of education completed at the level given in V701. BASE: Ever-married women except those answering "No education" or with missing data for V701 (V501 $<>0$ & V701 $<>8$ & V701 $<>9$ ).
<del>V703</del>		Literacy of the respondent's current or last partner. See variable V108.  BASE: Ever-married women (V501 < > 0).
V704		Current or last husband or partner's most recent occupation as collected in the country. Codes are country-specific. Base: Ever-married women (V501 $<>$ 0).
V705		Standardized partner's occupation groups. Agricultural categories also include fishermen, foresters and hunters and are <u>not</u> the basis for selection of agricultural/non-agricultural workers for the variables that follow. This selection is based on a country specific coding scheme in variable V704. In countries, where it is not possible to differentiate between self-employed agricultural workers and agricultural employees, no attempt has been made to use other information, and code 4 has been used for both categories. The analyst may wish to use other related information to differentiate between these two categories. BASE: Ever-married women (V501 $<>$ 0).
<del>V706</del>		Whether the husband/partner earns or earned a regular wage or salary.  BASE: Ever-married women whose partner works or worked in a non-agricultural occupation (V501 <> 0 & V704 <> country-specific agricultural category).
V707		Whether the husband/partner works on his own/family land or on someone else's land. BASE: Ever-married women whose partner works or worked in an agricultural occupation (V501 $<>0$ & V704 = country-specific agricultural category).
<del>V708</del>		Whether husband/partner worked on someone else's land mainly for money or for a share of the crops.  BASE: Ever-married women whose partner works or worked in agriculture on someone else's land (V707 = 0).
<del>V709</del>		Whether the respondent worked before her first marriage.  BASE: Ever-married women who worked before marriage (V709 = 1).
<del>V710</del>		Whether the respondent turned most of her money over to her family or kept it for herself, when she worked before her marriage.  BASE: Ever-married women who worked before marriage (V709 = 1).
<del>V711</del>		Whether the respondent worked after her first marriage.  BASE: Ever-married women (V501 = 0).

<u>Var</u>	Model	Description
<del>V712</del>		Whether the respondent has ever worked, for never-married women.  BASE: Never-married women (V501 = 0).
<del>V713</del>		Whether the respondent turned most of her money over to her family or kept it for herself, when she worked.  BASE: Never-married women who have ever worked (V712 = 1).
V714		Whether the respondent is currently working.
V715		Most recent husband or partner's education in single years. See variable V133. BASE: Ever-married women (V501 $< > 0$ ).
V716		Respondent's occupation as collected in the country. For Model "A" countries, this variable contains the <u>most recent</u> occupation for respondents who have worked since January 198?. For Model "B" countries, this variable relates to the respondent's <u>current</u> occupation. Codes are country-specific.
V717		Standardized respondent's occupation groups. Agricultural categories also include fishermen, foresters and hunters and are <u>not</u> the basis for selection of agricultural/non-agricultural workers. In countries, where it is not possible to differentiate between self-employed agricultural workers and agricultural employees, no attempt has been made to use other information, and code 4 has been used for both categories. The analyst may wish to use other related information to differentiate between these two categories.
V718		Current type of employment. For Model A countries this is taken from the last month in the calendar column 8. For Model B countries this variable is constructed from responses to the questions concerning who the respondent works for, whether she earns cash for this work, and whether she works at home or away from home.
V719		Whether the respondent works for a family member, for someone else or is self-employed. For Model A countries, it is not possible to differentiate between whether the respondent works for a family member or for someone else. Code 2 (Someone else) is used in this case. BASE: Women currently working (V714 = 1).
V720		Whether the respondent received cash for this work. For Model A countries, it is assumed that self-employed workers are paid cash.  BASE: Women currently working (V714 = 1).
V721		Whether the respondent works at home or away from home. BASE: Women currently working (V714 = 1).
V722		Whether, while working, the respondent usually, sometimes or never has her youngest child with her.  BASE: Women currently working who have at least one living child born since January 198? and still living at home  (V714 = 1 & count(REC21 where B3 > = V017 & B5 = 1 & B9 = 0) > 0).

V723 Who usually takes care of the youngest child while the respondent is working. Women who have the child with them at work (V722 = 1) are coded 0.

BASE: Women currently working who have at least one living child born since January 198? and still living at home

(V714 = 1 & count(REC21 where B3 > = V017 & B5 = 1 & B9 = 0) > 0).

- V724 A Whether the respondent ever worked since January 198?.
- V725 A Month started work prior to January 198?.
- V726 A Year started work prior to January 198?.

BASE: Women working in January 198? in column 8 of the calendar.

- V727 A Month ended last job prior to January 198?.
- V728 A Year ended last job prior to January 198?.

Women who had no job prior to January 198? are coded 00.

BASE: Women not working in January 198? in column 8 of the calendar.

V729 Educational achievement recodes the education of the partner into the following categories: None, incomplete primary, complete primary, incomplete secondary, complete secondary, higher education, unknown level of education. If the grade within a level is unknown, it is assumed that the level was not completed. See related variables V702, V703, V715.

Base: Ever-married women (V501 < > 0).

# Section 81 (REC81)

# Characteristics of the Interview

<u>Var</u>	Model	<u>Description</u>
V801		Time of the start of the interview. The first two digits give the time in hours using the 24-hour clock, and the last two digits give the minutes within that hour.
V802		Time of the end of interview is coded as for the start of interview.
V803		Length of interview in minutes is calculated from the previous two variables, but with interviews that required more than one visit being coded 96.
V804		Number of visits for the interview.
V805		Interviewer identification code. Codes are country-specific. This variable occupies 3 digits for DHSII.
V806		Data entry keyer code. Codes are country-specific.
<del>V807</del>		Presence of children aged under 10 at the reproduction section of the interview.
<del>V808</del>		Presence of the husband at the end of the reproduction section of the interview.
<del>V809</del>		Presence of other males at the end of the reproduction section of the interview.
<del>V810</del>		Presence of other females at the end of the reproduction section of the interview.
V811		Presence of children aged under 10 at the end of the marriage and sexual intercourse section of the interview.
V812		Presence of the husband at the end of the marriage and sexual intercourse section of the interview.
V813		Presence of other males at the end of the marriage and sexual intercourse section of the interview.
V814		Presence of other females at the end of the marriage and sexual intercourse section of the interview.

Section 82 (REC82)

Calendar

#### Var Model Description

- VCOL A Column number of the entries in the calendar, indicating the type of data found in the entry in the calendar.
- VCAL A The calendar of events representing the 5+ years prior to the date of interview. The calendar is split into 9 records, representing each of the 9 columns. Each of the 9 columns contains a single character for each month in the time period. The data are stored as single variables of 80 characters, allowing for upto 80 months to be represented in the calendar. The first character in each variable represents the most recent point in time, while the 80th character position represents data for January of the year in which the calendar started. The calendars are fixed at the 80th character position, such that the first few entries in the calendar represent points in time after the date of interview, and are consequently left blank. The columns are as follows:

#### Column Description

- 1 Births, pregnancies and contraceptive use
- 2 Reasons for discontinuation of contraceptive use
- 3 Duration of post-partum amenorrhea
- 4 Duration of pos-partum abstinence
- 5 Duration of breastfeeding
- 6 Marital/union status
- 7 Moves and types of communities
- 8 Type of employment
- 9 Country specific

For columns 3, 4 and 5, data about the duration of post-partum amenorrhea, post-partum abstinence, and duration of breastfeeding, have been transferred into the calendar from separate questions that were asked in the questionnaires, to provide complete data for all colmuns for the time period covered by the calendar.

#### Column Description

Records each of the births and pregnancies during the calendar period, as well as each episode of contraceptive use and non-use. The following codes are used in column 1:

0	Non-use of contraception	W	Other traditional methods
1	Pill	N	Norplant
2	IUD	A	Abstinence
3	Injections	α	Country-specific method 1
4	Diaphragm/foam/jelly	ß	Country-specific method 2
5	Condom	τ	Country-specific method 3
6	Female sterilization	?	Unknown method/missing data
7	Male sterilization	В	Birth
8	Periodic abstinence/rhythm	T	Terminated pregnancy/non-live birth
9	Withdrawal	P	Pregnancy

All codes are standard except for codes  $\alpha$ ,  $\beta$ , and  $\tau$  which are country-specific letter codes representing traditional methods.

### Column Description

Records the reason for discontinuation of a method. The discontinuation code appears in the row of the last month of use of the method for the episode. All other rows in the column are left blank, except for those in which discontinuations took place. The standard codes are as follows:

1	Became pregnant while using	$\mathbf{C}$	Cost
2	Wanted to become pregnant	F	Fatalistic
3	Husband disapproved	A	Difficult to get pregnant/menopause
4	Side effects	D	Marital dissolution
5	Health concerns	$\mathbf{W}$	Other reasons
6	Access/availability	K	Don't know
7	Wanted more effective method	α	Country-specific reason 1
8	Inconvenient to use	ß	Country-specific reason 2
9	Infrequent sex/husband away	τ	Country-specific reason 3

All codes are standard except for codes  $\alpha$ ,  $\beta$ , and  $\tau$  which are country-specific letter codes representing additional reasons for discontinuation.

- Records the episode of postpartum amenorrhea after a birth in the calendar period. The amenorrhea is recorded starting in the first month <u>after</u> the birth of the child. The following codes are used:
  - X Period did not return
  - O Amenorrhea for less than one month
  - ? Missing data

If codes 0 or ? are used, only a single 0 or ? is recorded in the month after the birth. The X code is recorded in each month of postpartum amenorrhea after the birth.

- 4 Records the episode of postpartum abstinence after a birth in the calendar period. The abstinence is recorded starting in the first month <u>after</u> the birth of the child. The following codes are used:
  - X Sexual relations not resumed
  - O Abstinence for less than one month
  - ? Missing data

If codes 0 or ? are used, only a single 0 or ? is recorded in the month after the birth. The X code is recorded in each month of abstinence after the birth.

- Records the episode of breastfeeding after a birth in the calendar period. The breastfeeding is recorded starting in the first month <u>after</u> the birth of the child. The following codes are used:
  - X Breastfeeding
  - 0 Breastfed for less than one month
  - N Never breastfed
  - ? Missing data

If codes 0, N or ? are used, only a single 0, N or ? is recorded in the month after the birth. The X code is recorded in each month of breastfeeding after the birth.

### Column Description

- Records the episodes of marriage in the calendar period. The following codes are used:
  - X In union (married or living together)
  - 0 Not in union
- Records the episodes of residence in communities in the calendar period and the type of the community. The following codes are used:
  - X Change of community
  - O Capital/Major city (country specific)
  - 1 City
  - 2 Town
  - 3 Countryside
  - 4 Abroad (country specific)
  - ? Missing data for type of residence

The code X is used in the month of a change of residence, and the codes 1,2,3, and? indicate the type of residence in the months when no change of residence was taking place.

- Records the episodes of employment in the calendar period and the type of the employment. The following codes are used:
  - 0 Did not work
  - 1 Paid employee, away from home
  - 2 Paid employee, at home
  - 3 Self-employed, away from home
  - 4 Self-employed, at home
  - 5 Unpaid worker, away from home
  - 6 Unpaid worker, at home
  - ? Missing data
- 9 Country-specific records additional events in the calendar, specific to a country. For example, months of separation between the respondent and her spouse.

Rows in the calendar, representing months <u>after</u> the month of interview, are left blank. With this exception, columns 1, 6, 7, and 8 do not contain any blank characters.

The Maternal Mortality section is a country specific section that exists only for those countries that have a maternal mortality module. It contains up to 20 entries containing information related to all of the sisters and brothers of the respondents.

<u>Var</u>	Model	<u>Description</u>
MMIDX MM1 MM2	MM MM MM	Index to maternal mortality history. Sex of sibling. Whether the sibling is dead or alive.
MM3	MM	Current age of sibling in years.  BASE: All living siblings (MM2 = 1).
MM4	MM	CMC date of birth of sibling. This is based on a crude imputation process. The analysts may elect to perform their own imputation based on their own assumptions.
MM5	MM	Sibling's marital status. Whether the sibling is/was ever married or not. BASE: All siblings whose age is/was greater than or equal to the cut off age (MM3 $> = MMC5$ ).
MM6	MM	Number of years ago the respondent's brother or sister died.
MM7 MM8	MM MM	Age at death of sibling in years. CMC date of death of sibling. The analyst may choose to perform their own imputation procedure, as for the CMC date of birth of the sibling. BASE: All siblings who have died $(MM2 = 0)$ .
MM9	MM	Indicates if the respondent's sister was pregnant when she died, if she died during childbirth, within six weeks after the delivery, within 2 months after the delivery.  BASE: Female siblings aged older than the cutoff age (MM1 = 2 & MM2 = 0 & MM7 > = MMC5). In some countries the question is only asked for ever married siblings (MM5 = 1).
MM10	MM	Information about whether the death that occurred was related to the sister's pregnancy. BASE: Female siblings that died during a pregnancy or a period of time after a delivery or a still birth $(MM9 = 2 \text{ or } MM9 = 4 \text{ or } MM9 = 5 \text{ or } MM9 = 6)$ .
MM11	MM	Specifies the cause of death. Codes are country specific.  BASE: All deaths not related to a pregnancy for a specified age and years within which death occurred (see original questionnaire for each country for further details).
MM12	MM	Time between delivery and death used in countries where questions relating to fixed periods of time between delivery and death (usually six weeks or two months) are not asked. BASE: Female siblings who died after pregnancy (MM9 = 4 or MM9 = 5 or MM9 = 6).
MM13	MM	Place in which the death occurred. Country specific codes. BASE: Siblings who have died (MM2 = 0).

MM 14 MM Number of children to whom the female sibling gave birth during her live. In most countries, for women with a maternity related death, this is the number of children born prior to the pregnancy, if the respondent was pregnant when she died or if she died during delivery, and includes the child, if the woman died after the birth of the child.

BASE: As for MM9 above.

### Section 84 (REC84)

### Maternal Mortality

MMC1	MM	Number of occurrences of the maternal mortality section. This variable gives the number
		of the respondent's brothers and sisters born to the same mother.

- MMC2 MM Number of births to the respondent's mother preceding the respondent's birth. This variables gives the number of brothers and sisters born to the respondent's mother who are/were older than the respondent.
- MMC3 MM In some countries information about the siblings is given by one of the sisters of the respondent, and not by the respondent herself, if both the sibling and the respondent were interviewed. In this variables, the line number of the sibling providing the information is recorded, if the information was not given by the respondent. If the respondent gave the information for the maternal mortality section, this variables is coded 0. The information for the respondent is copied from that reported by the sister, replacing the respondent's data by here sister's data in the maternal mortality section.
- MMC4 MM Line numbers in the household schedule of the eligible sisters of the respondent.
- MMC5 MM Cut off age for this section. In most countries the age of 15 was taken as the cut off age, however in some countries the age of 10 or 13 was used.

### **Sections 91-99 (REC91-REC99)**

# Country-Specific Variables

The following sections will appear in the recode data file as needed on a country-specific basis.

REC91	All single occurrence cou	intry-specific variables	relating to the respondent.

REC92 Country-specific variables from the birth history (REC21). Variable IDX92 is always included as the first variable in this section and is equal to BIDX for each entry in the birth history.

REC93 Country-specific variables from the contraceptive practice history (REC93). Variable IDX93 is always included as the first variable in this section and is equal to CPIDX for each entry in the contraceptive practice history.

REC94 Country-specific variables from the maternity history (REC41). Variable IDX94 is always included as the first variable in this section and is equal to MIDX for each entry in the maternity history.

REC95 Country-specific variables from the health history (REC43). Variable IDX95 is always included as the first variable in this section and is equal to HIDX for each entry in the health history.

REC96 Country-specific variables from the height and weight table (REC44). Variable IDX96 is always included as the first variable in this section and is equal to HWIDX for each entry in the height and weight table.

> The last three country-specific sections are not assigned to any particular section of the questionnaire, but are used for additional modules not usually incorporated in the questionnaires. These include the respondent's work history, the diagnoses of deaths for dead children who were born in the five years preceding the interview, or for husband's questionnaires.

> As the child related sections REC41, REC43, REC44 are now completely parallel, i.e. the first entry in each section relates to the last child born, the second entry in each section relates to the last but one child born, etc., country specific variables for these sections, usually placed in REC94, REC95 or REC96, may all be placed in REC94 if the number of variables involved is small. This is to save space in the data file.

REC97-99

Note:

# Section and Variable Description

# Household

Occurrences						
Section	Code Length	Class	Min	Max	Section	<u>n label</u>
RECH0	Н0	100	S	1	1	Household's Basic Data
RECH1	H1	43	M	0	90	Household Schedule
RECH2	Н2	48	S	0	1	Household Characteristics
RECH3	Н3	?	S	0	1	Country-specific Household Variables
RECH4	Н4	?	M	0	90	Country-specific Household Schedule
RECH5	Н5	?	?	0	?	Country-specific
RECH6	Н6	?	?	0	?	Country-specific

<sup>?</sup> implies that the entry is country-specific

### Section H0 (RECH0)

Household's Basic Data

### <u>Var</u> <u>Model</u> <u>Description</u>

HHID Case identification used to uniquely identify each household. In most surveys this is constructed by concatenating the cluster or sample point number and the household number, but in some surveys this may be the questionnaire number taken from the front page of the questionnaire.

HV000 Alphabetic country code to identify the survey from which the data were collected. The code is based on an international standard code. This variable is now 3 characters in length, with the third character indicating the format of the recode file used for this survey. For all surveys in DHS II this code will be 2. For example: DR2 is the Dominican Republic, MA2 is Morocco, ZM2 is Zambia, and ID2 is Indonesia.

HV001 Cluster number is the number identifying the sample point as used during the fieldwork. This variable may be a composite of several variables in the questionnaire. If so, the original variables are included in RECH3 as country-specific variables.

HV002 Household number is the number identifying the household within the cluster or sample point. In some cases, this variable may be the combination of dwelling number and household number within dwelling. In these cases, the original variables are included as country-specific variables.

HV003 Respondent's line number is the line number in the household schedule of the person responding to the questions asked in the household questionnaire. If nobody in the household was available for interview, this variable is coded 00.

Ultimate area unit is a number assigned to each sample point to identify the ultimate area units used in the collection of data. This variable is usually the same as the cluster number, but may be a sequentially numbered variable for samples with a more complicated structure.

HV005 Sample weight is an 8 digit variable with 6 implied decimal places. To use the sample weight divide it by 1000000 before applying the weighting factor. All sample weights are normalized such that the weighted number of cases is identical to the unweighted number of households when using the full dataset with no selection. This variable should be used to weight all tabulations produced using the data file. For self-weighting samples this variable is equal to 1000000.

HV006 Month of interview. HV007 Year of interview.

HV004

HV008 Century month code of date of interview (see note on century month codes).

HV009 Total number of household members indicates the number of entries to be found in RECH1.

HV010 Total number of eligible women indicates the number of women found eligible for the individual survey in the household schedule. The eligibility criteria are generally: female, aged between 15 and 49. In some countries, the eligibility criteria restricts the survey to evermarried women. In early DHS II surveys, the eligibility criteria also required that the members slept the previous night in the household. In later surveys, this criteria was dropped and all usual residents and

### Var Model Description

HV024

HV025

visitors who slept in the household the previous night were interviewed. Non *de facto* women were later dropped in the analysis and do not appear in the Individual Recode Data File.

HV011 X	Total number of eligible men indicates the number of men found eligible for the men's or husband's survey in the household. The selection criteria are country-specific and will be documented in the Household Recode Documentation for each country.
HV012	Total number of <i>de jure</i> household members gives the number of household members that usually live in the household.
HV013	Total number of <i>de facto</i> household members gives the number of household members that slept in the household the previous night, including visitors.
HV014	Number of children resident in the household and aged 5 and under. Visiting children are not included.
HV015	Result of household interview. Code 1 represents a completed interview. For all other cases, only RECH0 will exist in the data file. For flat and rectangular format data files, cases with a result code different than 1 are dropped from the file.
HV016	Day of interview.
HV017	Number of visits for the interview.
HV018	Interviewer identification code. Codes are country-specific.
HV019	Data entry keyer code. Codes are country-specific.
HV020	The ever-married sample indicator is a constant for all cases in the data file. For all woman samples it is code 0, and for ever married samples it is code 1.
HV021	Primary sampling unit is a number assigned to sample points to identify the primary sampling units for use in the calculation of sampling errors. This variable is usually the same as the cluster number and/or the ultimate area unit, but may differ if the sample design required a multistage selection process.
HV022	Sample strata defines the pairings or groupings of primary sampling units used in the calculation of sampling errors when using the Taylor series expansion method (for example, with the package Clusters).
HV023	Sample domain defines the basic geographic units within which the sample was designed. For example, if the sample was designed to be self-weighting within region, this variable would define those regions; if the sample was designed to be self-weighting within major urban areas, other urban areas and rural areas, this variable would define the major urban, other urban and rural areas. If the sample is self-weighted at the national level, this variable is code 0.
******	

Region of residence in which the household resides. Codes are country-specific.

Type of place of residence where the household resides as either urban or rural.

### Var Model Description

HV026 Size of place of residence is the type of place in which the household resides. Urban areas are classified into large cities (capital cities and cities with over 1 million population), small cities (population over 50,000), and towns (other urban areas), and all rural areas are assumed to be countryside.

HV027 X Selection for men's or husband's survey indicates whether the household was selected for the subset of households in which the men's or husband's survey was administered. Code 1 indicates a men's survey and code 2 a husband's survey, while code 0 indicates the household was not selected.

HV028 X Sample weight for men's or husband's survey is an 8 digit variable with 6 implied decimal places. To use the sample weight divide it by 1000000 before applying the weighting factor. All sample weights are normalized such that the weighted number of cases is identical to the unweighted number of households selected for the men's or husband's survey when using the full dataset with no other selection. This variable should be used to weight all tabulations produced using the households selected for the men's or husband's survey. For self-weighting samples this variable is equal to 1000000. For households not included in the men's or husband's survey subsample, this variable is set to zero.

Var	Model	Description

HV103

HVIDX Line number of the household member.

HV101 Relationship to the head of the household.

HV102 Whether the member is a *de jure* household member, i.e., whether the member is a usual resident of the household.

Whether the member is a *de facto* household member, i.e., whether the member slept in the household the previous night.

HV104 Sex of the household member.

HV105 Age of the household member.

HV106 Highest level of education the household member attended. This is a standardized variable providing level of education in the following categories: No education, Primary, Secondary, Higher. Any member below the lower age limit for the education questions is classified in the "No education" category. Note that the lower age limit may be different from 6 years in some countries. Country-specific categorizations of education are recorded in RECH3.

HV107 Highest year of education gives the years of education completed at the level given in HV106. BASE: All household members except those answering "No education" or with missing data or the response "Don't know" for HV106 (HV106 < > 0 & HV106 < > 9 & HV106 < > 8).

HV108 Education in single years. This variable is constructed from the educational level (HV106) and the grade at that level (HV107) as follows:

```
HV106 = > HV108

0 = > 0

1 = > HV107

2 = > HV107+ x

3 = > HV107+ y

9 = > 99
```

x = years to complete primary education

y = years to complete primary and secondary education where both x and y are country-specific.

HV109 Educational achievement recodes the education of the household member into the following categories: None, incomplete primary, complete primary, incomplete secondary, complete secondary, higher education. See related variables HV106, HV107, HV108.

HV110 Whether the household member is still in school. All members aged equal to or older than the upper limit (usually 25 years) for this question or who have not attended school are coded 0 (Not in school).

HV111 Whether the mother of the household member is still alive. BASE: All children in the household aged less than 15.

<u>Var</u> <u>l</u>	<u>Model</u>	<u>Description</u>
HV112		Line number in the household of the mother of the member. This variable is code 00 if the mother is not a member of the household.  BASE: All children in the household aged less than 15.

- HV113 Whether the father of the household member is still alive. BASE: All children in the household aged less than 15.
- HV114 Line number in the household of the father of the member. This variable is code 00 if the father is not a member of the household.

  BASE: All children in the household aged less than 15.
- HV115 X Marital status of the household member.
- HV116 X Whether the household member is currently, formerly or never married (or lived with a partner). Currently married includes married women and women living with a partner, and formerly married includes widowed, divorced, separated women and women who have lived with a partner but are not now living with a partner. In countries where the only question asked relates to whether the household member is ever married, the responses are coded 2 for ever married and 0 for never married.
- HV117 Eligibility of the household member for the individual women's survey. This indicates the women included in the individual recode. In most surveys, both de facto and non de facto women are interviewed, however women are included in the individual recode only if they were eligible for interview and were de facto members of the household. (A few surveys used a de jure sample and this selection does not apply in those countries.)
- HV118 X Eligibility of the household member for the individual men's survey.

# Section H2 (RECH2)

# Household Characteristics

<u>Var</u>	Model	<u>Description</u>
HV201		Major source of drinking water for members of the household. Individual codes are country-specific, but the major categories are standard.
HV202		Major source of water for household use other than for drinking. Individual codes are country-specific, but the major categories are standard.
HV203		Whether the same source of water is used for drinking water as for household water.
HV204		Time taken to get to the water source for household water. BASE: All respondents except those with household water piped into the residence, yard or plot (HV202 $<>$ 11 & HV202 $<>$ 21). The actual selection criteria is country-specific.
HV205		Type of toilet facility in the household. Individual codes are country-specific, but the major categories are standard.
		Whether the household has:
HV206		Electricity.
HV207		A radio.
HV208		A television.
HV209		A refrigerator.
		Whether any member of the household has:
HV210		A bicycle.
HV211		A motorcycle.
HV212		A car.
HV213		Main material of the floor. Individual codes are country-specific, but the major categories are standard.
HV214	X	Main material of the walls. Individual codes are country-specific, but the major categories are standard.
HV215	X	Main material of the roof. Individual codes are country-specific, but the major categories are standard.
HV216		Number of rooms used for sleeping in the household.
HV217		Relationship structure in the household describes the household composition in the following categories: one adult, two related adults of the opposite sex, two related adults of the same sex, three or more related adults, all other combinations. Only usual (de jure) members aged 15 and over are considered in determining the relationship structure.
HV218		Line number of head of household. This should always be 01, however there are some households in certain surveys in which the head of household has not been listed as the first person in the household listing.
HV219 HV220		Sex of head of household. Age of head of household.

## Sections H3-H6 (RECH3-RECH6)

Country-Specific Household Variables

The following sections will appear in the household recode data file as needed on a country-specific basis.

RECH3 All single occurrence country-specific variables relating to the household.

RECH4 Country-specific variables from the household schedule. Variable IDXH4 is always included as the first variable in this section and is equal to HVIDX for each entry in the household schedule.

RECH5-H6 The last two country-specific sections are not assigned to any particular section of the questionnaire, but are used for additional repeating modules not usually incorporated in the questionnaires. These include, for example, histories of births and deaths in the household in a recent period.

### **Dictionary Listing**

The dictionary listing provides the basic information relating to each variable in the data file. The dictionary listing provided here is for rectangular and hierarchical data files. It contains a description of all of the standard variables included in the recode file. The first page gives dictionary information about the file, including the name of the dictionary, its creation date and last modification date, the questionnaire identification fields and the section identification fields. this is followed by the section descriptions giving the following information:

Section name Name by which the section is referred.

Code Code used to identify the record for this section.

Length Number of characters used in the record.

Class Whether the section is a single (S) or multiple (M) section.

Occurs Minimum and maximum number of occurrences allowed for the section. If the

maximum is greater than one then the section is a multiple section, but if the maximum is one then the section is a single section. If the minimum number of

occurrences is zero then the section is not always required for every case.

Group Maximum number of occurrences of a group within a single section, the starting

location of the group within the section and the total length of all of the variables in

one occurrence of the group.

Section label Title for the section.

This is followed by the detailed description of each variable in the data file, section by section. The following information is provided for each variable:

Variable name Name by which the variable is referred.

Location Character position on the record.
Length Size of the variable in characters.

Decimals Number of decimal places in the variable. If decimal places are specified then the

variable is stored with the decimal point in the data file. For example, if a variable is 4 characters in size, with 2 decimal places the variable will appear as X.XX in the

data file.

Format N is for numeric, A for alphabetic.

Class S is for single variables in single or multiple sections, M for multiple variables of a

group in single sections.

Variable label Title of the variable.

Value labels Labels assigned to each code for the variable.

Ranges Pairs of values giving the lower and upper limits for the values of the variable.

The dictionary listing following is for the hierarchical data structure. The rectangular data structure has exactly the same format, but with the minimum number of occurrence of each section equal to the maximum number of occurrences of the section. The flat file data structure contains the same variables, but with all variables on one record. The locations of each variable can be calculated by concatenating all of the records end to end, but leaving out the section identification from all records and the respondent identification from all sections except the first.