



**Palestinian National Authority
Palestinian Central Bureau of Statistics**

Demographic and Health Survey, 2004

User Guide

Table of Contents

Definitions and Explanations

Survey Questionnaire

Data Set Linkage

Filtering and Grouping of Respondents

Target Population

Sample and Frame

Weighing

Variance Calculation

Data Collection

Response Rate

Data Quality

Derived Variables

Definitions and Explanations

Acute Respiratory Infections (ARI):	Acute respiratory infections are the most common illness suffered by children, no matter where they live. ARI are caused by a wide variety of disease agents; these include forms of vaccine-preventable tangent diseases: diphtheria, pertussis and tuberculosis. ARI are traditionally divided into two main categories: those of the upper respiratory tract (the common cold) and those of the lower respiratory tract (primarily pneumonia). The principal transmission factors are high population density, crowded conditions and seasonal changes that favor the spread of disease.
Adequate Iodized Salt:	Food salt fortified with an adequate amount of iodine (15 ppm and above) to prevent iodine-deficiency disorder, including goiter, in adults and children and mental handicap in children.
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 a person is actually married.
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 a false concentration of persons at particular ages or in particular age groups.
AIDS:	Acquired Immunodeficiency Syndrome, a serious, often fatal disease of the immune system transmitted through blood products, especially by sexual contact or contaminated needles.
Anthropometry:	The technique that deals with the measurement of size, weights and proportions of the human body. The anthropometric measurements described here are standing height, recumbent length and weight, in relation to the age and sex of the child and in accordance with the guidelines developed by the CDC and recommended by the WHO.
Assistant Measurer:	An enumerator who assists the measurer by helping to hold the child in place during the measurement proceeding and records the measurements on a questionnaire. An untrained assistant such as the mother can be used to help hold the child. If so, then the measurer who measures the child also records the measurement.

BCG Vaccination:	Vaccination through injection given to infants in the first month of life to protect against tuberculosis, an infection caused by the bacterium <i>Mycobacterium tuberculosis</i> , affecting primarily the respiratory system and spread by coughing and sneezing.
Birth Weight:	The first weight for the newborn obtained after birth.
Breastfeeding:	Refers to the method of feeding infants and children and is defined as feeding a child breast milk directly from the breast or expressed.
Composite Family:	Refers to families consisting of at least one nuclear family with other non-relatives.
Cell:	The smallest geographical unit in which fieldwork is carried out. Cell boundaries must be clear and easy to recognize in the field. Geographic markers such as road streets are usually used as a cell's boundaries.
Complementary Feeding:	The child has received both breast milk and solid or semi-solid food, i.e. juice, formula, etc.
Condom:	A sheet or covering made of thin latex rubber to fit over a man's erect penis or inserted into a woman's vagina.
Continued Breastfeeding Rate (CBFR):	The proportion of children aged 9-12 months who are still breastfeeding.
Contraceptive Injection:	A shot that is normally given every three or six months and is also known as Depo-Provera or Notriterat.
Contraceptive Pill:	One of the methods used by women for delaying or avoiding the coming pregnancy by taking a tablet every day.
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 one year are considered usual residents in this survey.
Dehydration:	Lack or shortage of body fluids. A child who has diarrhea soon loses a lot of fluids in her or his stools, thus becoming dehydrated.
Diaphragm, Foam, Jelly:	In this case we have grouped together a large number of female contraceptive methods that are used in the vagina, including diaphragm, sperm foam, jelly, foaming tablets, etc.
Diarrhea:	The passage of loose or liquid stools more frequently than is normal for the individual. Diarrhea may be defined as it is understood by respondents or mothers. The interviewers used the mother's definition in this survey.
Disease:	A disorder or impairment of the normal state of well-being.
Divorced:	An individual 12 years old and over who was married but his or her marriage was revoked by a legally registered divorce and he or she did not marry again.

DPT Vaccination:	Combination vaccination against diphtheria, pertussis (whooping cough) and tetanus, usually given in a series of injections starting at 2 months of age followed by 4 months, then 6 months with a booster at 12 months of age.
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, or 2. Complete kitchen facilities available only to the unit's inhabitants regardless of whether they use them or not.
Exclusive breastfeeding:	Children aged 0-6 months who are being breastfed and have not received any other food or drink, except for vitamins and medications.
Extended Family:	Refers to families consisting of at least one nuclear families with other relatives.
Family Household:	Consists of household members who are related to each other by blood, marriage or adoption.
Family Planning Method	A method used for delaying or stopping pregnancy. Modern methods include pills, IUD, injection, vaginal methods, female jelly, female sterilization, male sterilization and condoms.
Fertility:	The actual reproductive performance of an individual, a couple, a group or a population.
Folic Acid tablets:	Medication containing folic acid in the form of a tablet to prevent or treat folic-acid deficiency, especially during pregnancy.
Female Sterilization:	Inability of women to conceive as a result of surgical operation. There are several types of sterilization operations women can have, for example, tubal ligation or removal of the uterus or ovaries.
Head of Household:	The person who usually lives with the household and is recognized as head of household by its other members. Often he or she is the main decision-maker or responsible for financial support and the welfare of the household at the time the survey is conducted.
Health Care Provider:	An individual whose responsibility involves one or more of the following: the provision, administration, teaching and development of health services, activities or supplies. The provider may have direct or indirect interest in health industry.
Health Insurance	Indemnity coverage against financial losses associated with occurrence or treatment of health problems.
Health Status:	The state of health (often in a broad sense) of a specified individual, group or population.
Health:	Many definitions exist. As defined by the World Health Organization: "A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".
Height:	Height of the child measured in centimeters as: <ol style="list-style-type: none"> 1. Recumbent Length: distance from the crown of the head to the sole while the child is measured lying supine (for children less than 2 years of age).

2. Standing Height: distance from the crown of the head to the sole while the child is measured standing (children more than 2 years of age).

Height for Age:	This parameter reflects the achieved linear growth and its deficit indicates long-term cumulative inadequacies of health or nutrition. Two related terms are used when describing this parameter: length and stature. Length is the measurement while in a recumbent position and is used for children under 2 years of age, while stature refers to standing height. For simplification, the term height is used for both measurements in this report. Low height for age (below – 2SD of the NCHS/WHO reference) ranges from 5 to 65% among less developed countries. In low prevalence countries, it is most likely due to normal variation, i.e. shortness; in less developed countries it is likely to be due to a pathological process, resulting in stunting. A pathological process can be from the past or a continuous process.
High Birth Weight:	Weight of a newborn of more than 4 kgs.
Height Measuring Board:	A measuring board that can be used to measure either standing height or recumbent length, to the nearest 0.1 cm.
Hospital:	An institution whose primary function is to provide services (diagnostic and therapeutic) for a variety of medical conditions, both surgical and non-surgical. Most hospitals also provide some outpatient services, particularly emergency care.
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 a group of persons with or without a family relationship who live in the same dwelling unit, share meals and make joint provisions for food and other essentials of living.
Illiterate:	A person who cannot read or write a short abstract about his or her life and understand it.
Immunization:	Immunization is one of the sharpest tools for cutting into the vicious infections cycle and reducing the severity and frequency of setbacks to the normal development of the child in his or her formative years.
Infant:	A live-born child from the moment of birth through the completion of the first year.
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.
Iron Tablets:	Medication containing an iron supplement given in the form of a tablet or syrup to prevent or treat iron-deficiency anemia.
IUD:	A flexible, plastic intrauterine device. It often has copper wire or sleeves on it. It is inserted into the women's uterus through her vagina.

Live Birth:	A birth is considered live if the newborn has shouted, cried or shown any signs of life upon birth.
Low Birth Weight:	Weight of a newborn of less than 2.5 kg.
Male Sterilization:	This is a comparatively minor operation done on men for contraceptive purposes.
Malnutrition:	Malnutrition means “badly nourished” but it is more than a measure of what we eat or fail to eat. Clinically, malnutrition is characterized by an inadequate intake of protein, energy and micronutrients and by frequent infections or disease. Nutritional status is the result of the complex interaction between the food we eat, our overall state of health and the environment in which we live – in short, food, health and caring, the three “pillars of well-being”.
Marital Status:	The status of those 12 years old and over in terms of marriage traditions and laws in the country.
Married:	An individual 12 years old and over who is actually married according to the existing norms, regardless of whether he or she is living with a spouse at the time of the interview or not.
Marriage Duration:	The duration between the date of the actual marriage and the survey reference date, calculated in years.
Maternity Care/ Antenatal Care:	Giving birth requires the most sustained medical attention that should be provided through a comprehensive program of maternity care. Such a program should include examination, evaluation, observation, treatment and education of the pregnant woman and should be directed toward making pregnancy, labor and delivery as normal and safe as possible for mothers and their infants.
Measles Vaccination	Vaccination through injection given once at 9 months of age to protect against measles, which is an acute and highly contagious viral disease occurring primarily in children. A second dose follows at 15 months of age, combined with Rubella and Mumps vaccines and called MMR.
Measurer:	A trained enumerator who actually measures the height and weight of children.
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.
MMR:	An injection given at 15 months of age in order to immunize the child against Measles, Mumps, and Rubella.
Modern Methods of Contraception:	These include male and female sterilization, pills, IUD, injection, male and female condoms, diaphragms and foam/jelly.
Mortality:	Deaths as a component of population change.
Neonatal Death Rate:	The number of infant (1 month of age) deaths per 1,000 live births in a given year.
Neonatal Period:	The first 28 days of life.

Neonatal Tetanus:	A disease that kills many babies. This disease can be easily prevented by a woman receiving immunization against tetanus while she is pregnant with the baby before birth. This immunization is usually given to pregnant women as an injection in the arm. However, more than one injection may be required in order to provide protection.
Normal Birth Weight:	Weight of the newborn between 2.5-4.0 kgs.
Nuclear Family:	Refers to families consisting of married couples without children, married couples with unmarried children, or single parents with unmarried children.
Nutritional Status:	A description of the current status of the child, both in terms of immediate acute factors such as inadequate current intake of food, childhood diseases and diarrhea leading to wasting, as well as the accumulated impact of chronic deprivation leading to stunting.
Occupation:	Refers to the kind of work done by employed persons, irrespective of their training or education. Thus, the occupation refers to the tasks carried out by a person. If the person has more than one occupation, the one in which he or she spent most of his or her time was accepted as his or her occupation.
Oral Rehydration Solution (ORS):	Solutions for the prevention of dehydration in infants and children. These are either commercially produced sachets or tablets or can be prepared at home with fluids that contain both salt and nutrients.
Oral Rehydration Therapy (ORT):	ORT is given to prevent and treat dehydration during episodes of diarrhea by giving a child fluids by mouth. ORT is a threefold strategy that combines administration of a simple solution of sugar and salt with continued feeding through a diarrhea episode and referral when appropriate.
Pilot Survey:	Duplication of the final proposed survey design on a small scale from beginning to end.
Place of Residence:	Place of residence is divided into urban, camps and rural. A population outside municipal boundaries and camps are considered a village population.
Polio Vaccination:	Vaccination by oral drops against an acute infection that can cause paralysis in children. It has the same schedule as DPT in children under 5 years of age with an addition of two injectable doses given at 1 and 2 months of age.
Post Neonatal Death Rate:	The number of infant (from 1-11 month of age) deaths per 1000 live births in a given year.
Post-Neonatal Period:	The time between the end of the first month of life and the first year.
Prevalence:	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.

Primary Health Care:	First contact and continuing comprehensive health care, including basic or initial diagnosis and treatment, health, supervision, management of chronic conditions and preventive health services. The provision of primary care does not necessarily require highly sophisticated equipment or specialized resources.
Reference Date:	The date referred to is 17/05/2004, in which the calculation of vital rates and ages was done.
Reproductive Health:	Defined by WHO as a state of physical, mental and social well-being in all matters relating to the reproductive system at all stages of life. The term implies that people are able to have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this are the rights of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of the family planning method of their choice and the right to appropriate health-care services that enable women to safely go through pregnancy and childbirth.
Room:	The dwelling unit or a part of it surrounded by walls and with a ceiling providing that its area is not less than four square meters. 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 is the last grade (university degree and above).
Single:	An individual 12 years old and over who has not actually married according to the existing norms and traditions.
Skilled Health Personnel:	Doctors, nurses, midwives, community health workers, health educator, etc.
Smoker:	The individual (10 years old and over) who smokes one cigarette or more a day, including pipe and narghile smokers.
Supplementary Feeding:	Any liquid (including milk) or solid given while the child is still receiving breast milk.
Tetanus:	A life-threatening disease caused by toxins produced by the bacterium <i>Clostridium tetani</i> , which often grows at the site of a cut or wound. Tetanus usually occurs after an acute injury, such as a puncture wound or laceration that has been contaminated with dirt containing the clostridium spores.
Tetanus Toxoid Vaccination:	Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus.

Timely Complementary Feeding Rate:	The proportion of infants 6-9 months of age who are receiving breast milk and complementary foods.
Total Fertility Rate:	The average number of children that would be born alive to a women (or group of women) during her lifetime 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 five.
Under-Five Mortality:	The proportion of children born alive who die before reaching their fifth birthday.
Vitamin A/D:	Vitamin A and D drops, given to children from birth until 1 year of age at the maternal child health clinics of the Ministry of Health. It is not provided at UNRWA clinics.
Wasting:	Low weight-for-height indicates wasting (i.e. “thinness”), which is one of the best indicators of current and acute malnutrition, i.e. a deficit in tissues and fat mass compared with what expected in a normal child of the same length/height. It is generally associated with failure to gain weight or loss of weight.
Weaning:	The process whereby the child becomes accustomed to taking liquids or solids other than breast milk.
Weight:	Measurement of a child’s total body mass underside.
Weight for Age:	This parameter is influenced by both the height and weight of the child. It reflects the long- and short-term health of an individual or population. Lightness and underweight have been used to describe normal and pathological processes. High weight for age is not used to describe obesity.
Weight for Height:	This parameter reflects body weight to height. Its use carries the advantage of requiring no knowledge of age. However it is not a substitute for other indicators. Low weight for height is called thinness, if normal, or wasting, if pathological, and can reflect a recent or chronic condition. Prevalence in non-disaster areas is around 5%. A lack of evidence of wasting in a population does not imply the absence of current nutritional problems.
Widower:	The individual 12 years old and over who was married, but his or her marriage was revoked because of the death of his or her partner, and he or she did not marry again.
Withdrawal:	A traditional family-planning method used by couples by ejaculating outside the vagina.
Years of Schooling:	The total number of years that have been completed successfully at a school or university by the respondent.

Survey Questionnaire

The questionnaire was developed by the Palestinian Central Bureau of Statistics after revision and adaptation of the following standard questionnaires:

1. Health Survey questionnaire that was implemented by the Palestinian Central Bureau of Statistics in 2000
2. Demographic Survey questionnaire that was implemented by the Palestinian Central Bureau of Statistics in 1995
3. UNICEF questionnaire for Multiple Indicator Cluster Survey (MICS II)
4. Standard Demographic and Health survey questionnaire
5. PAP FAM standard questionnaire
6. Demographic and Health Survey questionnaires (DHS) from other countries.

The demographic and health survey in 2004 questionnaire consisted of four main parts:

1. Control Sheet, which includes items related to quality control, sample identification, interview schedule and interview outcome.
2. Household questionnaire, which includes the following sections:
 - The Household Roster including demographic variables such as age, sex, relation to the head of the household, date of birth and health variables such as health insurance and smoking.
 - The Housing section including questions on housing conditions, such as water, sanitation and iodized salt.
3. Women's health questionnaire. This questionnaire was designed to collect data for all ever-married women 15-54 years old. It consists of six sections:
 - Reproduction
 - Family planning
 - Antenatal care and breastfeeding
 - Tetanus toxoid vaccination
 - Desire for reproduction
 - Knowledge of HIV
4. Child health questionnaire: This part consists of three sections:
 - Child health and child immunization for under-five children
 - Anthropometry for under-five children
 - Child education for children aged 5-17 years

Data Set Linkage

The data set to users consists of eight primary files that are related by identification variables (keys). A description of the files is below.

File Name	Content	Identification Variable
Rosters	Roster Data	IDh00: Master Record Identification HR01 - Unique Person Number
Housing.sav	Housing and Family Data	IDh00: Master Record Identification
Women 15-54 .sav	Health data for all women 15-54 years old	IDh00: Master Record Identification Hr01 - Unique Women Number
Maternal care.sav	Pregnancy and Breastfeeding	IDh00: Master Record Identification Hr01 - Unique Mother Number
Vaccination.sav	Health data for children less than 5 years old	IDh00: Master Record Identification Hr01 - Unique Children Number
All births.sav	Births table (reproductive history)	Idh00: Master Record Identification Id0n: mother line no in the household hr01 :Unique Mother Number
Tetanus.sav	Data for all ever-married women 15-54 years old for tetanus toxiod	IDh00: Master Record Identification Hr01 - Unique Mother Number
Women aids.sav	Knowledge about AIDS for women 15-54 years	IDh00: Master Record Identification Hr01 - Unique Mother Number
Women_1.sav	Family planning methods, reproduction, and desire for reproductive	IDh00: Master Record Identification Hr01 - Unique Mother Number
Child education.sav	Education of children aged 5-17 years	IDh00: Master Record Identification Hr01 - Unique Children Number
Malnutrition.sav	Malnutrition for children less than 5 years (Measurements of height and weight)	IDh00: Master Record Identification Hr01 - Unique Children Number

The main variables, which relationally link the files, are IDH00 & HR01, which are presented in all files.

Filtering and Grouping of Respondents

Units of analysis (Others units are generally derived from these) and filtering instructions are as follows:

Unit	From file	Filtering
Person	Rosters	Households with eligible children and women
Household	Housing.sav	Housing charactering for interview households
Women	Women 15-54 .sav	Women aged 15-54 years regardless their marital status
Mothers	Maternal care.sav	Women aged 15-54 years who ever married
Children	Vaccination.sav	Children aged less than 5 years
births	All births.sav	All births the women had during her reproductive age
Mothers	Tetanus.sav	Women aged 15-54 years who ever married
Mothers	Women aids.sav	Women aged 15-54 years who ever married
Mothers	Women_1.sav	Women aged 15-54 years who ever married
Children	Child education.sav	Children aged 5-17 years

Target Population

The target population consisted of all Palestinian households that usually reside in the Palestinian Territory. This type of survey concentrated on two subpopulations: The first is ever-married women 15-54 years old, and the second is under-five children.

Sample and Frame

The number of households in the sample was 6,574 households: 4,456 in the West Bank and 2,118 in the Gaza Strip. 5,799 households were interviewed, 3,746 in the West Bank and 2,053 in Gaza Strip.

The list of all Palestinian households has been constructed by updating some identification variables from the data collected through the Population Census of 1997. The master sample was drawn up to be used for different sample surveys. It consists of 481 enumeration areas (EA) (the average size of about 150 households). The master sample was the sample frame for the current Demographic and Health Survey of 2004. The selected EA were divided into small units called cells (with an average size of 25 households). One cell per EA was selected.

The sample type was a stratified two-stage random sample:

First stage: 260 EAs were selected from all Palestinian territory.

Second stage: A systematic random sample of 25 households was selected from each EA in the West Bank and the Gaza Strip. For the part of Jerusalem that was annexed by Israel after the 1967 war, 30 households were selected from each EA.

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.

The weighing procedure considered the total Palestinian population in the beginning of the second quarter of the year 2004 and their distribution by region, sex and age group.

Variance Calculations

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 or mistakes made by the interviewer or the respondent. It is still difficult to estimate the non-sampling errors. However, many procedures have been adopted to reduce the 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.

Data Collection

Instructions and Training Manual

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. Seventy-nine interviewers, 16 interviewers' assistants and 32 coordinators, supervisors and editors were selected to work in the West Bank and the Gaza Strip.

4.5.2: Training

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

The main training was via videoconference between the West Bank and the Gaza Strip. Training lasted for an intensive 11 days. 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 and interviewer and supervisor's instructions 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

The principles of interviewing were addressed by the demonstration of an interview through role-playing and practice interviews.

Fieldwork Organization

The main fieldwork in the West Bank and Gaza Strip started on May 20, 2004, and was completed on July 7, 2004.

Seventeen mobile teams in the West Bank and the Gaza Strip undertook fieldwork. Each team consisted of three to five interviewers, one supervisor, one assistant and one field editor.

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

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 ages of eligible women, observation of interviewers by supervisors, distribution of written memos to the field when confusion arose, adequate documentation of the flow of the questionnaire through control sheets and limiting call backs to three visits per household.

Data Processing

PLAIZE was used in the 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 were conducted, and some questionnaires were sent back to the field for corrections.

Data entry started in May 25, 2004, and finished on July 30, 2004. 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 the statistical package SPSS for Windows (version 8.0) and specialized health and demographic analysis programs.

Reference Date

The reference date for the Demographic and Health Survey was 17/05/2004.

Response Rates

Overall 88.2% of the questionnaires were completed, 84.1% in the West Bank, and 96.9% in the Gaza Strip.

Number of Households, Eligible Women, Children and Response Rates, by Region, 2004

Sample and Response Rates	Region		
	Palestinian Territory	West Bank	Gaza Strip
Number of Households in Sample	6,574	4,456	2,118
Number of Households Interviewed	5,799	3,746	2,053
Response Rate	88.2	84.1	96.9
Number of Ever Married Women (15-54) years	5,092	3,198	1,894
Number of Women Interviewed	4,972	3,087	1,885
Response Rate	97.6	96.5	99.5
Number of Children (Under 5) years	5,034	2,929	2,105
Number of Children Interviewed	4,839	2,788	2,051
Response Rate	96.1	95.2	97.3

Data Quality

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 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 are measures that have direct bearing on the magnitude of non-sampling errors and, hence, on the quality of the resulting data.

Evaluation of Demographic and Health Data

Demographic data are in particular 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

age data is of particular importance in demographic surveys, because the age distribution is needed for various demographic purposes.

Age-reporting errors result from incorrect reporting by respondents 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 is no exception. However, the quantum and seriousness of the 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 was 103.9 for both sexes, indicating that the data are free of age heaping at digits 0 and 5. The Mayers and Bachi indices are 5.1 and 2.9 respectively, showing little heaping at single years.

Antenatal Care

37.4% of women with recent births in Palestinian Territory are protected against neonatal tetanus. The vast majority of these women received two or more doses of tetanus toxoid within the last three years. Among the regions, women living in the West Bank are most likely to be protected (43.6%) while those living in the Gaza Strip are the least likely to be protected (33.3%).

Female respondents who had births in the three years prior to the survey were asked whether they had received antenatal care for any birth and, if so, what type of person provided the care. If the woman saw more than one type of provider, all were recorded in the questionnaire.

Child Immunization

In the Demographic and Health Survey of 2004, mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the survey questionnaire. Mothers were also probed to report any vaccinations the child received that did not appear on the card. Overall, 72.9% of children had health cards. If the child did not have a card, the mother was briefed with a short description of each vaccine and asked to recall whether or not the child had received it and, for DPT and polio vaccines, how many times. In this survey we found that only 7.9% of children under the age of five did not have health cards.

Breastfeeding

Complementary feeding refers to children who receive breast milk and solid or semi-solid food. In this survey, data on breastfeeding was collected for children born in the last three years preceding the survey.

Child Nutrition

Children were weighed and measured (approximately 95.4% of children), and those whose measurements are outside a plausible range were excluded. In addition, a small number of children whose birth dates were not known were excluded.

Children under the age of two years were measured lying down, while children under the age of five years were measured standing up as recommended.

Illness

In the Demographic and Health Survey of 2004 questionnaire, mothers (or caretakers) were asked to report whether their child had had diarrhea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than what the child usually ate and drank.

Children with acute respiratory infection are defined as those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were due to a problem in the chest, or both a problem in the chest and a blocked nose, or whose mother did not know the source of the problem.

Derived Variables

Name Variable	Description Variable	Values Variable
Region	Region	1. West Bank 2. Gaza Strip
loctype	Locality Type	1. Urban 2. Rural 3. Camps
agemonth	Age in exact months	
agem_com	Age in complete months	
dat_birt	Child date of birth	
haz	Height for age	
waz	Weight for age	
whz	Weight for height	
flag	Flag	