

# **NFHS-3 Supplemental Documentation: Data Set Version 52**

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## **1.0 Notes on the NFHS-3 Data Set**

### **1.1 Marital Status and “Gauna Not Performed”**

Throughout the NFHS-3 questionnaire, whenever marital status information was asked, “Married, Gauna not performed” was an allowed option. This option is non-standard to DHS marital status and individuals who gave this response were recoded to “Never Married”. The rationale in doing this is that for most Indian women and men this status represents a pre-sexually active union and thus *not* a union from the point of view of most health and demographic analysis.

As is DHS recode protocol, this information was retained in a set of parallel country-specific variables using the original questionnaire number prefixed with an ‘S’ for the naming convention. In the case of the woman’s data, the marital status is held in the variable V501 using the standard coding conventions. The non-standard “Married, Gauna not performed” coding was retained in the parallel NFHS-3 country-specific variable S301, and thereby allows the analyst to choose which variant to use.

### **1.2 Education Levels**

Throughout the NFHS-3 questionnaire, whenever education information was asked, the response was collected only in number of years. However standard DHS recode variables for education include both the number of years studied as well as the educational level, i.e., Primary, Secondary, and Higher. For the NFHS-3 these level categories were constructed as follows:

- Primary = 1 to 5 years of education
- Secondary = 6 to 12 years of education
- Higher = more than 12 years of education

### **1.3 Caste/Tribe Designations**

In each of the three NFHS-3 questionnaires respondents were asked to which caste/tribe they belonged (head of household (SH45), women (S117), and men (SM119)). If the response to these questions was either Caste (1) or Tribe (2), the name of the Caste or Tribe was written down by the interviewer. During data entry this information was entered and stored in a separate file. This file is available on a request.

Note: No organization, correction of spelling, or checking of any kind was done to this information, i.e., it is ‘raw’ data only; with IDs to link the response to the corresponding case in the main data file.

Also, for the women and the men a follow-up question was asked if the response in S117/SM119 was anything other than “No caste/tribe”. This compound response did not lend itself to recoding to the single ‘Ethnicity’ variables V131/MV131, thus the ‘S’ variables (S117/SM119 and S118/SM120) were created.

## **1.4 Units of Analysis**

The following are the ‘units of analysis’ for women and men, HIV results, and the domestic violence module. These definitions are the criteria used in the NFHS-3 data, and are standard to DHS data, except where noted. All cases that do not meet the criteria stated here have a weight of zero (0) in the data.

- ⇒ Analysis of Women and Men: only de facto individuals (i.e., those who slept in the house the previous night (HV103 = 1)) with a complete interview are considered.
- ⇒ HIV Analysis: only de facto individuals with a complete interview and a valid blood result (positive or negative) are considered. **Note**: the HIV universe includes women and men combined.
- ⇒ Domestic Violence Analysis: only de facto women with a complete interview who did not have any outside observers (D122A, D122B, D122C all equal zero (0)) are considered.

## **1.5 Information Not Included in the NFHS-3 Data Set:**

### a) District Level Identifiers/GIS

The NFHS-3 included HIV testing as part of its information collection. The requirement of confidentiality that comes with collecting HIV results made the inclusion of District level identifiers impossible with the NFHS-3 data set. Separately it was decided not to collect GIS information in the NFHS-3 – although procedures exist to collect GIS and HIV results in tandem.

See section 5.0 “HIV Testing and the Scrambling PSU Numbers” for a further discussion.

### b) Ultimate Area Selection Probability (HV033/V033/MV033)

For reasons of PSU identification and confidentiality mentioned in point (a) above, the ‘Ultimate Area Selection Probability’ (HV033/V033/MV033) values are likewise not included in the NFHS-3 data set.

## **1.6 Constructed HIV ID Variable**

To facilitate the linkage of the HIV data to the other data files, an ID variable has been constructed: **HIVID**.

In NFHS-3 the State code acted as a de facto prefix to the cluster or PSU number, as cluster numbers were unique only within each State. In the HIV data file, the State and PSU hybrid became a combined numeric identification variable, which is defined in the HIV recode file as variable HIVCLUST. However, in all other data files, the State and PSU numbers remain separate. This resulted in a "problem" between HIVCLUST and the ID variables in the main file (HHID, CASEID and MCASEID)—HIVCLUST contained embedded zeros, whereas the other ID variables did not. For example, State code 28 and PSU 6 appears as:

⇒ 28006⇐

in the HIV file, but as

⇒ 28 6⇐

in all other files. This is a resolvable problem, but it adds extra work for the analyst trying to link the files. Thus the “**Alternative HIV ID**” [**HIVID**] was constructed for the HIV data file. This ID is a 15 character alpha variable that matches exactly the corresponding case in the Woman’s (CASEID in the IR data) and Men’s (MCASEID in the MR data) files. Likewise it links to the household (HR) file in the identical manner as do the individual women and men’s files/IDs.

## **1.7 2,711 Unmatched HIV cases**

When working with the woman’s and men’s files (IR and MR) it can be observed that there are a total of 102,946 individuals for which HIV results exist. Checking the HIV data file (IAAR52.dat) however, will yield results for 105,657 individuals; a difference of 2,711 cases from the main data file(s).

In explaining this difference it is important to remember that the HIV testing was done at the household level, thus all the HIV results were ‘brought down’ to the individual woman’s and men’s files. It was this ‘bringing down’ process that accounts for the 2,711 unmatched cases, which have two sources: 1) as per DHS standard all individual analysis is done only on defacto cases, almost all of these 2,711 cases were present in the household and tested, but were non-defacto cases, and thus not eligible for inclusion in the main data set. 2) A very small number of cases where tested at the household level, but then did not complete an individual interview – and thus they’re information does not exist.

The 2,711 unmatched cases remain in the HIV file for the researcher who may want to study HIV among de jure residents – as they, with exception of those in point 2 above, are all de jure cases. This would require the creation of de jure HIV weights however, as these are not supplied with the data set.

## 2.0 Notable Variables

### 2.1 The Wealth Index: HV270, V190, MV190

The Wealth Index was constructed from household-level data, using Principle Components Analysis (PCA). The input information for this analysis came from household ownership of items ranging from furniture and vehicles; to dwelling characteristics such as water source, sanitation facilities, and the home's construction materials; and to whether a household member had a bank or post office account. The following gives a complete list of the items used to create the Wealth Index (with the original household questionnaire numbers cited):

- Drinking Water Source (HV201)
- Non-Drinking Water Source (HV202)
- Toilet Facility (HV205)
- Household Electrification (HV206)
- Household Possessions (HV207-HV212, HV221, HV243A-C, SH47B-W)
- Type of Cooking Fuel (HV226)
- Main Floor Material (HV213)
- Main Roof Material (HV215)
- Main Wall Material (HV214)
- Type of Windows (SH56A-D)
- Number of de jure members per sleeping room (HV012/HV216)
- House Ownership (SH58)
- Household member having a bank or post office account (HV247)
- Domestic Servant in Household (HV101 = 17)
- Ownership of Agricultural Land (V740 = 0 or 1, or MV740 = 0 or 1)

Notes: For categorical items (e.g., water source, materials) missing values were not reassigned, i.e., they were left "missing." Whereas for dichotomous variables (e.g., electricity, possessions) missing values were assigned to the category "No/does not have".

Each asset was assigned a weight (factor score) generated through PCA, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. The sum of the scores of the assets possessed by each household resulted in that household's wealth index factor or score.

The sample was then divided into *population* quintiles, with each quintile given a rank from one (poorest) to five (wealthiest). These quintiles are based on the distribution of the *de jure* household population, rather than on the distribution of households, as it is thought that most analyses are concerned with poor people rather than poor households.

The cut-off points at which the quintiles were formed were calculated by obtaining a weighted frequency distribution of households, the weight being the product of the number of de jure members in the household and the sampling weight of the household (HV012 \* (HV005 / 1,000,000)). Thus, the distribution represents the national household population, where each member is given the wealth index score of his or her household.

For more a more lengthy discussion of the wealth index, why it's of interest, and how it is calculated, see the *DHS Comparative Reports #6, The DHS Wealth Index*, which is available for download from the Measure DHS website ([www.measureDHS.com](http://www.measureDHS.com)).

## **2.2 New WHO Children's Anthropometry Variables**

Between the NFHS-2 and NFHS-3 the World Health Organization introduced new anthropometry standards for children; it was these standards that were used in the NFHS-3 National and State Reports. The NFHS-3 data set contains both the new and the older anthropometry measures. The older measures are retained in the same variable names as in NFHS-2 (and the DHS standard); in the household these are HC5, HC8 and HC11, and at the woman's level they are HW5, HW8, and HW11. The WHO variables are held in new variables; in the household HC70, HC71 and HC72, and at the woman's level HW70, HW71, and HW72. It is these variables that must be used to reproduce the results as published in the reports.

## **2.3 Definitions for Contraception Variables**

For the repeating variables V304A, V304, V305, and V307; the iterations are defined as follows:

Iteration	1 = Pill
	2 = IUD
	3 = Injection
	5 = Condom
	6 = Female sterilization
	7 = Male sterilization
	8 = Periodic abstinence
	9 = Withdrawal
	14 = Female condom
	16 = Emergency contraception
	17 = Other modern method
	18 = Folkloric method

With all other iterations being unused in NFHS-3.

Note: The standard DHS recode defines iteration 10 as "Other method" for the above listed variables. In the NFHS-3 however "Other method" was broken into "Other modern method" (iteration 17) and "Folkloric method" (iteration 18). Thus grouping these two categories will yield the standard DHS "Other method" category.

As is standard DHS formatting, this structure is mirrored by the codes in V312. However in the NFHS-3 data set there are an additional three codes present in V312:

4	Diaphragm
11	Implants
15	Foam, Jelly

These responses were allowed when the respondent was asked for the currently used method. They are included in the ‘Other Modern Method’ category in V304A, V304, V305, and V307.

The difference between V307 (“Method currently used”) and V312 (“Current contraceptive method”) is that V307 captures all methods currently used - for instances where the respondent is using multiple methods, whereas V312 contains only the most effective method currently being used. The designation of the method in V312 was set at the time of interview. The rank of effectiveness of method, and defined method-type category for each method, are as follows:

<u>Rank of Method Effectiveness*</u>	&	<u>Method Type**</u>
Female Sterilization		Modern
Male Sterilization		Modern
Pill		Modern
IUD		Modern
Injections		Modern
Implants		Modern
Condom		Modern
Female condom		Modern
Diaphragm		Modern
Foam, jelly		Modern
Periodic abstinence		Traditional
Withdrawal		Traditional
Other modern method		Modern
Folkloric method		Folkloric

\* “Emergency contraception” (Modern) is not considered a ‘currently used’ method.

\*\* As designated in the value labels of V301, V302, V304A, V313 and V364.

All the statements in this section apply equally to the equivalent men’s variables (M304A, MV304, MV305, MV307, MV312, etc).

## **2.4 Calendar (VCAL) Codes**

Calendar variables (VCAL(x)) are 80 character alphanumeric variables that contain information on aspects of the respondent’s immediate history. Each position in the string represents one month, and in that position may be a code with information pertaining to that month. The first ‘active’ position in the string is the month of interview, with each successive position being a month further back in time. Where there are multiple calendars, they run concurrently.

The NFHS-3 data set contains four calendars in the women’s file that represents the following:

- VCAL(1): Births, pregnancies, and contraceptive use (column 1 in the questionnaire)
- VCAL(2): Reason for contraception discontinuation (column 4 in the questionnaire)
- VCAL(3): Marriage (column 3 in the questionnaire)
- VCAL(6): Ultrasound conducted during pregnancy (column 2 in the questionnaire)



VCAL(4, 5, 7, 8, and 9) were not used in NFHS-3 and are blank in the data.

The first 'active' position in the VCAL string is in the position designated by V018, with all 'later' positions padded by blanks. The month of this starting position is the month of interview, with the CMC value for this month held in V008. The length of the portion of the string that contains the active data, V018 to the 80<sup>th</sup> position, is given by variable V019. In NFHS-3 the 80<sup>th</sup> position (ie the last position) in the string is January 2000 for interviews conducted in the survey's first phase, and January 2001 for those conducted in the second. V017 contains the Century Month Code (CMC) for these two sets of months: 1201 (phase 1) and 1213 (phase 2).

VCAL – in time:                   Month of interview = V008   - to -   End of calendar = V017  
 VCAL – by position:            First active position = V018   - to -   End of string = 80<sup>th</sup> position

Entire VCAL = [padded blanks + months/positions containing data (V019)] = 80 total positions

Example, Phase 1: For a woman interviewed in the first phase of the survey, V017 is 1201, as this is the CMC for phase 1's calendar start-date: January 2000. If her interview was in March 2006, then 75 months have transpired since January 2000, therefore 75 is stored in V019. This is the length of her active calendar, i.e., the number of months for which data was collected for this woman. Finally, since the VCAL variables are 80-characters in length, we need to know where in the variable this woman's data begins. Subtracting 75 from 80 results in 5, the number of unused months/positions in the variable, thus the starting position for her data would be at 5 + 1, or the 6th row. Thus 6 is the value stored in V018.

Example, Phase 2: For a woman interviewed in the second phase of the survey, V017 is 1213, as this is the CMC for phase 2's calendar start-date: January 2001. If her interview was in July 2006, then 67 months have transpired since January 2001, therefore 67 is stored in V019. This is the length of her active calendar, i.e., the number of months for which data was collected for this woman. Finally, since the VCAL variables are 80-characters in length, we need to know where in the variable the woman's data begins. Subtracting 67 from 80 results in 13, the number of unused months/positions in the variable, thus the starting position for her data would be at 13 + 1, or the 14th row. Thus 14 is the value stored in V018.

Valid codes for each VCAL variable are shown below. Keep in mind that if a column does not allow a blank it means only the "active" portion of the calendar does not allow a blank. The positions before the starting position (V018) are always blank.

VCAL(1): "Births, pregnancies, and contraceptive use"

Blanks not allowed. Each active position must contain one of the following codes:

- B = Birth
- P = Pregnancy
- T = Terminated pregnancy/non-live birth
- 0 = Non-use of contraception
- 1 = Pill

- 2 = IUD
- 3 = Injections
- 4 = Diaphragm
- 5 = Condom
- 6 = Female sterilization
- 7 = Male sterilization
- 8 = Periodic abstinence/rhythm
- 9 = Withdrawal
- W = other traditional methods
- N = Norplant/implants
- C = Female condom
- F = Foam or jelly
- ? = Missing

VCAL(2): “Reason for contraception discontinuation”

These codes appear only when the contraceptive method in VCAL(1) was discontinued; blanks are otherwise allowed.

- 1 = Became pregnant while using
- 2 = Wanted to become pregnant
- 3 = Husband disapproved
- 4 = Side effects
- 5 = Health concerns
- 6 = Access/availability
- 7 = Wanted more effective method
- 8 = Inconvenient to use
- 9 = Infrequent sex/husband away
- C = Cost
- F = Fatalistic
- A = Difficult to get pregnant/menopausal
- D = Marital dissolution
- W = Other reasons
- L = Lack of sexual satisfaction
- M = Created menstrual problem
- G = Gained weight
- N = Did not like method
- P = Lack of privacy for use
- K = DK
- ? = Missing

VCAL(3): “Marriage”

No blanks are allowed in this column; a woman is either X, N, or 0.

- X = Married

N = Married, but Gauna not performed  
0 = Not married  
? = Missing

VCAL(6): “Ultrasound conducted during pregnancy”

These codes appear only where a birth ("B") or termination ("T") is registered in VCAL (1); blanks are otherwise allowed.

Y = Yes  
N = No  
? = Missing

## **2.5 House Type and SLI**

Two variables were created in the NFHS-3 data set for comparability to NFHS-2, these are the “House type” (SHNFHS2) and the “Standard of Living Index” (SHSLI) variables. They are defined as follows:

### House Type (SHNFHS2):

Households in India were classified as ‘Kachha’, ‘semi-Pucca’, or ‘Pucca’. This classification was derived from the housing material questions: HV213, HV214 and HV215, and proceeded in the following manner:

- If the information in either HV213, HV214 or HV215 was either missing or ‘Other’ (code 96), then the house type was classified as **missing**.
- If HV213 was coded 23 – 36, AND HV214 coded 31 – 36, AND HV215 coded 31 – 39, then the house was classified as **Pucca** (code 3).
- If HV213 was coded 11 – 22, AND HV214 coded 11 – 26, AND HV215 coded 11 – 25, then the house was classified as **Kachha** (code 1).
- For all remaining combinations of information the house was classified as **semi-Pucca** (code 2).

### Standard of Living Index (SHSLI):

The Standard of Living Index (SLI) is a scoring system where the house, facilities associated with the house, and physical items belonging to the household are given scores. These scores are then summed and the result measured against a static set of SLI cut-offs. Households with a score 0 -14 are classified as having a ‘Low’ SLI, a score of 15-24 is a ‘Medium’ SLI, and scores 25 and above are a ‘High’ SLI. As with House Type, if any of the variables from which the scores are drawn are missing, ‘don’t know’, or ‘other’, the SLI for that household is then set to missing.

The variables used and the scores assigned are as follows:

<u>Variable/value</u>	<u>Assigned SLI Score</u>	<u>Variable/value</u>	<u>Assigned SLI Score</u>
House Type		Telephone (mobile or land-line)*	
- SHNFHS2 = 3	4	- HV243A or HV221 = 1	3
= 2	2	Refrigerator	
Toilet facility/Shared		- HV209 = 1	3
- HV205/ HV225 = 11-15/ 0	4	Colour TV	
= 11-15/ -	2	- SH47J = 1	3
= 21-23/ 0	2	Bicycle	
= 21-23/ -	1	- HV210 = 1	2
Electricity		Electric fan	
- HV206 = 1	2	- SH47G = 1	2
Cooking fuel		Radio/transistor	
- HV226 = 1,2,4	2	- HV207 = 1	2
= 5,6,7	1	Sewing machine	
Drinking water source		- SH47K = 1	2
- HV201 = 11-12	2	Black & white TV	
= 13-32	1	- SH47I = 1	2
Separate room for cooking		Water pump	
- HV242 = 1	1	- SH47U = 1	2
Own house		Animal-drawn cart	
- SH58 = 1	2	- HV243C = 1	2
Own agricultural land		Thresher	
- SH60 = 5-990	4	- SH47V = 1	2
= 2-4.9	3	Mattress	
= 0-2,999.8	1	- SH47B = 1	1
Any irrigated land		Pressure cooker	
- SH61 = 0.0-994.0,999.8	2	- SH47C = 1	1
Any livestock		Chair	
- HV246 = 1	2	- SH47D = 1	1
Tractor		Cot/bed	
- SH47W = 1	4	- SH47E = 1	1
Car		Table	
- HV212 = 1	4	- SH47F = 1	1
Motorcycle/scooter		Clock/watch	
- HV211 = 1	3	- HV243B = 1	1

\* missing rule ignored if one 'yes'

## **2.6 Calculated Variable SH18C, Age at Start of 2005-06 School Year**

(The following also applies to variables S18C and SM18C added in data set version 52.)

A non-standard variable, SH18C “Calculated age at start of 2005-06 school year (April 2005) in months”, has been introduced into the NFHS-3 data set for each household member. This variable is intended for use in education analysis, and represents a calculated age, in months, that each member would have been in the month (end) of April 2005 (i.e., CMC = 1264). The 2005-2006 school year was the academic year referenced by the interviewers when asking household members age 5-18 years their schooling history; April was later chosen as a representative month for the beginning of that academic year for the purpose of calculating this variable.

The age in SH18C can differ from the age given in the household (HV105). This occurs when information regarding the individual’s age could be found in the Anthropometry section<sup>1</sup>. In cases where anthropometric information existed, the age found therein (HA32/HB32/HC32) was used in lieu of the household age. Where month of birth did not exist for an individual, the month component of the information was generated randomly. For the few remaining cases where the age was ‘missing’ or ‘don’t know’, the age was set to 95 years and a random month of birth was used to calculate SH18C.

SH18C was calculated for all household members, as the calculation of the Gross Attendance Ratio (GAR) and the Net Attendance Ratio (NAR) required identifying the entire population whose age was 6-18 years in April 2005.

## **2.7 “Owns House”, the SH58 Variables**

The question of whether the house is owned by the household (SH58) was asked of all respondent households outside of Kolkata and Mumbai. In Kolkata and Mumbai (SHCITY = 3,5) this was replaced by an expanded set of ownership questions: SH58KM, A-E, EA-EI. These extended questions were set to not applicable for all households outside Kolkata and Mumbai. For the question SH58 for households in Kolkata and Mumbai the response is a recoding of question SH58KM, where SH58KM = 1,2,3 is recoded to SH58 = 1.

<sup>1</sup> As is standard DHS protocol, during the post-processing of NFHS data, there was a review of ages. During that time ages and dates of birth were brought into the anthropometric section. For children 0-5 years of age this information was already present; therefore it was only adjusted/corrected with regard to the information given in the mother’s birth history in her individual questionnaire. For adult individuals (women age 15-49 and men age 15-54), for whom age and date of birth were not collected in the anthropometric section of the household questionnaire, their age information was “brought up” from the individual level, i.e., copied to the household level anthropometry section. If that person’s age or date of birth was missing or only partially completed in their individual questionnaire, the missing portion was imputed. When SH18C was calculated for someone who did not have an individual questionnaire, and their age in the household was listed as ‘missing’ or otherwise invalid, their age was set to 95 years and a random month of birth was used to calculate the CMC for SH18C.

## 2.8 “Household structure” variable SHSTRUC

The ‘Household structure’ variable (SHSTRUC) defines a household as nuclear or non-nuclear and is determined by examining the ‘Relationship to head of household’ variable HV101, but only de jure residents (HV102 = 1) were considered.

Any household that contains a head, a wife of head, a child of the head including adopted/foster children, or any combination of these that include either a head or wife of head; and additionally does not include ever-married (from HV115) children of the head including ever-married adopted/foster children, nor include any of the following individuals: son/daughter-in-law, grandchild, parent, parent-in-law, brother/sister, brother/sister-in-law, niece/nephew, other relative, other person, but does allow for domestic servant, is considered a nuclear family. All other combinations are considered non-nuclear.

## 2.9 Standard Recode vs. Survey Specific Variables, and their Conventions

**Standard Recode** variables are those that use a common definition, name and structure across a wide range of DHS/NFHS data sets. Raw data from a given survey is ‘recoded’ into this standard form. The intention is to make common information easily recognizable for the user once they have become familiar with an initial set of data. Additionally, the user may construct generic programming that may then be used across a wide range of data sets with minimal or no modification.

Data requirements change and expand over time, and DHS data recodes have evolved with these changes. The convention is for the data sets to be divided into phases; the **NFHS-3 is a DHS-5 type recode**. Each successive recode phase attempts to retain all the information and structure of the previous recodes, while adding the new. There is also the retirement of older variables which no longer have analytical value, although there have been few of these.

One disadvantage of this system is that conventions adopted decades ago in environments of more modest computing power remain with us (e.g. weight values must be divided by 1,000,000). As in architecture, we live in the past. The advantages, however, outweigh the disadvantages.

A short list of the **Standard Recode** variable naming conventions as they exist in the DHS-5 recode is as follows (for an exhaustive list of DHS recode variables see the recode document “Recode4DHS.pdf” on [www.measureDHS.com](http://www.measureDHS.com))

### Household Level Variables:

- **HVxxx**      general and repeating data
- **HAxx**        woman’s anthropometry data
- **HBxx**        men’s anthropometry data
- **HCxx**        children’s anthropometry data

Women's Level Variables:

- **Vxxx**            general data
- **MLxxx**        malaria related data
- **Dxxx**            domestic violence data
- **VCAL(x)**        calendar data

Women's Level Children's Variables (all in repeating records):

- **Bxx**            Birth history/reproduction data
- **Mxx**            Maternity data
- **Hxx**            Health/vaccination data
- **HWxx**        Anthropometry data

The Birth History, the first of the repeating records, contains the **Bxx** variables and repeats for each child ever born, up to 20 children. Each of live births has its own record, with the individual child of each twin or multiple birth occupying their own separate record. The children are listed in order of most recent birth back to the first born.

The other three repeating sections: Maternity (**Mxx**), Health (**Hxx**), and Anthropometry (**HWxx**), contain only births to the woman in the 5 years (in some surveys this time period may differ) prior to the date of interview, up to 6 children. As with the Birth History each child is a separate record, listed in order and starting with the most recent birth.

When doing analysis in any one of these four records, the information from the other three may be accessed through the index variable at the beginning of each record: in the Birth History **BIDX**, in Maternity **MIDX**, in Health **HIDX**, and in Anthropometry **HWIDX**. For example, when in the Health section the particular child's sex can be referenced by **B4(HIDX)**, and while in the Birth History the child's weight and height (for a child less than 5 years) would be **HW2(BIDX)** and **HW3(BIDX)**.

Men's Level Variables:

- **MVxxx**        general data

Of course any given survey also includes information that cannot be retained in the pre-defined recode variables. Some of this data necessitates completely new variables, and some requires the expansion already existing recode variables. For an example and discussion of the latter in NFHS-3 see "1.1 Marital Status and 'Gauna Not Performed'" in this document. These variables are designated **Country Specific** or more accurately **Survey Specific** variables. Their naming convention is as follows:

Country/Survey Specific Variables:

- **SHxxx**        household level data
- **Sxxx**            women's level data
- **SMxxx**        men's level data

In the case of the Country Specific variables, unlike the Standard Recode variables, the xxx numeric part of the variable name the question number on the questionnaire from which the data was derived. This convention aids the user in identifying the context in which the information was collected.

For both the Standard Recode and Country Specific variables, the same value conventions are adopted. The most notable of these are:

Value Conventions:

- Yes = 1, No = 0
- Other = 6, 96, 996, ...
- Inconsistent = 7, 97, 997, ...
- Don't know = 8, 98, 998, ...
- Missing values = 9, 99, 999, ... or "?" if the variable is a string
- Not Applicable: value is blank

Century Month Code:

The Century Month Code (CMC) is a method of recording date information and is used extensively throughout DHS data sets. The CMC for any date is its month marked from January 1900, which is month 1. Thus any month/date can be given by:

$$\text{CMC value} = ((\text{Year} - 1900) * 12) + \text{Month}$$

For the March 1964 the CMC value is  $((1964 - 1900) * 12) + 3 = 771$ . For September 1998 the CMC = 1185.

CMC values exist throughout DHS data as some indicators demand accuracy of dates to the month level (ie, anthropometry, mortality), and as it is easier to manipulate date calculations with CMC values than with conventional month/year formatting. That said, in many cases the same information in conventional month and year format exist in the data along side the CMC value.

An example of a CMC calculation using DHS variables - age of child X, born in August 2006, at time of interview March 2008:

$$\begin{aligned} V008 &= \text{CMC Date of interview} \\ B3(X) &= \text{CMC DOB of child X} \end{aligned}$$

$$\begin{aligned} \text{CMC age of child} &= \text{CMC Date of interview} - \text{CMC DOB of child X} \\ &= V008 - B3(X) \\ &= 1299 - 1280 \quad [\text{CMC}(\text{March 2008}) - \text{CMC}(\text{August 2006})] \\ &= 19 \end{aligned}$$

Thus the child was 19 months of age at the time of interview.



## 3.0 A General Overview of Weights as used in DHS/NFHS Data

### 3.1 Definition

Sampling weights are adjustment factors applied to each case in the analysis to adjust for differences in probability of selection and for interview non-response among the cases in a sample. In DHS/NFHS surveys, many times the sample is selected with unequal probability to expand the number of cases available (and hence reduce sample variability) for certain areas or subgroups for which information is needed. In this case, weights need to be applied when tabulations are made of statistics to produce the proper representation. After weights are calculated due to sample design, corrections are also made for differential response rates.

There are two main sampling weights in DHS/NFHS surveys: household weights and individual weights. The household weight for a particular household is the inverse of its household selection probability multiplied by the inverse of the household response rate of its household response rate group. The individual weight of a respondent's case is the household weight multiplied by the inverse of the individual response rate of his or her individual response rate group. There may be additional sampling weights for sample subsets—for example, male surveys, anthropometry, HIV, and Domestic Violence. There is only a need for the additional sample weights if there is a differential probability in selecting the subsamples.

For example, if one in five households in the entire sample is selected for anthropometry, then an additional sample weight is not necessary. However, if one in five households in urban areas and one in two households in rural areas are selected, then an additional sample weight is necessary when estimating national levels, or for any group that includes cases from both urban and rural areas. Notwithstanding the aforementioned, the DHS has customarily included both household weights and individual weights for men's surveys (modules), normalizing the weights for the number of households in the subset for the men's surveys, and to the number of men's individual interviews even when no differential sub-selection has been used.

Response rate groups are groups of cases for which response rates are calculated. In DHS surveys, households and individuals are grouped into sample domains and response rates are calculated for each domain.

### 3.2 Household Response Rate

Coverage: Excluded are dwellings without a household (no household lives in the dwelling, address is not a dwelling, or the dwelling is destroyed).

Numerator: Number of households with a completed household interview.

Denominator: Sum of number of households with a completed household interview, households that live in the dwelling but no competent respondent was at home, households with permanently postponed or refused interviews, and households for which the dwelling was not found.

### **3.3 Women's Individual Response Rate**

Coverage: Women eligible for interview, usually women who are between the ages of 15 and 49 who slept in the household the night before the survey. In ever-married samples, women are eligible for interview only if they have ever been married or lived in a consensual union. In some surveys, the age range of eligibility has differed, e.g., all ever-married women age 12–49.

Numerator: Number of eligible women with a completed individual interview.

Denominator: Sum of number of eligible women with a completed individual interview, eligible women not interviewed because they were not at home, eligible women with permanently postponed or refused interviews, eligible women with partially completed interviews, eligible women for whom an interview could not be completed due to incapacitation and for other reasons.

### **3.4 Men's Individual Response Rate**

Coverage: The age ranges and eligibility criteria have varied for men. Check with survey documentation.

### **3.5 Calculation**

Initial sample weights are produced by the DHS/NFHS sampler using the sample selection probabilities of each household and the response rates for households and for individuals. The initial weights are then standardized by dividing each weight by the average of the initial weights (equal to the sum of the initial weight divided by the sum of the number of cases) so that the sum of the standardized weights equals the sum of the cases over the entire sample. The standardization is done separately for each weight.

**Note:** DHS produced weights should not be combined, as the weight for any sub-sample (eg; women, men, HIV,...) already has factored into it the appropriate 'super' sample weight (eg; household).

## 4.0 NFHS-3 Weights

The NFHS-3 data set is similar to a standard DHS data set with regard to weights, with one notable exception. Each weight variable exists in a pair: a National-level weight, and a State-level weight. This dichotomy is also true for NFHS-2 and NFHS-1 weights.

**4.1 What They Are, and When to Use Them.** The National level weight is to be used when doing any ‘All India’ analysis or any analysis that involves groupings taken from more than one individual state. The State level weight is to be used for analysis within a single state. The difference between these two sets of weights is that each of the State’s weights are calculated and normalized for the sample of that individual state; whereas the National level weight is calculated to account for the difference in sampling proportions among the states, and is normalized across the entire NFHS-3 sample. Thus State level weights give correct analysis within each individual state; National level weights give correct analysis for the entire country and any analysis of groupings that cross state boundaries. For analysis of cities the same approach applies; when within a single state use the State weights, otherwise use the National weights.

**4.2 Naming Conventions.** The standard DHS recode variable names have been used throughout the data set for the National level weights. For the State weights each variable is given the name of the National weight variable, with an “S” appended to it. Thus the National household weight is ‘HV005’; and the State household weight is ‘HV005S’. Synopsis:

- All weights come in pairs: National and State
- For analysis within a single individual state: use State weights
- For all other analysis, **including analysis among states**, use National weights
- For any given National weight variable, the State weight equivalent ends with an “S”

**4.3 The High-Use Weights.** For most analysis there are five sets of weights that the user will need to be concerned with—household, women’s, men’s, HIV, and domestic violence—all of which exist in the National and State pairs mentioned above. In addition, the HIV weight pair appear five times in the guise of five different variables; in the household (for women and men separately), women, men, and HIV files; **but it is always the same value for the particular case (individual) to which it is associated.**

**4.4 The Low-Use Weights.** There are two other sets of weights that most users will not have any need for, as they are only needed for non-response analysis. These are the “National [and State] weight for households selected for men’s sub-sample” and the “National [and State] weight for households selected for HIV sub-sample”. These are Household level weights for the two sub-samples of households where men’s interviews and HIV testing were carried out. These can be thought of as intermediate weights, as they are the household level basis from which the men’s and individual HIV weights are calculated. The equivalent weight for women is the household weight itself. This is because all households were subject to women’s interviews, i.e., the woman’s ‘sub-sample’ is drawn from the entire household sample.

## 4.5 Listing of NFHS-3 Weights

<b><u>NFHS-3 Weights - a quick list</u></b>		
<b>National Analysis</b>		<b>Level/file</b>
HV005	National household weight	Household
HA69	National woman's HIV weight	Household
HB69	National man's HIV weight	Household
V005	National woman's weight	Woman's
SA69	National woman's HIV weight	Woman's
D005	National domestic violence weight	Woman's
MV005	National man's weight	Man's
SB69	National man's HIV weight	Man's
HIV05	National HIV weight (women and men combined)	HIV
<b>State Analysis</b>		
HV005S	State household weight	Household
HA69S	State woman's HIV weight	Household
HB69S	State man's HIV weight	Household
V005S	State woman's weight	Woman's
SA69S	State woman's HIV weight	Woman's
D005S	State domestic violence weight	Woman's
MV005S	State man's weight	Man's
SB69S	State man's HIV weight	Man's
HIV05S	State HIV weight (women and men combined)	HIV

For anthropometry analysis in NFHS-3 there are no specific anthropometry weights, thus for anthropometry analysis at the household level the household weight is to be used; likewise at the woman's level the woman's weight (appropriate to the National/State analysis).

As per standard DHS data formatting, all weight values have an implied 6 decimals. Thus if HV005 = 2561000, the actual weight value is 2.561; if MV005 = 789000, then the actual weight value is 0.789.

## 4.6 NFHS-3 Weight Variables by the Files in Which They are Found

<b>Weight Variables: in National / State pairs</b>						
<b>File type (sav, sd2, dta)</b>	<b>Household</b>	<b>Women's</b>	<b>Men's</b>	<b>Women's HIV</b>	<b>Men's HIV</b>	<b>Domestic Violence</b>
Household (IAHR52FL)	HV005 HV005S			HA69 HA69S	HB69 HB69S	
Household Members (IAPR52FL)	HV005 HV005S			HA69 HA69S	HB69 HB69S	
Women's (IAIR52FL)		V005 V005S		SA69 SA69S		D005 D005S
Births (IABR52FL)		V005 V005S		SA69 SA69S		D005 D005S
Children (IAKR52FL)		V005 V005S		SA69 SA69S		D005 D005S
Men's (IAMR52FL)			MV005 MV005S		SB69 SB69S	
Couples (IACR52FL)		V005 V005S	MV005 MV005S	SA69 SA69S	SB69 SB69S	D005 D005S
HIV Results (IAAR52FL)				HIV05 HIV05S		

<b>Household Subsample Weights</b>		
<b>File type (sav, sd2, dta)</b>	<b>Men's Subsample</b>	<b>HIV Subsample</b>
Household (IAHR52FL)	HV028 HV028S	HVHIVWT HVHIVWTS
Household Members (IAPR52FL)	HV028 HV028S	HVHIVWT HVHIVWTS

## 4.7 NFHS-2 Weights

<b>NFHS-2 Weights as we encounter them in the data</b>		
<b>Household Level</b>		<b>Notes</b>
HV005	Sample weight	National
HV028	Sample weight for male sub-sample	Not used in NFHS-2
SNWEIGHT	National household weight (6 decimals)	Empty
SHV005	State household weight	State
NHV005	All India sample HH weight (without Tripura)	
<b>Woman's Level</b>		
V005	Sample weight	National
SAN005	All-India anemia sample weight	National
SWN005	All-India H/W sample weight	National
SAS005	State anemia sample weight	State
SWS005	State H/W sample weight	State
SWEIGHT	Weight for height/weight	Identical to SWS005
SV005	State individual weight	State
NSWN005	All-India H/W sample weight (without Tripura)	
NV005	All India sample weight (without Tripura)	
SAWEIGHT	State anemia weight	Identical to SAS005
NSAN005	All-India anemia sample weight (without Tripura)	

**Weights to use** / **Weights that do not include Tripura** / **Used in individual State files**

Note: Weights 'without Tripura' are the weights that were used in the NFHS-2 National Report, as the data from Tripura was not available at that time. All other weights include Tripura and are appropriate for all analysis. Thus...

<b>NFHS-2 Weights as we need to know them</b>		
	<b>National Analysis*</b>	<b>Level</b>
HV005	National household weight	Household
V005	National woman's weight	Woman's
SAN005	National anemia weight	Woman's
SWN005	National anthropometry weight	Woman's
<b>State Analysis</b>		
SHV005	State household weight	Household
SV005	State woman's weight	Woman's
SAS005	State anemia weight	Woman's
SWS005	State anthropometry weight	Woman's

**USER ALERT:** The above listing is applicable ONLY to the full NFHS-2 data files: ie the IAXx42 files. The individual State data files may substitute SWEIGHT and SAWEIGHT.

\* Includes Tripura

## 4.8 NFHS-1 Weights

<b><u>NFHS-1 Weights</u></b>		
	<b>National Analysis*</b>	<b>Level</b>
HV005	National household weight	Household
V005	National woman's weight	Woman's
<b>State Analysis</b>		
SHWEIGHT	State household weight	Household
SWEIGHT	State woman's weight	Woman's

Note: As there was no men's sample in NFHS-1 the HV028 variable was set to 'not applicable'.

There is no anthropometry weight in NFHS-1, thus for anthropometry analysis the woman's weight - appropriate to the analysis (National or State) - is to be used.

## 5.0 HIV Testing and the Scrambling of PSU Numbers

NFHS-3 included the voluntary HIV testing of eligible men age 15-54 and women age 15-49 as a component of the data collection. To give the results of the HIV testing their greatest possible analytical value, the test results were explicitly linked to all other information collected from the tested individual. At the same time anonymity was promised and assured with regard to all information collected, including HIV test results.

To assure HIV test anonymity in a DHS-type survey, a number of steps are taken, including the use of randomized barcode IDs; offsite lab testing independent of data collection and processing; and the scrambling of certain identifiers in the data. It is the scrambling of the identifiers, and its effect on the NFHS-3 data set, that will be discussed here.

[For a more complete discussion of the issues and procedures relating to HIV testing in NFHS-3, see “*National Family Health Survey (NFHS-3), 2005–06: India: Volume I.*”]

For ethical reasons, data quality assurance, and, in the case of USAID-funded surveys, contractual obligation, DHS-type surveys that include HIV testing must obscure cluster-level identifiers before the data is disseminated. In the case of NFHS-3 this meant that after the original (raw) data was entered into the computer and reviewed for any corrections that entailed reference to the original questionnaires, the Primary Sampling Unit (PSU, or cluster) number and household number were scrambled (randomized). Additionally, during the survey’s initial design, the weights were constructed so as to be independent of the PSUs.

Once the scrambling of these numbers was complete, and checks were made to ensure that the data structure and its internal relationships were correct and intact, all paper questionnaires and earlier data sets were destroyed. The newly-scrambled PSU numbers were then sequentially renumbered within each state, and household numbers were sequentially renumbered within each PSU.

The effect of these actions was to sever the link between the data and the original sampling frame—while maintaining intact all structural links and relationships within the households themselves. All values for State codes, city designations, and slum/non-slum designations were retained. For the data user this action has no effect, as it makes only the technical change of giving each household a new unique identifier.

Effect on District level identification. Some users of NFHS-2 data conducted district-level analysis. This was done by linking the district codes and PSU numbers in the NFHS-2 data to the original sampling frame. However, as neither NFHS-2 nor NFHS-3 were designed for district-level analysis, and due to the confidentiality requirements of NFHS-3 (discussed above), no district-level information was collected nor included in the NFHS-3 data. Further, identifying districts through the PSU numbers, as was done in earlier rounds of the NFHS, is not possible as the scrambling of these numbers in the NFHS-3 data has broken the relationship of the data to the sampling frame. Thus no district-level identification is possible with NFHS-3 data.



## 6.0 NFHS-2 vs. NFHS-3

### 6.1 Matching Surveyed States from NFHS-2 to NFHS-3

As a bifurcation of some states occurred between the NFHS-2 and NFHS-3 surveys, the following mapping can be used to compare the States listed in the NFHS-2 data to those in NFHS-3 data.

**Note:** the value labels for the State variables (HV024, V024 and MV024) in each of the NFHS-2 and NFHS-3 data sets do not match, but are related as listed in the extreme left and right columns below.

<u>NFHS-2 (1998-1999)</u>			=>	<u>NFHS-3 (2005-2006)</u>	
<b>“State” HV024</b>	<b>“PSU” HV001</b>	<b>“District” SDIST</b>	=>	<b>State code and name</b>	<b>“State” HV024</b>
2			=>	[AP] Andhra Pradesh	28
3			=>	[AS] Assam	18
4		28-40	=>	[JH] Jharkhand	20
4		1-27,41-42	=>	[BH] Bihar	10
5			=>	[GO] Goa	30
6			=>	[GJ] Gujarat	24
7			=>	[HR] Haryana	6
8			=>	[HP] Himachal Pradesh	2
9			=>	[JM] Jammu and Kashmir	1
10			=>	[KA] Karnataka	29
11			=>	[KE] Kerala	32
12	1-28,178-183		=>	[CH] Chhattisgarh	22
12	29-177,184-233		=>	[MP] Madhya Pradesh	23
13			=>	[MH] Maharashtra	27
14			=>	[MN] Manipur	14
15			=>	[MG] Meghalaya	17
16			=>	[MZ] Mizoram	15
17			=>	[NA] Nagaland	13
18			=>	[OR] Orissa	21
19			=>	[PJ] Punjab	3
20			=>	[RJ] Rajasthan	8
21			=>	[SK] Sikkim	11
22			=>	[TN] Tamil Nadu	33
23			=>	[WB] West Bengal	19
24		9-12,14-63	=>	[UP] Uttar Pradesh	9
24		1-8,13	=>	[UC] Uttaranchal	5
30			=>	[DL] Delhi	7
34			=>	[AR] Arunachal Pradesh	12
35			=>	[TR] Tripura	16

**Regarding NFHS-1:** As sufficiently detailed geographic information does not exist in the NFHS-1 data set, a mapping of the bifurcated states between the NFHS-1 and NFHS-3 data sets cannot be precisely defined.

## 6.2 A Brief Comparison Between NFHS-2 and NFHS-3

A detailed, one-to-one mapping of each question in NFHS-2 to NFHS-3 and vice versa was neither attempted nor intended. Rather, the below shows most of the differences between the household questionnaires, and overall differences between the women's questionnaires, as well as some background information (sample size, eligibility, etc).

Comparison	NFHS-2	NFHS-3
Sample Size	91,196 households; 89,199 ever-married women; no men	109,041 households; 124,385 women; 74,369 men; 102,946 individuals (women & men) HIV tested
Eligibility	Ever-married women age 15-49 No men interviewed	All women age 15-49 All men age 15-54
HIV Testing	Not conducted	All eligible women and men
Village Questionnaire	asked	not asked
Household Questionnaire <b>NFHS-2 to NFHS-3</b>	QH09, marital status, all ages QH11, literacy QH17-18, occupation QH19, suffers from asthma QH20-21, suffers from TB QH22, suffers from malaria QH23, suffers from jaundice QH24, chew paan masala or tobacco QH25, drink alcohol QH26, smoke QH34, main source of lighting for HH QH38, other fuel used for cooking or heating QH48, type of kitchenware QH49, type of house (pucca/semi-pucca/kaccha) QH50, type of salt, refined/coarse QH51-62, verbal autopsy record	QH08, marital status, age 10 years and older not asked not asked Q575B (Woman's QRE), QM618B (Man's QRE) QH30-QH31 not asked not asked Q568 (Woman's QRE), QM611 (Man's QRE) Q569-570 (Woman's), QM612-613 (Man's) Q565-568 (Woman's), QM608-611 (Man's)  not asked not asked not asked not asked not asked
Household Questionnaire <b>NFHS-3 to NFHS-2</b>	not asked not asked  not asked not asked	QH12, birth registration QH13-QH14, survivorship and residence of biological parents QH23-QH29, child labour block QH43, why don't HH members go to a govt facility when sick

Comparison	NFHS-2	NFHS-3
Anthropometry Data	<p>subset of questions asked in NFHS-3 not asked</p> <p>not asked not asked not asked not asked</p> <p>data collected in woman's questionnaire on her and her children</p> <p>Q907A-B, Delhi and Maharashtra only, lead testing on children born since January 1996</p> <p>Weights assigned for anthropometric measurements</p>	<p>QH47, household possessions QH49-QH50, where cooking takes place, stove/chullah/fire QH56 type of windows QH57, # rooms used for sleeping QH63, does any HH member own a bank or post acct QH65, what kind of health scheme or insurance</p> <p>data collected in household questionnaire on all eligible men (age 15-54), women (age 15-49), and children (less than 6 years of age) in the household</p> <p>not asked</p> <p>anthropometric-specific weights not assigned, use HH weights</p>
Woman's Questionnaire <b>NFHS-2 to NFHS-3</b>	<p>Q220, # stillbirths and induced/spontaneous abortions Q225-228, ever had a stillbirth or abortion, if so, how many Q336-Q338a, questions on IUD/Loop usage Q339-Q342, questions on husband's sterilization procedure Q343, care received for husband's ster/IUD insertion Section 4, Antenatal/Natal/Postnatal care, collected for births in last 3 years Q411, internal exam Q411, x-ray Q411, sonogram/ultrasound Q411, amniocentesis Q414, night blindness Q414, blurred vision Q414, swelling Q414, excessive fatigue Q414, anemia Q432-Q433 Section 4B, Immunization and Health, births in last 3 years Q514, spousal abuse justified if natal family does not give expected money, jewelry, or other items Q621-Q622, child care while woman working</p>	<p>not asked not asked</p> <p>not asked not asked</p> <p>not asked Section 4, Antenatal/Natal/Postnatal care, collected for births in last 5 years</p> <p>not asked not asked asked in calendar column 2 not asked not asked not asked not asked not asked not asked not asked not asked Section 5, Immunization and Child's Health, births in last 5 years not asked not asked</p>

## 7.1 Distribution File Types

To give an example of how distribution files for the NFHS-3 survey are organized, the following table shows the available files, along with the names that they were given.

India 2005-2006 NFHS-3 Survey					
Unit of Analysis	ASCII File Types		System File Types		
	Hierarchical	Flat	SAS	SPSS	STATA
(AR) HIV	by request	by request	by request	by request	by request
(BR) Birth		IABR52FL.ZIP	IABR52SD.ZIP	IABR52SV.ZIP	IABR52DT.ZIP
(CR) Couples		IACR52FL.ZIP	IACR52SD.ZIP	IACR52SV.ZIP	IACR52DT.ZIP
(HR) Household		IAHR52FL.ZIP	IAHR52SD.ZIP	IAHR52SV.ZIP	IAHR52DT.ZIP
(IR) Women	IAIR52.ZIP	IAIR52FL.ZIP	IAIR52SD.ZIP	IAIR52SV.ZIP	IAIR52DT.ZIP
(KR) Children		IAKR52FL.ZIP	IAKR52SD.ZIP	IAKR52SV.ZIP	IAKR52DT.ZIP
(MR) Men	IAMR52.ZIP	IAMR52FL.ZIP	IAMR52SD.ZIP	IAMR52SV.ZIP	IAMR52DT.ZIP
(PR) Person (HH Members)		IAPR52FL.ZIP	IAPR52SD.ZIP	IAPR52SV.ZIP	IAPR52DT.ZIP

**(AR) HIV Recode** files contain voluntary HIV testing results of all eligible male and female respondents, whether de facto or de jure. Also included for each person is the barcode assigned to them during blood collection and their HIV weight, although non de facto individuals are assigned a weight of zero. The person is the case.

**(BR) Birth Recode** files contain an entire woman's questionnaire for each child listed in her birth history. Sections that repeat in the questionnaire, such as the birth history, neonatal/antenatal care, and immunization/ nutrition, only occur once, for the child in question. If the child was not born in the past 5 years, these latter sections will be blank. A maximum of 20 children for each woman can be listed. The woman (mother) will have a de facto residency status, but her child may or may not be, and in fact may not even be a resident of the household. The child is the case, with the identifier being created from the household ID and the child's birth order, the youngest child being listed first.

**(CR) Couples Recode** files contains information from each eligible de facto woman and man identified by one another as a couple/married to one another. In addition, both husband and wife must have completed their interviews. Their data is interleaved by sections; the woman's data is listed before her husband's data within each section. The woman is the case.

**(HR) Household Recode** file contains the household questionnaire data. This includes the household roster, household characteristics, and the height and weight data for all eligible women, men, and children from the household listing. Each line (record) in the file corresponds to an entire household; data that repeats (HH and H/W rosters) are repeated in blocks. The household is the case.

**(IR) Individual (Woman) Recode** file contains the woman's questionnaire data for each eligible de facto women identified through the household roster. The woman is the case.

**(KR) Children's Recode** file contains the entire woman's questionnaire for each child born in the month of interview and the 59 months preceding. Sections that repeat, such as the birth history, neonatal/ antenatal care, and immunization/nutrition, only occur once, for the child in question. A maximum of 6 children for each woman can be listed. The woman (mother) will be de facto, but her child may or may not be, and in fact may not even be a resident of the household. The child is the case, with the identifier being composed from the household ID and the child's column number in the neonatal/antenatal care section.

**(MR) Male Recode** file contains the man's questionnaire data from each eligible de facto man identified through the household roster. The man is the case.

**(PR) Person Recode** file contains the household questionnaire data. This includes the household roster, household characteristics, and the height and weight data for all eligible women, men, and children from the household listing. Each line (record) in the file corresponds to one person from the household roster; therefore, residency status (de jure or de facto) is not considered. Since each line must allow for a man, woman, or child's height and weight data, these sections will be blank when they do not apply. For example, a female age 9 years is ineligible for the height/weight section, so there will be no entry for her in the height/weight section. However, if a woman age 29 years were eligible, then the height/weight block pertaining to women would contain her information. The individual is the case.

## 7.2 Working File Types (extensions) among Dissemination Files

The following reference table lists the types of working files that are included in a distributed dataset .ZIP file, depending of the data format.

XXX: File Extension							
File Extension	Description	Flat ASCII File (FL)	Hierarchical File	SPSS System File (SV)	SAS System File (SD)	STATA System File (DT)	Comments
.DAT	ASCII data file	YES	YES				
.DCF	Dictionary file for use with CPro	YES	YES				
.DCT	Stata dictionary file (syntax)	YES					
.DO	Stata syntax file	YES					
.DOC	Microsoft word document with country information	YES	YES	YES	YES	YES	
.DTA	STATA system file					YES	
.FRQ	Unweighted frequency distribution (open with a text editor)	YES		YES	YES	YES	
.FRW	Weighted frequency distribution (open with a text editor)	YES		YES	YES	YES	
.MAP	File layout or codebook (open with a text editor)	YES	YES	YES	YES	YES	
.SAS	SAS data description file (syntax)	YES					
.SAV	SPSS system file			YES			
.SD2	SAS system file				YES		
.SPS	SPSS data description file (syntax)	YES					
.WRN	Data alert	YES	YES	YES	YES	YES	as needed

### 7.3 Unique Identifiers by file type, for the NFHS-3 Data Sets

*The following Identifiers can be used to link the individual data sets where appropriate.*

File Names	Data Type	Identifiers (linking variables)	Notes
IAAR52xx	HIV	HIVCLUST [8] + HIVNUMB [4] + HIVLINE [3]	HIVID [15] can also be used, a constructed single variable made up of State + PSU + household + individual line number
IABR52xx	Birth	CASEID [15] + BIDX [2]	BIDX = birth index, ordered starting from youngest child
IACR52xx	Couples	CASEID [15]	See also Man's ID, MV003 [2]
IAHR52xx	Household	HHID [12]	
IAIR52xx	Woman	CASEID [15]	CASEID = HHID + HVIDX (household ID + line number of woman in household)
IAKR52xx	Child	CASEID [15] + MIDX [1]	MIDX = column # in Sections 4 and 5 of the questionnaire, ordered starting from youngest child
IAMR52xx	Man	MCASEID [15]	MCASEID = HHID + HVIDX (household ID + line number of man in household)
IAPR52xx	Person	HHID [12] + HVIDX [2]	HVIDX = a person's line number in the household

*Note: variables names are CAPITALIZED, variable lengths noted in brackets [x]*

## **8.0 Unofficial NFHS-3 Data Set and National Report** **Errata**

In no particular order:

- 1) Women's background religion values were incorrectly generated (typo) from the men's religion variable (MV130 used instead of V130).  
Tables affected: 4.2, 4.6, 4.7, 4.10, 4.11, 4.14.1, 4.17.1, and 4.20
- 2) "Number of living sons" was calculated as per standard application; for NFHS-3 should have excluded pregnant women/men with pregnant wives from both numerator and denominator.  
Tables affected: 4.14.1, and 4.14.2
- 3) Incorrect handling of men's cases age 50-54; these cases were not restricted only to the 50-54 total row, but distributed throughout the affected tables.  
Tables affected: 4.14.2 and 4.15.2
- 4) "Antenatal care visits" cases incorrectly assigned a value for every child; but valid values exist only for last child.  
Table affected: 8.11
- 5) Calculation of children alive at any given birth in last 5 years incorrect; initial setting of "children alive at time of interview" incorrectly set to "children ever born".  
Table affected: 8.11

Note: All the above items **were repaired** in the relevant **State Report Tables**.

[9 April 2008 - gah]

- 6) Correction of the composite 'Unmet need' variables V624 and V626. At the time of the creation of the NFHS-3 data set the recoding program contained a one line flaw that resulted in the miscalculation of the two composite 'Unmet need' variables V624 and V626. This problem, when corrected, results in a 0.1% change in one value label designation in the V624 variable, and three 0.1% changes in the V626. See the compared frequencies of the originally issued and corrected variables (page 42).  
Tables affected: 5.31 and 5.32  
Data set re-issued as version 52 (first re-issue)

[13 Aug 2010 - gah]



## 8.1 List of Corrected Tables

**Caveat emptor: these tables are formatted only with working titles, column labels, and footnotes.**

**Table 4.2 Fertility by background characteristics \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\***

**Correction: Woman's religion categories corrected**

Total fertility rate for the three years preceding the survey, percentage of women currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, India, 2005-2006

Background characteristic	Total fertility rate	Percentage currently pregnant	Mean number of children ever born to women age 40-49
<b>Religion</b>			
Hindu	2.59	5.0	3.91
Muslim	3.40	6.8	5.08
Christian	2.34	4.0	3.06
Sikh	1.95	3.0	3.29
Buddhist/Neo-Buddhist	2.25	3.5	3.67
Jain	1.54	1.6	2.96
Other	3.98	6.9	4.30
Missing	2.20	5.4	4.67
All India total	2.68	5.2	4.00

<sup>1</sup> Women age 15-49 years

**Table 4.6 Birth order \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\***

**Correction: Woman's religion categories corrected**

Percent distribution of births during the three years preceding the survey by birth order, according to background characteristics, India, 2005-06, and percent distribution of births to ever-married women by birth order, NFHS-3, NFHS-2 and NFHS-1

Background characteristic	Birth order				Total	Number of births
	1	2	3	4+		
<b>Religion</b>						
Hindu	32.5	28.1	16.0	23.3	100.0	25,925
Muslim	24.1	24.2	16.6	35.1	100.0	5,616
Christian	34.4	32.0	15.5	18.2	100.0	663
Sikh	40.0	34.6	16.6	8.9	100.0	428
Buddhist/Neo-Buddhist	33.0	40.6	12.4	13.9	100.0	230
Jain	49.9	35.7	11.2	3.2	100.0	53
Other	23.0	16.6	10.9	49.5	100.0	167
Missing	22.4	30.7	9.0	38.0	100.0	31

Table 4.7 Birth intervals \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction: Woman's religion categories corrected**

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, India, 2005-2006

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
<b>Religion</b>									
Hindu	11.2	16.5	33.7	19.2	9.3	10.1	100.0	30,181	31.1
Muslim	12.2	15.4	33.3	19.4	8.5	11.2	100.0	7,324	30.8
Christian	9.7	17.4	30.6	18.1	9.8	14.3	100.0	730	32.4
Sikh	19.5	16.8	26.8	15.6	8.6	12.6	100.0	429	29.6
Buddhist/Neo-Buddhist	13.4	12.7	42.4	16.1	6.7	8.7	100.0	240	30.2
Jain	3.5	9.9	22.8	22.7	16.8	24.4	100.0	41	41.6
Other	8.3	17.4	35.8	19.0	11.5	8.0	100.0	233	31.2
Missing	5.5	1.4	39.7	31.0	12.8	9.6	100.0	36	36.6
All India total	11.4	16.3	33.6	19.2	9.1	10.4	100.0	39,215	31.1

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 4.10 Median age at first birth \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction: Woman's religion categories corrected**

Median age at first birth among women age 20-49 (25-49) years, according to background characteristics, India, 2005-2006

Background characteristic	Age						Women age	Women age
	20-24	25-29	30-34	35-39	40-44	45-49	20-49	25-49
<b>Religion</b>								
Hindu	-	20.0	19.6	19.6	19.6	20.2	20.0	19.8
Muslim	-	19.3	19.0	18.9	19.1	19.3	19.4	19.1
Christian	-	22.2	23.1	22.3	22.2	23.1	-	22.6
Sikh	-	22.1	21.3	21.6	21.8	22.3	-	21.8
Buddhist/Neo-Buddhist	-	20.3	19.0	18.9	19.1	20.7	19.9	19.6
Jain	-	23.9	23.0	22.1	22.2	21.5	-	22.7
Other	19.7	19.7	19.0	19.8	21.7	20.8	19.9	20.0
Missing	-	19.0	20.7	20.3	20.4	18.4	-	19.5
All India total	-	19.9	19.6	19.6	19.6	20.2	20.0	19.8

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Table 4.11 Teenage pregnancy and motherhood \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction:** Woman's religion categories corrected

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child and percentage who have begun childbearing, by background characteristics, India, 2005-2006

Background characteristic	Percentage who:			Number of women
	Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	
<b>Religion</b>				
Hindu	12.5	3.9	16.4	19,504
Muslim	11.6	4.4	16.0	3,996
Christian	5.7	2.9	8.6	526
Sikh	3.6	1.3	4.9	386
Buddhist/Neo-Buddhist	11.4	2.9	14.3	201
Jain	1.6	0.0	1.6	74
Other	15.5	5.0	20.4	111
Missing	8.8	11.5	20.3	14
All India total	12.1	3.9	16.0	24,811

Table 4.14.1 Desire to limit childbearing: Women \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction 1:** Woman's religion categories corrected**Correction 2:** "Number of living sons" corrected to exclude pregnant women from both numerator and denominator

Percentage of currently married women age 15-49 who want no more children, by number of living children and background characteristics, India, 2005-2006

Background characteristic	Number of living children							All India total
	0	1	2	3	4	5	6+	
<b>Religion</b>								
Hindu	2.7	29.1	84.8	91.6	92.7	93.3	90.3	71.2
Muslim	2.9	14.3	66.2	81.1	86.8	86.6	87.2	64.3
Christian	1.2	30.6	86.7	88.7	89.2	82.8	83.4	70.1
Sikh	5.3	47.1	92.3	96.5	96.5	95.8	96.1	80.4
Buddhist/Neo-Buddhist	8.7	37.0	90.6	94.6	97.3	89.9	98.9	80.8
Jain	3.9	38.0	94.4	97.8	100.0	100.0	100.0	79.2
Other	0.4	6.3	71.2	69.5	79.7	73.3	89.6	56.6
Missing	0.0	25.0	59.3	99.0	100.0	100.0	100.0	64.8
<b>Number of living sons (2)</b>								
0	2.8	23.9	62.1	65.3	61.5	65.2	64.3	27.1
1	-	36.3	88.1	89.9	89.2	89.0	90.6	76.4
2	-	-	89.9	95.7	95.5	93.7	92.8	93.5
3	-	-	-	93.2	95.1	94.4	90.3	93.6
4+	-	-	-	-	93.0	94.1	88.6	90.7
All India total	2.8	27.7	83.2	90.4	91.7	91.8	89.3	70.5

Note: Women who have been sterilized are considered to want no more children.

<sup>1</sup> Includes current pregnancy.

<sup>2</sup> Excludes pregnant women.

Table 4.14.2 Desire to limit childbearing: Men \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction 1:** Entire table correctly calculated for men 15-49 only (originally calculated for men 15-54)**Correction 2:** "Number of living sons" corrected to exclude men with pregnant wives from both numerator and denominator

Percentage of currently married men age 15-49 who want no more children, by number of living children and background characteristics, India, 2005-2006

Background characteristic	Number of living children							All India total
	0	1	2	3	4	5	6+	
<b>Age</b>								
15-24	1.1	7.7	56.2	70.5	83.8	48.3	0.0	16.8
25-34	2.8	20.1	75.6	82.1	88.8	87.1	91.5	57.7
35-49	14.5	58.0	93.1	95.6	96.3	96.2	96.4	89.6
<b>Residence</b>								
Urban	4.7	32.1	88.0	92.9	95.0	94.7	96.1	71.3
Rural	4.0	23.5	80.9	89.5	93.9	94.3	95.7	70.3
<b>Education</b>								
No education	6.9	22.8	74.8	87.6	91.5	93.4	95.1	73.6
<5 years complete	4.1	20.6	81.6	91.5	95.0	95.2	96.7	73.4
5-7 years complete	3.7	18.2	82.8	92.4	94.6	95.0	97.1	69.0
8-9 years complete	2.5	21.9	81.7	89.4	94.5	96.1	94.8	66.5
10-11 years complete	6.5	33.8	88.7	91.4	98.2	94.6	95.1	72.5
12+ years complete	2.7	36.9	90.4	93.7	96.9	93.4	99.7	69.2
Missing	0.0	18.1	46.5	100.0	100.0	-	100.0	58.4
<b>Religion</b>								
Hindu	4.1	28.5	85.1	91.4	94.8	95.6	96.3	71.2
Muslim	5.4	11.9	67.2	83.2	91.1	91.1	94.9	66.2
Christian	1.6	25.6	86.9	87.0	83.7	89.7	90.1	67.7
Sikh	4.3	42.3	92.1	98.0	99.2	74.9	100.0	78.4
Buddhist/Neo-Buddhist	11.3	22.2	93.3	94.8	100.0	89.2	100.0	79.5
Jain	5.5	25.8	83.8	99.5	100.0	100.0	-	70.1
Other	0.4	20.9	59.5	83.8	93.5	81.5	86.2	59.6
Missing	-	45.2	100.0	100.0	-	-	100.0	85.0
<b>Caste/tribe</b>								
Scheduled caste	4.3	22.9	79.9	90.0	93.8	95.2	96.8	70.0
Scheduled tribe	3.2	16.5	74.8	86.0	90.8	92.8	92.5	65.2
Other backward class	3.8	23.9	83.8	90.8	94.4	94.9	96.6	71.4
Other	5.1	33.6	86.7	92.2	95.3	93.5	95.5	71.5
DK	0.0	47.1	93.1	87.2	100.0	100.0	63.5	81.0
Missing	4.5	45.2	93.7	94.9	100.0	99.6	75.4	73.3
<b>Wealth index</b>								
Lowest	3.4	15.6	68.2	84.1	92.4	94.2	94.6	68.0
Second	3.3	18.4	78.9	89.2	94.3	93.6	96.6	70.5
Middle	4.8	22.2	83.1	91.9	93.2	96.9	94.7	70.2
Fourth	3.6	28.9	87.0	92.4	96.3	92.3	98.0	71.9
Highest	5.8	38.5	91.1	95.2	96.2	95.8	98.1	72.1
<b>Number of living sons (2)</b>								
0	4.2	21.2	63.3	59.6	61.0	55.9	70.2	26.6
1	-	37.0	89.1	91.0	93.7	93.3	96.3	77.5
2	-	-	91.4	97.5	98.5	98.6	98.5	95.8
3	-	-	-	96.8	97.7	98.1	97.4	97.4
4+	-	-	-	-	96.0	97.0	97.9	97.4
Total 15-49	4.2	26.9	83.6	90.6	94.2	94.4	95.8	70.6
50-54	33.1	90.8	97.0	99.0	99.3	98.4	96.4	96.1
Total men 15-54	5.0	29.4	84.6	91.5	94.9	95.0	95.9	72.9

Table 4.15.2 Desire to limit childbearing by state: Men \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction:** Entire table correctly calculated for men 15-49 only (originally calculated for men 15-54)

Percentage of currently married men age 15-49 who want no more children, by number of living children and background characteristics, India, 2005-2006

Background characteristic	Number of living children							All India total
	0	1	2	3	4	5	6+	
All India total	4.2	26.9	83.6	90.6	94.2	94.4	95.8	70.6
<b>North</b>								
Delhi	3.7	25.0	88.7	96.3	95.1	100.0	97.7	71.1
Haryana	8.4	33.8	88.0	96.3	96.6	97.1	100.0	78.1
Himachal Pradesh	0.0	38.0	93.3	91.9	95.4	100.0	86.9	80.4
Jammu & Kashmir	5.3	16.8	68.8	88.3	97.1	100.0	100.0	69.2
Punjab	2.1	30.2	90.5	97.2	100.0	87.5	95.8	76.1
Rajasthan	1.2	9.7	71.3	87.2	90.1	93.2	97.0	65.9
Uttaranchal	13.5	24.9	91.8	91.7	94.7	90.0	90.7	72.9
<b>Central</b>								
Chhattisgarh	3.8	12.1	78.3	89.6	92.6	100.0	94.4	68.3
Madhya Pradesh	3.0	20.3	77.9	85.3	94.8	93.7	92.6	70.4
Uttar Pradesh	4.1	14.8	68.9	86.3	92.8	94.7	96.4	69.4
<b>East</b>								
Bihar	8.9	20.5	63.5	84.4	94.3	95.1	97.6	69.0
Jharkhand	3.0	16.2	67.8	84.0	91.6	93.3	94.4	63.5
Orissa	2.5	33.1	84.8	93.0	94.8	97.6	86.1	68.9
West Bengal	2.9	41.5	88.6	95.0	94.7	100.0	92.7	71.8
<b>Northeast</b>								
Arunachal Pradesh	3.3	20.8	70.3	78.8	89.4	91.4	83.6	62.7
Assam	0.9	19.7	80.5	88.6	93.4	92.4	100.0	64.5
Manipur	4.8	12.6	60.9	79.6	88.9	89.0	93.9	60.4
Meghalaya	12.6	12.8	38.6	40.0	48.7	58.6	74.2	38.5
Mizoram	0.0	6.7	36.8	62.1	80.3	87.1	84.2	48.0
Nagaland	12.4	18.9	53.1	66.5	70.9	81.1	86.9	58.6
Sikkim	2.9	37.5	91.3	98.4	100.0	100.0	100.0	71.3
Tripura	9.8	44.9	93.5	97.1	100.0	100.0	100.0	72.9
<b>West</b>								
Goa	10.1	29.0	75.9	89.6	85.6	88.9	63.7	55.2
Gujarat	5.1	25.5	82.5	87.0	93.8	89.2	100.0	68.1
Maharashtra	4.6	31.5	88.2	94.4	96.7	91.7	93.0	73.5
<b>South</b>								
Andhra Pradesh	5.0	29.4	92.9	95.3	98.2	94.8	95.4	74.2
Karnataka	3.8	35.9	86.8	92.0	96.4	95.6	95.4	72.0
Kerala	2.4	16.8	88.3	89.6	75.0	100.0	100.0	65.3
Tamil Nadu	4.5	34.6	95.8	97.1	98.7	100.0	100.0	76.3

Table 4.17.1 Indicators of sex preference: women \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction: Woman's religion categories corrected**

Mean ideal number of sons, daughters, and children of either sex for women age 15-49, percentage who want more sons than daughters, percentage who want more daughters than sons, percentage who want at least one son, and percentage who want at least one daughter by background characteristics, India, 2005-06

	Mean number of			Percent who want more sons than daughters	Percent who want more daughters than sons	Percent who want at least one son	Percent who want at least one daughter	Number of women
	Sons	Daughters	Either sex					
<b>Religion</b>								
Hindu	1.0	0.8	0.4	22.3	2.4	77.0	73.5	98,115
Muslim	1.3	1.0	0.4	26.5	2.8	81.0	78.7	16,019
Christian	1.0	0.9	0.5	12.5	6.9	71.6	70.7	2,932
Sikh	0.9	0.7	0.4	16.8	1.6	73.1	65.4	2,094
Buddhist/Neo-Buddhist	0.9	0.8	0.3	15.5	3.9	78.6	77.1	1,004
Jain	0.7	0.7	0.6	6.2	5.3	59.8	61.1	404
Other	1.4	1.2	0.3	29.0	3.8	87.0	84.1	457
Missing	1.2	1.0	0.2	20.8	3.1	85.9	82.6	118
All India total	1.1	0.8	0.4	22.4	2.6	77.4	74.0	121,143

Table 4.20 Wanted fertility rates \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction: Woman's religion categories corrected**

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, India, 2005-2006

Background characteristic	Total wanted fertility rates	Total fertility rate
<b>Religion</b>		
Hindu	1.9	2.6
Muslim	2.2	3.4
Christian	1.9	2.3
Sikh	1.5	1.9
Buddhist/Neo-Buddhist	1.7	2.2
Jain	1.4	1.5
Other	2.4	4.0
Missing	1.5	2.2
All India total	1.9	2.7

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

Table 8.11 Pregnancies for which an ultrasound was done \*\*\*WORKING TABLE OUTPUT - 9 April 2008\*\*\*

**Correction 1: "Antenatal care visits" corrected to tally for last birth only (no information was collected for any earlier birth)****Correction 2: "Mother's number of living children at time of pregnancy" corrected**

Percentage of all pregnancies in the five years preceding the survey for which an ultrasound was done and percent distribution of pregnancies with an ultrasound by pregnancy outcome, according to background characteristics, India, 2005-06

Characteristics	Percentage of pregnancies with an ultrasound	Number of pregnancies	Pregnancy outcome				Total percent	Number of pregnancies with ultrasound
			Son	Daughter	Termination	Still pregnant		
<b>Antenatal care visits 1</b>								
None	2.1	9,035	56.3	43.7	0.0	0.0	100.0	189
1-3	14.2	15,660	55.0	45.0	0.0	0.0	100.0	2,223
4+	57.6	14,667	55.5	44.5	0.0	0.0	100.0	8,450
Don't know/ missing	34.5	315	50.5	49.5	0.0	0.0	100.0	109
<b>Mother's number of living children at time of pregnancy</b>								
No children	35.6	23,243	43.8	40.2	8.7	7.3	100.0	8,266
1 child	26.6	19,711	47.7	39.2	6.8	6.3	100.0	5,252
...0 sons	27.6	9,843	51.5	36.4	6.4	5.7	100.0	2,715
...1 son	25.7	9,868	43.7	42.3	7.1	7.0	100.0	2,537
2 children	15.8	11,798	48.3	34.0	12.1	5.6	100.0	1,865
...0 sons	21.7	3,492	54.3	30.1	11.0	4.5	100.0	756
...1 son	14.1	5,812	44.4	36.5	13.1	6.0	100.0	820
...2 sons	11.6	2,494	43.2	37.3	12.3	7.1	100.0	288
3 children	8.7	6,921	46.4	35.6	14.2	3.8	100.0	604
...0 sons	15.6	1,324	52.0	33.8	9.2	4.9	100.0	206
...1 son	8.2	2,928	42.5	35.0	19.9	2.6	100.0	241
...2+ sons	5.9	2,669	45.2	38.8	12.0	4.1	100.0	156
4+ children	5.1	8,112	44.2	32.2	17.7	5.9	100.0	413
...0 sons	10.7	678	53.4	35.1	7.3	4.2	100.0	73
...1 son	6.9	1,979	47.3	25.6	21.8	5.3	100.0	136
...2+ sons	3.7	5,455	38.9	35.6	18.7	6.8	100.0	204
All India total	23.5	69,786	45.7	38.8	8.9	6.6	100.0	16,400

<sup>1</sup> Includes only the most recent pregnancy in the five years preceding the survey<sup>2</sup> For multiple births, sex of pregnancy outcome taken as first listed birth

NGO = Nongovernmental organization

Table 5.31 Need for family planning among currently married women \*\*\*WORKING TABLE OUTPUT - 13 August 2010\*\*\*

**Correction:** Table recalculated with corrected V626, "Unmet need (definition 2)", value

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, and the total demand for family planning, by background characteristics, India, 2005-06

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	24.8	2.0	26.8	10.1	2.9	13.0	34.9	4.9	39.8	32.6	6,726
20-24	14.6	6.1	20.7	11.8	21.6	33.4	26.4	27.7	54.1	61.7	16,782
25-29	5.9	9.8	15.7	6.7	49.7	56.4	12.6	59.5	72.1	78.2	18,540
30-34	2.0	8.8	10.8	2.7	67.7	70.3	4.7	76.5	81.2	86.6	16,459
35-39	0.5	6.9	7.4	0.8	72.3	73.1	1.2	79.3	80.5	90.8	14,492
40-44	0.1	4.2	4.3	0.2	68.5	68.7	0.4	72.7	73.1	94.1	11,605
45-49	0.1	1.8	1.9	0.0	63.2	63.2	0.1	65.0	65.1	97.1	8,484
<b>Residence</b>											
Urban	4.4	5.2	9.5	6.4	57.5	64.0	10.8	62.7	73.5	87.0	28,604
Rural	6.8	7.1	13.9	4.1	48.9	53.0	10.9	56.0	66.9	79.2	64,485
<b>Education</b>											
No education	5.4	8.1	13.5	2.2	49.8	52.1	7.7	57.9	65.5	79.4	43,931
<5 years complete	5.0	5.2	10.2	3.8	59.2	63.0	8.8	64.3	73.2	86.1	7,776
5-7 years complete	7.1	5.2	12.3	5.0	53.8	58.7	12.1	59.0	71.0	82.7	14,018
8-9 years complete	7.6	5.7	13.3	7.8	50.6	58.5	15.4	56.3	71.7	81.5	10,735
10-11 years complete	6.8	5.1	11.9	6.6	53.1	59.7	13.4	58.2	71.6	83.3	7,704
12 or more years complete	5.9	4.7	10.5	13.0	49.4	62.3	18.8	54.0	72.9	85.6	8,921
<b>Religion</b>											
Hindu	5.7	6.0	11.8	4.5	53.3	57.8	10.2	59.3	69.5	83.1	75,799
Muslim	8.3	10.1	18.4	6.8	38.9	45.7	15.1	49.0	64.1	71.3	12,288
Christian	6.4	6.0	12.4	5.3	52.4	57.6	11.7	58.3	70.0	82.3	2,041
Sikh	2.3	4.1	6.4	4.7	61.8	66.5	7.0	65.9	72.9	91.3	1,567
Buddhist/Neo-Buddhist	5.6	3.8	9.4	1.3	66.4	67.7	6.9	70.2	77.2	87.8	684
Jain	3.0	4.2	7.3	7.9	67.5	75.4	10.9	71.7	82.7	91.2	279
Other	10.3	14.2	24.4	2.1	23.2	25.3	12.4	37.4	49.7	50.8	333
<b>Caste/tribe</b>											
Scheduled caste	6.2	7.0	13.2	4.7	50.3	55.0	10.9	57.3	68.2	80.7	17,372
Scheduled tribe	6.7	7.1	13.8	3.0	44.9	47.9	9.7	52.0	61.8	77.6	7,632
Other backward class	6.6	6.6	13.3	3.8	50.4	54.2	10.4	57.0	67.4	80.3	37,198
Other	5.1	6.0	11.1	6.6	55.2	61.8	11.7	61.2	72.9	84.8	30,131
DK	6.4	6.6	13.0	3.2	62.6	65.8	9.6	69.2	78.7	83.5	462
<b>Wealth index</b>											
Lowest	7.6	10.4	18.0	3.0	39.2	42.2	10.6	49.6	60.2	70.1	17,425
Second	7.1	7.4	14.5	3.6	47.5	51.1	10.7	54.9	65.6	77.9	18,495
Middle	6.4	6.3	12.7	4.0	52.7	56.8	10.4	59.0	69.4	81.8	18,671
Fourth	5.5	4.9	10.5	5.4	57.1	62.5	10.9	62.0	72.9	85.7	18,985
Highest	3.8	4.1	7.9	7.8	59.7	67.5	11.7	63.8	75.5	89.5	19,513
All India total	6.0	6.5	12.6	4.8	51.5	56.3	10.9	58.1	68.9	81.7	93,089



Table 5.32 Need for family planning among currently married women by state and over time \*\*\*WORKING TABLE OUTPUT - 13  
August 2010\*\*\*

**Correction:** Table recalculated with corrected V626, "Unmet need (definition 2)", value

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, and the total demand for family planning, by background characteristics, India, 2005-06

State	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
All India total	6.0	6.5	12.6	4.8	51.5	56.3	10.9	58.1	68.9	81.7	93,089
<b>North</b>											
Delhi	3.3	4.4	7.6	7.8	59.1	66.9	11.0	63.5	74.5	89.7	1,033
Haryana	3.1	5.2	8.3	4.1	59.2	63.4	7.3	64.4	71.7	88.4	1,768
Himachal Pradesh	2.3	4.8	7.2	3.5	69.1	72.6	5.9	73.9	79.8	91.0	553
Jammu & Kashmir	5.6	8.6	14.2	5.2	47.5	52.6	10.8	56.0	66.8	78.8	760
Punjab	2.5	4.7	7.2	4.7	58.5	63.3	7.3	63.2	70.5	89.8	2,249
Rajasthan	7.2	7.3	14.4	3.5	43.8	47.2	10.7	51.0	61.7	76.6	5,199
Uttaranchal	4.3	6.5	10.7	5.6	53.7	59.3	9.9	60.1	70.0	84.7	703
<b>Central</b>											
Chhattisgarh	5.1	4.7	9.9	2.9	50.3	53.2	8.0	55.0	63.1	84.4	1,987
Madhya Pradesh	5.4	5.9	11.3	2.9	53.0	55.9	8.3	58.9	67.2	83.2	5,644
Uttar Pradesh	8.8	11.9	20.7	5.7	37.9	43.6	14.6	49.7	64.3	67.8	14,210
<b>East</b>											
Bihar	10.6	12.1	22.6	2.2	31.9	34.1	12.8	43.9	56.7	60.1	7,694
Jharkhand	11.3	11.8	23.1	3.2	32.5	35.7	14.5	44.3	58.8	60.8	2,519
Orissa	6.8	8.1	14.9	3.4	47.4	50.7	10.2	55.5	65.6	77.3	3,487
West Bengal	3.5	3.9	7.4	11.8	59.4	71.2	15.3	63.3	78.6	90.6	8,001
<b>Northeast</b>											
Arunachal Pradesh	8.2	10.6	18.7	7.3	35.9	43.2	15.5	46.5	62.0	69.7	86
Assam	3.3	7.0	10.3	10.3	46.2	56.5	13.5	53.2	66.8	84.6	2,334
Manipur	4.7	7.3	12.0	13.0	35.7	48.7	17.7	43.0	60.7	80.3	161
Meghalaya	23.2	11.8	35.0	6.7	17.5	24.3	29.9	29.3	59.3	40.9	183
Mizoram	12.0	5.0	17.1	12.5	47.4	59.9	24.5	52.5	77.0	77.8	64
Nagaland	9.9	16.1	26.0	3.5	26.2	29.7	13.4	42.3	55.7	53.3	98
Sikkim	5.6	11.1	16.8	5.5	52.2	57.6	11.1	63.3	74.4	77.5	49
Tripura	3.6	6.5	10.0	10.3	55.5	65.7	13.8	61.9	75.7	86.8	333
<b>West</b>											
Goa	7.3	5.7	13.0	8.3	39.9	48.2	15.7	45.6	61.2	78.7	118
Gujarat	4.2	3.7	7.9	7.5	59.1	66.6	11.8	62.8	74.5	89.4	4,700
Maharashtra	5.4	3.9	9.4	4.4	62.5	66.9	9.8	66.4	76.2	87.7	8,814
<b>South</b>											
Andhra Pradesh	3.0	1.7	4.7	0.9	66.7	67.6	3.9	68.4	72.3	93.5	7,327
Karnataka	6.0	3.6	9.6	1.8	61.8	63.6	7.8	65.4	73.2	86.9	5,372
Kerala	5.9	2.9	8.8	8.9	59.7	68.6	14.8	62.6	77.4	88.7	2,622
Tamil Nadu	4.0	4.5	8.5	2.1	59.3	61.4	6.1	63.8	69.9	87.9	5,021

## 8.2 Comparison of the Originally Issued and Corrected Variables V624, V626:

### NFHS-3:Originally Issued Data - Version 51

Item V624: Unmet need (Unweighted)  
... tbd-name: '.RECODE5.REC61.V624'

Categories	Frequency	CumFreq	%	Cum %
0 Never had sex	29941	29941	24.1	24.1
1 Unmet need to space	5035	34976	4.0	28.1
2 Unmet need to limit	5772	40748	4.6	32.8
3 Using to space	5017	45765	4.0	36.8
4 Using to limit	47557	93322	38.2	75.0
5 Spacing failure	109	93431	0.1	75.1
6 Limiting failure	68	93499	0.1	75.2
7 Desire birth < 2 years	14614	108113	11.7	86.9
8 No sex, want to wait	3304	111417	2.7	89.6
9 Infecund, menopausal	12690	124107	10.2	99.8
Missing	278	124385	0.2	100.0
TOTAL	124385	124385	100.0	100.0

Item V626: Unmet need (definition 2) (Unweighted)  
... tbd-name: '.RECODE5.REC61.V626'

Categories	Frequency	CumFreq	%	Cum %
0 Never had sex	29908	29908	24.0	24.0
1 Unmet need to space	5120	35028	4.1	28.2
2 Unmet need to limit	5663	40691	4.6	32.7
3 Using to space	5017	45708	4.0	36.7
4 Using to limit	47557	93265	38.2	75.0
5 Spacing failure	109	93374	0.1	75.1
6 Limiting failure	68	93442	0.1	75.1
7 Desire birth < 2 years	14610	108052	11.7	86.9
8 No sex, want to wait	2623	110675	2.1	89.0
9 Infecund, menopausal	13650	124325	11.0	100.0
Missing	60	124385	0.0	100.0
TOTAL	124385	124385	100.0	100.0

### NFHS-3:CORRECTED Data - Version 52

(13 Aug, 2010)

Item V624: Unmet need (Unweighted)  
... tbd-name: '.RECODE5.REC61.V624'

Categories	Frequency	CumFreq	%	Cum %
0 Never had sex	29941	29941	24.1	24.1
1 Unmet need to space	4944 (-91)	34885	4.0	28.0
2 Unmet need to limit	5713 (-59)	40598	4.6	32.6
3 Using to space	5017	45615	4.0	36.7
4 Using to limit	47557	93172	38.2	74.9
5 Spacing failure	259 (+150)	93431	0.2	75.1
6 Limiting failure	127 (+59)	93558	0.1	75.2
7 Desire birth < 2 years	14555 (-59)	108113	11.7	86.9
8 No sex, want to wait	3304	111417	2.7	89.6
9 Infecund, menopausal	12690	124107	10.2	99.8
Missing	278	124385	0.2	100.0
TOTAL	124385	124385	100.0	100.0

Item V626: Unmet need (definition 2) (Unweighted)  
... tbd-name: '.RECODE5.REC61.V626'

Categories	Frequency	CumFreq	%	Cum %
0 Never had sex	29908	29908	24.0	24.0
1 Unmet need to space	5027 (-93)	34935	4.0	28.1
2 Unmet need to limit	5606 (-57)	40541	4.5	32.6
3 Using to space	5017	45558	4.0	36.6
4 Using to limit	47557	93115	38.2	74.9
5 Spacing failure	261 (+152)	93376	0.2	75.1
6 Limiting failure	125 (+57)	93501	0.1	75.2
7 Desire birth < 2 years	14551 (-59)	108052	11.7	86.9
8 No sex, want to wait	2623	110675	2.1	89.0
9 Infecund, menopausal	13650	124325	11.0	100.0
Missing	60	124385	0.0	100.0
TOTAL	124385	124385	100.0	100.0