



Palestinian Central Bureau of Statistics

Health Survey – 2000

User Guide

Note for the Users:

Geographical, Administrative Divisions: For the purpose of this survey, the following geographic and administrative divisions were used; the Palestinian Territory, which includes two regions: the West Bank and Gaza Strip. The West Bank includes three geographic regions: North of the West Bank, (includes: Jenin, Tubas, Tulkarm, Nablus, Qlaqiliya and Salfit governorates), Central of the West Bank (includes: Ramallah and Al-Bireh, Jericho and Jerusalem governorates), and South of the West Bank (includes: Hebron and Bethelhem Governorates). While Gaza Strip includes two geographic regions: North Gaza, (includes: Gaza North and Gaza City governorates), and the second region, was Central and South Gaza, (includes: Deir Al-Balah, Khan Yunis, and Rafah governorates).

Definitions and Concepts

Adequately Iodized Salt:	Salt that contains at least 15 parts per million of iodine.
Age:	The completed age in years of the enumerated person, which is the difference between the date of birth and the survey reference period. The exact age is the time elapsed between the day of birth and a given day, including parts of a year.
Age – Sex Structure:	The composition of a population as determined by the number or proportion of males and females in each age category. The age – structure of a population is the cumulative result of past trends in fertility, mortality, and migration rates. Information on age – sex composition is an essential prerequisite for the description and analysis of demographic data.
Age at Marriage:	The age of the individual in years at the time of his / her actual marriage.
Age Heaping:	A general tendency to misreport a preferred number as one's age or to round one's age to a number ending with the digits 0 or 5, or, as a multiple of 6 or 12 months for children. This type of age misreporting results in false concentration of persons at particular ages or in particular age groups.
Cell:	The smallest geographical unit in which fieldwork is carried out. Cells boundaries must be clear and easy to recognize in the field. Geographic markers such as road streets are usually used as cell's boundaries.
De Jure Population:	The population enumerated as the basis of usual residence excluding temporary visitors and including residents temporarily absent. All persons who have been temporarily absent for up to 1 year are considered usual residents in this survey.
Disease:	A disorder or impairment of the normal state of well-being.
Dwelling Unit:	A room or number of rooms occupied or vacant and are used as a separate dwelling, providing that there is either <ol style="list-style-type: none">1. Direct entrance from the outside or through a hall, or2. Complete kitchen facilities used only by the unit's inhabitants regardless of whether they use them or not.
Family Household:	Consists of household members who are related to each other by blood, marriage, or adoption.
Fertility:	The actual reproductive performance of an individual, a couple, a group, or a population.
Head of Household:	The person who usually lives with the household and is recognized as head of household by its other members. Often he/she is the main decision-maker or responsible for financial support and welfare of the household at the time the survey is conducted.

Health Insurance:	Indemnity coverage against financial losses associated with the occurrence or treatment of health problem.
Household Membership:	Persons staying in the dwelling unit at the time of an interview are considered members of the household if (1) the dwelling unit is their usual or only place of residence, or (2) a place of residence is maintained for them here and elsewhere, but they spend most of their time in this residence.
Household:	One person or group of persons with or without a family relationship who live in the same dwelling unit, who share meals and make joint provisions for food and other essentials of living.
Illiterate:	A person who can not read or write a short abstract about his life and understand it .
Infant Mortality Rate:	The number of infant deaths under one year of age in a given year per 1,000 live births during the year.
Infant:	A live-born child from the moment of birth through the completion of the first year.
Live Birth:	A birth is considered alive if the newborn has shouted, cried, or shown any characteristics of life upon birth.
Marital Status:	<p>The status of those 12 years old and over in terms of marriage traditions and laws in the country. It might be one of the following:</p> <p>Single: The individual 12 years old and over who did not actually marry according to the existing norms and traditions.</p> <p>Married: The individual 12 years old and over who is actually married according to the existing norms regardless of whether he/she is living with a spouse, at the time of the interview or not.</p> <p>Divorced: The individual 12 years old and over who was married but his/her marriage was revoked by a legally registered divorce, and he/she did not marry again.</p> <p>Widower: The individual 12 years old and over who was married, but his/her marriage was revoked because of the death of his/her partner, and he/she did not marry again.</p>
Marriage Duration:	The duration between the date of the actual marriage and the survey reference date, calculated in years.
Median Age:	The age that divides a population into two numerically equal groups: that is, half of the people are younger than this age and half are older.
Mortality:	Deaths as a component of population change.
Occupation:	Refers to the kind of work done by the employed persons, irrespective of their training or education. Thus, the occupation refers to the tasks carried out by a person. If the person had more than one occupation, the one in which he/she spent most of his/her time.
Pilot Survey:	Duplication of the final proposed survey design on a small scale from

	beginning to end.
Prevalence Rate:	The number of cases of disease, infected persons with some other attribute present at a particular time and in relation to the size of the population from which it is drawn.
Reference Date:	The date referred to in calculating the vital rates and ages. In this survey it is 29/04/2000.
Room:	The dwelling unit or part of it surrounded with walls and has a ceiling providing that its area is not less than 4 square meters. The balconies surrounded with glass are considered rooms; while kitchens, bathrooms, other balconies, corridors, halls, and half rooms are not considered rooms. Also, rooms used for work purposes such as a doctor's room or a sewing room are not considered rooms in this survey.
Safe Drinking Water:	Water piped into the dwelling or yard, a public tap, a tube, a well or borehole with pump, a protected well or spring, or rainwater.
School:	Any educational institution excluding kindergartens, regardless of students number and grade structure, providing that the lowest grade is the first basic grade and the highest grade the last grade (university degree and above).
Smoker:	The individual 12 years old and over who smokes one cigarette or more a day including pipe and water pipe smokers.
Total Fertility Rate:	The average number of children that would be born alive to a women (or group of women) during her life time if she were to pass through her childbearing years conforming to the age specific fertility rates of a given year. The sum of age specific fertility rates is multiplied by 5.
Type of Locality:	Localities have been divided into three types: Urban, Rural, Camps Urban: Any locality whose population amounts to 10,000 persons or more. This applies to all governorates/districts centers regardless of their size. Besides, it refers to all localities whose populations vary from 4,000 to 9,999 persons provided they have, at least, four of the following elements: public electricity network, public water network, post office, health center with a full – time physician and a school offering a general secondary education certificate. Rural: Any locality whose population is less than 4,000 persons or whose population varies from 4,000 to 9,999 persons but lacking four of the aforementioned elements. Camp: It refers to any locality referred to as a refugee camp and administered by the United Nations Refugees and Work Agency in the Near East (U.N.R.W.A.).
Years of Schooling:	It is the total number of years that have been completed successfully at a school/university by the respondent.

Survey Questionnaire

- **Household questionnaire** which includes the following sections:
 - Control Sheet: which includes items related to quality control sample identification, interview schedule and interview results.
 - Household Roster: includes demographic variables such as age, sex, relation to head of household, date of birth and health indicators such as health insurance and smoking.
 - Housing section: includes questions on housing conditions, such as water, sanitation and iodized salt.
 - Reproduction.
 - Desire of Reproduction.
- **Prefix and meaning**

Prefix	Meaning
EAs	Enumeration Areas
PPM	Part Per Million
ID	Identity
HH	Household
DK	Do not Know
Gov.	Governmental
No.	Number
UNRWA	United Nation Relief and Work Agency
MCH	Maternal and Child Health

Data set Linkage

The dataset available consists of (18) primary data files was classified by subject, these data files are available on three CD-ROM as follow:

(CD1): Demographic characteristics for Households and Housing.

(CD2): Child Health and Rights.

(CD3): Maternal Care and Public Health.

The table below presents the contents of each CD-ROM and the methodology of linking different data files:

CD Number	File Name	Content	Key Variables
CD1	Part1	Household Roaster	FILECODE: Household Identification Number, HR01: Person Number
	Part2	Dwelling	FILECODE: Household Identification Number, HR01: Person Number
	Part3a	Reproduction	FILECODE: Household Identification Number, HR01: Person Number
	Part3b	Reproduction	FILECODE: Household Identification Number, HR01: Person Number
	Part3c	Reproduction	FILECODE: Household Identification Number, RE17: Person Number from Reproduction part
	Part7	Fertility Preference	FILECODE: Household Identification Number, HR01: Person Number
CD2	Part10	Birth Registration for Children Under Five Years	FILECODE: Household Identification Number, HR01: Person Number
	Part11	Child Education	FILECODE: Household Identification Number, HR01: Person Number
	Part12	Child labor	FILECODE: Household Identification Number, HR01: Person Number
	Part13	Child Health and Immunization	FILECODE: Household Identification Number, HR01: Person Number RE17: Person Number from Reproduction part
	Part14	Child Ophthalmic Health	FILECODE: Household Identification Number, HR01: Person Number
	Part15	Anthropometry	FILECODE: Household Identification Number, HR01: Person Number
CD3	Part4	Contraception	FILECODE: Household Identification Number, HR01: Person Number
	Part5a	Pregnancy	FILECODE: Household Identification Number, RE17: Person Number from Reproduction part

CD Number	File Name	Content	Key Variables
	Part5b	Breast Feeding	FILECODE: Household Identification Number, HR01: Person Number RE17: Person Number from Reproduction part
	Part6	Tetanus Toxoid (TT)	FILECODE: Household Identification Number, HR01: Person Number
	Part8	Health Awareness and Public Health	FILECODE: Household Identification Number, HR01: Person Number
	Part9	Knowledge of AIDS	FILECODE: Household Identification Number, HR01: Person Number

Description of the files:

File Name	Number of Cases (Unweighed)	Number of Variables
Part1	38089	42
Part2	6204	25
Part3a	5729	28
Part3b	26074	52
Part3c	5729	25
Part7	5729	60

1. Filtering and Grouping Respondents:

Units of analysis (other units are derived from these) and filtering instruction are as follows:

Unit	From file	Filtering
Households	Part2	Only those with interview completed
Individuals	Part1	Those with interview completed and usually residence in the household
Eligible Women	Part3a, Part3c, Part7	Women 12-54 years, Ever married and currently married
Eligible Births	Part3b	Women 12-54 years, who have at least live births

Target Population

The target population consists of all Palestinian households that usually reside in the Palestinian Territory. This type of survey concentrates on one sub population, which is ever-married women and aged (15-54) years.

Sample Size

Different criteria were taken into account when sample size was determined. The level of sampling error for the main indicators was considered, the result could be published at 3 subpopulations (National level, The West Bank Level and Gaza Strip level), and 10% incomplete questionnaire was assumed.

The overall sample was 272 EAs, 178 in the West Bank and 94 in Gaza Strip. The Sample includes 288 cells, 194 in West Bank and 94 in Gaza Strip.

The number of households in the sample was 6,349 households, 4,295 in the West Bank and 2,054 in Gaza Strip.

Weighing

Weights have been calculated for each sampling unit. Weights reflect the sampling procedures. To make the weighing procedure feasible and simple, we assumed that the households have been selected directly within the EA.

It was respected in weighing procedure that the total Palestinian population in the beginning of the second quartet in year 2000 and their distribution according to the region, sex and age group.

Variance

It is important to calculate the sampling error and to show it beside the estimates. This gives the data user an idea about the efficiency and accuracy of the estimates.

The total survey errors are divided into two types; sampling errors and non-sampling errors. Non-sampling errors arose from implementing data collection and data processing, such as failure to interview the correct unit, mistakes made by the interviewer or the respondent. It is still difficult to estimate non-sampling errors. But many procedures have been adopted to reduce non-sampling errors.

Sampling errors on the other hand are a measure of the variability between all possible samples. Sampling errors can be estimated from the survey results.

The variance calculation uses the method of Ultimate Clusters; the variance formula depends on the type of estimate (ratios, means, totals...etc.). For this purpose we use a statistical package for variance calculation called CENEVAR.

As the following equations:

$$v(\bar{R}_A) = \frac{1}{\bar{X}_A^2} \left[v(\bar{Y}_A) + \bar{R}_A^2 v(\bar{X}_A) - 2\bar{R}_A \text{cov}(\bar{X}_A, \bar{Y}_A) \right]$$
$$\text{cov}(\hat{X}_A, \hat{Y}_A) = \sum_{h=1}^H \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{X}_{Ahi} - \frac{\hat{X}_{Ah}}{n_h} \right) \left(\hat{Y}_{Ahi} - \frac{\hat{Y}_{Ah}}{n_h} \right)$$

$$\bar{Y}_{Ahi} = \sum_{j \in A} w'_{hij} y_{hij}$$

$$\bar{Y}_{Ah} = \sum_i \sum_{j \in A} w'_{hij} y_{hij}$$

$$\bar{X}_{Ahi} = \sum_{j \in A} w'_{hij} x_{hij}$$

$$\bar{X}_{Ah} = \sum_i \sum_{j \in A} w'_{hij} x_{hij}$$

$$v(\hat{Y}_A) = cov(\hat{Y}_A, \hat{Y}_A)$$

$$v(\hat{X}_A) = cov(\hat{X}_A, \hat{X}_A)$$

Reference Date

The fieldwork started in this survey from 10/4/2000 to 31/5/2000, the referred date to in calculating the vital rates and ages was 29/4/2000.

Response Rate

Overall 94.0% of the questionnaires were completed, 93.3% in the West Bank, and 95.5% in Gaza Strip.

The response rate was about 97.7%, it was 96.9% in the West Bank and 99.3% in Gaza Strip. Table 1, describe the number of households, eligible women and response rates

Table 1: Number of Households, Eligible Women and Response Rates by Region

Variable	Region		
	West Bank	Gaza Strip	Palestinian Territory
Number of Households			
Sampled	4,463	2,137	6,600
Eligible for interview	4,295	2,054	6,349
Interviewed	4,164	2,040	6,204
Response Rate	96.9	99.3	97.7
Number of Women in the Age (12-54) Years and Ever Married			
Eligible	3,646	2,119	5,765
Interviewed	3,626	2,103	5,729
Response Rate	99.5	99.2	99.4

Data Collection

1. Recruitment:

Recruitment of fieldworkers was restricted to women. The fieldwork directorate at PCBS screened all available female applicants. A scale was designed to rank applicants using objective criteria. Four committees to interview applicants in Ramallah, Nablus, Hebron and Gaza were formed. 72 interviewers, 45 supervisors and editors were selected to work in the West Bank and Gaza Strip.

2. Training:

The draft fieldwork manual prepared for the pilot was reviewed, edited and utilized for training.

The main training was divided into two courses, one course was given in the West Bank and the other was given in Gaza Strip. An 18-days intensive course for 147 interviewers was conducted, 100 of them in West Bank and 47 in Gaza Strip.

A group of doctors was recruited to deliver lectures on different parts of the questionnaires.

The training materials, consisted of the following basic survey documents: questionnaires, interviewer's and supervisor's instructional manual..

The training course for interviewers consisted of:

- Classroom lectures on the objectives and organization of the survey.
- Detailed explanation of the questionnaire.
- The art of asking questions.

Principles of interviewing include demonstration of interview through role-playing and practice interviews

3. Fieldwork Organization:

Main fieldwork in West Bank and Gaza Strip started on April 10, 2000 and was completed on May 31, 2000.

17 mobile teams in West Bank and Gaza Strip undertook fieldwork. Each team consisted of 3-5 interviewers, one supervisor, one assistant and one field editor.

We have implemented field editing which included further spot-checks if needed. The field editor thoroughly checked and corrected any obvious mistakes and slips.

4. Editing in the Field:

Fieldwork procedures and organization were designed to ensure adequate supervision and the collection of high quality data. To this end, several quality control measures were used including, periodic sudden visits by the professional staff to the field team, adequate communications between the central office staff and the field in the form of daily and weekly reporting, re-interviewing of about 10% of the sample households by supervisors, spot-checking of ages for eligible women, observation of interviewers by supervisors, distribution of written memos to the field when confusion arises, adequate documentation of the flow of the questionnaire through control sheets, and limiting call backs to three visits per household.

5. Data Processing:

IMPS was used in data entry, data entry was organized in a number of files, corresponding to the main parts of the questionnaire.

A data entry template was designed to reflect an exact image of the questionnaire, and included various electronic checks: logical check, consistency checks and cross-validation. Continuously thorough checks on the overall consistency of the data files and sample allocation were sent back to the field for corrections.

Data entry started on May 18, 2000 and finished on June 8, 2000. Data cleaning and checking processes were initiated simultaneously with the data entry. Thorough data quality checks and consistency checks were carried out.

Final tabulation of results was performed using statistical package SPSS for Windows (version 8.0) and specialized health and demographic analysis programs.

Data Quality

1. Introduction:

Since the data reported here are based on a sample survey and not on complete enumeration, they are subjected to two main types of errors: sampling errors and non-sampling errors.

Sampling errors are random outcomes of the sample design, and are, therefore, easily measurable.

Non-sampling errors can occur at the various stages of the survey implementation in data collection and data processing, and are generally difficult to be evaluated statistically. They cover a wide range of errors, including errors resulting from non-response, sample frame coverage, data processing and response (both respondent and interviewer-related). The use of effective training and supervision and the careful design of questions as measures have direct bearing on the magnitude of non-sampling errors, and hence the quality of the resulting data.

2. Demographic Data:

Demographic data are particularly subjected to various other sources of non-sampling errors, and there are standard techniques to assess the seriousness of these errors. The quality of the data for age is of particular importance in demographic surveys, because the age distribution is needed for various demographic purposes.

Age reporting errors result from incorrect responses during enumeration, misunderstanding of the questions concerning age, mistakes during data entry, or more importantly in our context, respondents not knowing their exact age. Age reporting errors occur in all surveys and this one no exception. However, the amount and seriousness of errors varies a great deal among surveys. It should be mentioned that questions were asked about both completed age and dates of birth in this survey, and official documents were used whenever possible to obtain these data.

A standard way to evaluate the data is to check the extent of age heaping in convenient digits, most commonly 0 and 5. The Wipple index is 103.9 for both sexes, indicating that the data are free of age heaping at digits 0 and 5. The Mayers and Bach indices are 5.1 and 2.9 respectively, showing little heaping at single years.

Derived Variables

Variable Name	Variable Values	Variable Description
HR05A	00= less than one year 98= Do not know	Age in a complete Years
HR14C	1= Illiterate 2= Can read and write 3= Elementary 4= Preparatory 5= Secondary 6= Associate diploma 7= Bachelor and above 98= Do not know 99= Not Stated	Educational Attainment
Occup	1=Legislators and Managers 2=Professionals 3=Technicians and Associate Professionals 4=Clerks 5=Services and Sales Workers 6=Skilled Agricultural and Fishery Workers 7=Crafts and Related Workers 8=Plant and Machine Operators 9=Elementary Occupation 10=Not Stated	Type of Occupation
FILECODE	Key Variable	Household ID number
AGEINDAY	Number of days	Age in days
GEINMON	Number of months	Age in exact months
FINALW	Person's weight	COMPUTE finalw = whh_1 * fg (COMPUTE)
LOCTYPE	1= Urban 2= Rural 3= Camp	Type of Locality
AGE60	1= 0-4 2= 5-9 3= 10-14 4= 15-19 5= 20-24 6= 25-29 7= 30-34 8= 35-39 9= 40-44 10= 45-49 11= 50-54 12= 55-59 13= 60+ 14= Don't Know 15= Not Stated	Age Group for 60+
AGEGRP	1= 0-4 2= 5-9 3= 10-14 4= 15-19 5= 20-24 6= 25-29 7= 30-34 8= 35-39	Age Group for 70+

Variable Name	Variable Values	Variable Description
	9= 40-44 10= 45-49 11= 50-54 12= 55-59 13= 60-64 14= 65-69 15= 70+ 16= Don't Know 17= Not Stated	
AGEGRP2	1= 0-4 2= 5-9 3= 10-14 4= 15-19 5= 20-24 6= 25-29 7= 30-34 8= 35-39 9= 40-44 10= 45-49 11= 50-54 12= 55-59 13= 60-64 14= 65+ 16= Don't Know 17= Not Stated	Age Group for 65+
GRP3AGE	1= 0-4 2= 5-9 3= 10-14 4= 15-19 5= 20-24 6= 25-29 7= 30-34 8= 35-39 9= 40-44 10= 45-49 11= 50-54 12= 55-59 13= 60-64 14= 65-69 15= 70-74 16= 75-79 17= 80-84 18= 85+ 19= Don't Know 20= Not Stated	Age Group for 85+
DIVSON	1=North of the West Bank 2=Central of the West Bank 3=South of the West Bank 4= North Gaza 5= Central and South Gaza	Geographical Regions
HR04_1	1= Male 2= Female	Sex for Head of HH
HR05A_1	Age 00= less than one year 98= Do not know	Age in a complete Years for Head of HH
HR06_1	1= Registered Refugee	Refugee Status for Head of HH

Variable Name	Variable Values	Variable Description
	2= Non-Registered Refugee 3= Not Refugee 9= Not Stated	
HR17_1	1= Worked form 1-14 hours 2= Worked for 15 hours or above 3= Unemployed ever worked 4= Unemployed never worked 5= Full Time Student 6= Full Time house Keeper 7= Unable to Work 8= Doesn't work and doesn't seek job 9= Other 99= Not Stated	Labor Force Status for Head of HH
HR18_1	1=Legislators and Managers 2=Professionals 3=Technicians and Associate Professionals 4=Clerks 5=Services and Sales Workers 6=Skilled Agricultural and Fishery Workers 7=Crafts and Related Workers 8=Plant and Machine Operators 9=Elementary Occupation 10=Not Stated	Type of Occupation for Head of HH
HR19_1	1= Never Married 2= Legally Married 3= Married 4= Divorced 5= Widowed 9= Not Stated	Marital Status for Head of HH
FLAG_2	Number	Head of Household number
WHH_1	Number	Household's weight
HR24	Number	Number of children Under 5 Years Old