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1.1 Geography and Population

Kazakhstan lies in the north of the central Asian republics and is bounded by Russia in the north, China in the east, the Kyrgyz Republic and Uzbekistan in the south, and the Caspian Sea and part of Turkmenistan in the west. The territory of Kazakhstan is mostly steppe with hilly plains and plateaus.

The national language is Kazakh, which belongs to the Turkic language group. Russian is widely spoken and is an important language of communication. The primary religion of the people of Kazakhstan is Sunni Islam.

According to the last census, conducted in 1999, the population of Kazakhstan is 14.9 million people, making Kazakhstan the fourth most populous former Soviet republic. Fifty-six percent of the country's residents live in cities (National Statistical Agency, 1999). With a population density of approximately 6 people per square kilometer, Kazakhstan is one of the most sparsely populated regions in the world.

Currently, Kazakhstan is experiencing rapid social change that includes a dramatic reduction in the number of children desired and fertility rates fast approaching Western levels. The country is now nearing the end of a demographic transition, having an annual rate of natural increase of 0.5 percent and a total fertility rate estimated at 2.0 births per woman.

People representing more than 100 nationalities live in Kazakhstan, with Kazakhs and Slavs (mostly Russians and Ukrainians) constituting the two largest ethnic groups. According the 1999 census, the ethnic breakdown was as follows: 53.4 percent Kazakh, 30.0 percent Russian, and 16.6 percent Ukrainian, Uzbek, German, Tartar, Byelorussian, Korean, and others. (National Statistical Agency, 1999).

Kazakhstan is experiencing a pronounced outflow of citizens, primarily Russians moving to other former Soviet republics. Official figures indicate that 472,273 people left Kazakhstan in 1998; 63.9 percent of them were ethnically non-Kazakh. To some extent, the outflow has been offset by in-migration. Kazakhstan's government has actively encouraged the return of ethnic Kazakhs from elsewhere in the former Soviet Union, as well as from Mongolia, Turkey, Iran, and other countries. As a result, 40,624 persons identified as ethnic Kazakhs immigrated to Kazakhstan in 1998 (National Statistical Agency, 1999).

1.2 History of Kazakhstan

Historically, the Kazakh people pursued a nomadic lifestyle for which the region's climate and terrain were well suited. The indigenous Kazakhs belonged to several divisions of Turkic tribes, and the movements, conflicts, and alliances of these tribes determined the early history of Kazakhstan. The earliest well-documented state in the region was the Turkic Kaganate, which came into existence in the sixth century A.D. Various Turkic tribes ruled the country until it fell under 200 years of Mongol rule in the thirteenth century.

The present-day Kazakhs became a recognizable group in the mid-fifteenth century, when Qasym-Khan ruled the country. The Kazakhs then separated into three hordes: the Great Horde, which controlled Semirech'ye and southern Kazakhstan; the Middle Horde, which occupied north-central Kazakhstan; and the Lesser Horde, which occupied western Kazakhstan. The hordes were unified in eighteenth century in the Ulu-Tau area by the great leader Abylai Khan. Under his leadership, the country was able to maintain effective diplomatic relations with its powerful neighbors: Russia and China.

Despite such diplomacy, Russia conquered Kazakhstan in the late eighteenth century. The Middle Horde fell first, followed by the rest of the country. Soon after the conquest, the Kazakhs began to resist Russian control, and the first mass uprising was led by Khan Kene, who is now considered a Kazakh national hero.

In 1917, a group of secular nationalists called the Alash Orda attempted to set up an independent national government. This state lasted less than two years (1918-20) before surrendering to the Bolshevik authorities, who then sought to preserve Communist control under a new political system.

In 1920, Kazakhstan became part of the Kyrgyz Autonomous Republic formed by the Soviet authorities, and in 1925 this entity's name was changed to the Kazakh Autonomous Soviet Socialist Republic. In 1936, Kazakhstan was made a full Soviet republic.

After 1930, the Soviet government began forcing the nomadic Kazakhs to settle on collective and state farms, and the Soviets encouraged large numbers of Russians and other Slavs to settle in the region. During this period (known as Stalin's collectivization), Kazakhstan endured repeated famines. At least 1.5 million Kazakhs and 80 percent of the republic's livestock died. Thousands more Kazakhs tried to escape to China, Afghanistan, Iran, and Turkey; however, most of them starved in the attempt.

During the so-called Virgin Land campaign (1956-1964) a significant part of Kazakhstan's territory was put to the plow for the cultivation of wheat and corn. Also during this period, industrial development was initiated in Kazakhstan and benefited from the country's abundance of natural resources. Economic development was accelerated by the military industry and the space program, which were promoted by the Soviet government. During this period of intensive industrialization and agricultural development, many non-Kazakhs arrived in the country. By the 1970s Kazakhstan was the only Soviet republic in which the eponymous nationality was a minority in its own territory.

One negative consequence of such intensive industrialization and agricultural development was significant industrial and agrochemical pollution. The Soviet government also used Kazakhstan as a testing ground for nuclear weapons, which raised concerns about radioactive pollution in the Semipalatinsk region where the weapons were tested.

In 1991, after the collapse of the former Soviet Union, Kazakhstan officially declared itself an independent state. According to the country's Constitution, Kazakhstan is a parliamentary republic, with the president as the head of state. Former Communist Party leader Nursultan Nazarbayev became Kazakhstan's first president in 1999. In January 1999, he was sworn into office for another seven years.

Thus, two major demographic trends characterize Kazakhstan in the twentieth century: rapid urbanization and a shift in the national ethnic structure. Kazakhstan's present ethnic spectrum is the result of a migration process initiated and influenced by industrialization and political changes throughout Kazakhstan's history. Millions of ethnic Slavs (Russians, Ukrainians, Byelorussians) settled in the northern territories of Kazakhshtan, whereas the central and southern regions remained populated primarily by ethnic Kazakhs.

1.3 Economy

Kazakhstan, the second largest of the former Soviet republics, possesses significant amounts of fuel reserves as well as plentiful supplies of other minerals and metals. It also has considerable agricultural potential: its vast areas of steppe accommodate both livestock and grain production. Kazakhstan's industrial sector rests on the extraction and processing of these natural resources and on a relatively large machine-building sector specializing in construction equipment, tractors, agricultural machinery, and defense items.

The breakup of the USSR and the collapse of demand for Kazakhstan's traditional heavy industry products have resulted in a sharp contraction of the economy since 1991, with the steepest annual decline occurring in 1994. In response to worsening economic conditions, the government began accelerating reforms with a revised package of structural reform. Economic stabilization and fundamental structural reforms in the trade regime have brought about an improvement in Kazakstan's external situation.

Between 1995 and 1997, the pace of the government's program of economic reform and privatization quickened, resulting in a substantial shifting of assets into the private sector. The December 1996 signing of the Caspian Pipeline Consortium agreement to build a new pipeline from western Kazakhstan's Tengiz oil field to the Black Sea increases prospects for substantially larger oil exports in the near future.

However, there was a downward turn in Kazakhstan's economy in 1998 with a 2.5 percent decline in growth of the gross domestic product (GDP) due to slumping oil prices and the Russian financial crisis in August. Another complicating factor was moving the capital to Astana, which has both disrupted government operations and diverted a large portion of the government's budget into the massive construction necessary to make Astana a functioning capital.

Despite these difficulties, most of which can be attributed to the transition period, some evidence indicates that the economy started recovering in 1999. The government continues to commit itself to a free-market economy and has put in place efficient monetary policy and innovative pension reform. Other positive signs are the thriving securities markets and continuous fiscal and banking reform. The government has actively encouraged international trade and foreign investment, leading to higher per capita foreign-investment levels in Kazakhstan than any other former Soviet republic. To become more efficient, the government restructured and consolidated many operations to reduce the number of government ministries and agencies. Because of such policies and Kazakhstan's vast oil and mineral resources, relatively low external-debt obligations, and well-trained work force, the country's medium- and long-term economic prospects continue to be good.

1.4 Health Care System and Epidemiological Profile of Kazakhstan

Until recently, Kazakhstan's health care system, which developed as part of the Soviet-planned system, could be defined as a planned public service provided by the state, with all health personnel being state employees. The system was highly centralized and standardized. Services were free to patients, provided in state-owned facilities, and financed mostly by the state budget. Heavy emphasis was placed on training large numbers of doctors and providing large numbers of hospital beds. The system intended to provide comprehensive health coverage and universal access to services with a focus on disease prevention.

Health services were provided through a network of primary-health-care institutions, including ambulatories, dispensaries, polyclinics, hospitals (rural, delivery, and other types), and doctor's assistant/midwife posts (so-called FAPs). For the purpose of management, the country was divided into health-service-delivery areas, each representing between 3,000 and 4,000 people. Specialized services were provided through secondary and tertiary health systems.

The Soviet health care system has been successful in providing adequate access to services for most of Kazakhstan's population, including those who reside in rural and remote areas. However, maintaining such a system required substantial and continuous budgetary support and enormous manpower resources and managerial skills. Although the Soviet health care system met many of its goals, the system itself and the health of the population has deteriorated, largely due to the political and economic turmoil that accompanied the collapse of the former Soviet Union.

As a result, Kazakhstan inherited a health care system that was in a chronic state of disarray. Even in the years that preceded the collapse, the former Soviet Union was the only major country where the percentage of the gross domestic product (GDP) going to health care decreased, and it was already in the range of just 3 to 4 percent. This percentage compares with average health-care expenditures of 6 to 10 percent of the GDP in most developed countries. After the collapse of the former Soviet Union, funding to the health sector in Kazakhstan decreased to about 1 or 3 percent of the GDP, and the GDP fell by as much as 50 percent. This situation has resulted in decline in life expectancy, increased morbidity, poor conditions of hospitals and other health facilities, and overall public dissatisfaction with health services (Sharmanov et al., 1996).

The failure of the state-run health care system forces people to turn to a growing array of private health services that are available mostly through a cash payment. As a result, the picture now emerging in Kazakhstan is of a dual system: the old state system, facing chronic underfunding, and a second, loosely regulated private system, offering market and competitive solutions.

This situation, as well as the guarantee of free basic health care in the 1995 Constitution of Kazakhstan, prompted the country to search for other ways to fund health services. A new institutional structure, the Health Insurance Fund, was established in 1995 to operate the health insurance system. Initially, the fund was successful in increasing the efficiency of the health sector. However, because of mismanagement and corruption, which resulted in inefficiency and growing public criticism, the idea of the national health insurance system collapsed in 1999.

While searching for an efficient funding mechanism, the country took major steps in restructuring the primary-health-care system with the intent to redirect resources to the primary-health-care sector. Efforts to restructure the primary-care delivery system in Kazakhstan have focused on creating a network of family group practices. These practices are physically, financially, and administratively independent from higher level facilities. The funding mechanism of this system is based on a capitation system, and the ultimate goal is to increase the managerial autonomy and internal control that primary-care providers have over their resources, so they can better adapt to the needs of their service population (Borowitz et al., 1999).

Pilot programs in family group practices and new payment systems demonstrating their cost-effectiveness and high-quality services have been established in the cities of Zhezkazgan and Semipalatinsk. In late 1998, President Nazarbayev endorsed a plan to replicate nationwide the new health-care model, and a large World Bank loan was negotiated to provide support for the program. Despite some criticism among conservative groups of physicians and health administrators, the new system continues to be envisioned as an efficient means of health care management and financing.

From an epidemiological point of view, Kazakhstan has features of both developed and developing countries. The major causes of death are similar to those of industrialized countries: cardiovascular disease, cancer, and accidents. The decline in life expectancy is not due to infectious diseases, but rather to increases in cardiovascular mortality, alcohol-related deaths, accidents, and violence. Infectious diseases account for a relatively low percentage of overall mortality, generally less than 20 percent (Sharmanov, 1996, Borowitz et al., 1999).

At the same time, there is a rising incidence of tuberculosis, especially its multi-drug-resistant forms. Because of tuberculosis' consumption of a large proportion of the limited resources available to the health sector and its potentially to spread to other countries, tuberculosis is of great public-health concern in Kazakhstan. Recently, the government of Kazakshtan endorsed the DOTS program, which is a new treatment protocol for tuberculosis that provides effective treatment and prevents drug-resistant forms of the disease from spreading.

Among children, acute respiratory infections and childhood diarrheal diseases are the main causes of death. From a burden-of-disease perspective, this area is the most critical because it requires significant investment of resources as well as development of effective intervention programs.

1.5 Family Planning Policies and Programs

The main goals of Kazakhstan's family planning policy are to ensure low-risk pregnancies and safe motherhood, to reduce complications due to inadequately spaced pregnancies, and to reduce the incidence and prevalence of pregnancy complications and extragenital diseases among women of reproductive age.

In Kazakhstan, one of the primary methods of birth control is induced abortion. After its initial legalization in 1920, abortion was banned in 1936 as part of a pronatalist policy emphasizing population growth. Since this attempt to increase population growth proved unsuccessful and even harmful because of maternal deaths caused by illegal abortions, the Soviet government again legalized induced abortion for nonmedical reasons in 1955. Abortions were allowed to be performed free of charge in most health facilities, such as outpatient departments of general hospitals and delivery hospitals.

Currently, induced abortion is legal in Kazakhstan during the first 12 weeks of pregnancy. In some cases, it can be performed after 12 weeks if certain medical or social indications exist. These cases require supervision of qualified medical personnel in a hospital setting. Abortion can be done free of charge; however, fee-for-services facilities have become available to perform mini-abortions by the vacuum aspiration technique. Despite indications that the number of induced abortions has declined in recent years, the abortion issue remains a public health concern in Kazakhstan because of the prevalence of complications and the overall adverse effects on women's health.

Because of the policy of promoting safe methods of family planning, widespread use of contraception has been observed in Kazakhstan during the past several years. Among the most popular methods is the intrauterine device (IUD). Many women rely on the IUD as a convenient and safe method of contraception. For many years, oral contraceptives were less available in Kazakhstan because of the order “*On the Side Effects and Complications of Oral Contraceptives*”, published by the Ministry of Health of the former Soviet Union in 1974. This document, in effect, banned the distribution and use of oral contraceptives (United Nations, 1995).

After the collapse of the former Soviet Union, the government of Kazakhstan liberalized its policy on family planning. Currently, the government manages a broad spectrum of activities including providing intensive family planning education for the population and supplying contraceptives throughout the country. The private sector is also involved in marketing contraceptives. Women in Kazakhstan now have access to a variety of methods of contraception including oral contraceptives and injectables. Contraceptives are distributed in the public sector by pharmacies and women’s consulting centers, and in the private sector by private pharmacies.

Part of the success in reducing the abortion rate has been attributed to social marketing of contraceptives and education programs supported by the U.S. Agency for International Development (USAID) and the United Nations Population Fund (UNFPA). As a result of the government’s policies and international assistance, reliance on abortion is diminishing in Kazakhstan as use of contraceptive methods becomes more widespread. Some evidence suggests that further significant declines in the abortion rate can occur with an increase in contraceptive use (Westoff et al., 1998).

1.6 Demographic and Health Data Collection System in Kazakhstan

The demographic and health data collection system in Kazakhstan is based on the registration of events and periodic censuses. The data on births, deaths, marriages, and divorces are registered at the local administrative level of an internal passport control system. These data are then forwarded to the National Statistical Agency through the *raion*- and *oblast*-level statistical offices. The committee is responsible for conducting censuses and maintaining this registration system. The last census in Kazakhstan was conducted in 1999, and its results were published in 2000. The National Statistical Agency is also responsible for tabulating and publishing an annual report of demographic data generated by the registration system.

Collection of health data is a primary responsibility of the Health Statistics Department of the National Agency on Health. Health information is collected by staff at the facilities delivering services and then sent to the Health Statistics Department through the *raion*- and *oblast*-level health information centers. The Health Statistics Department compiles and analyzes the data and issues an annual report entitled *Health of the Population of the Republic of Kazakhstan and Health Resources*.

The health data collected and published by the Health Statistics Department consist of the following major categories: 1) morbidity specified by type of disease (infectious and noninfectious); 2) mortality specified by causes of death; 3) infant deaths, including data on antenatal, perinatal, and early neonatal deaths; 4) maternal mortality specified by causes of maternal death; 5) data on maternal and child health, including antenatal care and delivery assistance, contraceptive clients, induced abortion rates, and pediatric services; 6) number of health facilities, medical personnel, hospital beds, and length of average stay in the hospital; and 7) health data specified by type of medical services, including medical care for patients with cancer, tuberculosis, mental disorders, drug abuse, and sexually transmitted diseases. These data are usually tabulated at the national and *oblast* levels, and for some categories, by the age groups 0-14 and 15 or more years.

Despite this collection effort, a data analysis function that provides tools to evaluate and inform policy development is not sufficient. There is significant underreporting of some cases of morbidity and mortality and some of the criteria used to calculate important demographic and health indicators are based on old Soviet definitions, which sometimes do not comply with international standards. An example is the definition of live birth, which is used to calculate infant mortality rates. Kazakhstan still uses the old Soviet definition of live birth. As a result, infant mortality rates, particularly neonatal mortality rates reported by the government, are significantly lower than the actual infant mortality rates.¹

Besides the problems of inaccurate data and lack of a data analysis function, the health information collection process and systems are vertical and not integrated to create one set of data providing a picture of the health sector in Kazakhstan.

1.7 Objectives and Organization of the Survey

The 1999 Kazakhstan Demographic and Health Survey (1999 KDHS) is the second national-level population and health survey in Kazakhstan. The first Demographic and Health Survey was conducted in 1995. The 1999 KDHS was implemented by the Academy of Preventive Medicine of Kazakhstan and was funded by USAID. Technical assistance for the program was provided by the MEASURE DHS+ project of Macro International Inc. in the U.S.

The purpose of the survey is to develop a single integrated set of data for the government of Kazakhstan to use in planning effective policies and programs in the areas of health and nutrition. The survey was designed to provide current data on women's reproductive histories; knowledge and use of methods of contraception; breastfeeding practices; and the nutrition, vaccination coverage, and episodes of diseases among their children under the age of five. Information on knowledge of and attitudes toward HIV/AIDS and other sexually transmitted infections, as well as data on men's reproductive behavior, were also collected in the 1999 KDHS. The survey also included the measurement of the hemoglobin level in the blood to assess the prevalence of anemia, and measurements of height and weight to assess nutritional status (funded by UNICEF).

Since the 1999 KDHS is the second survey, it provides comparable data for analysis of trends in fertility, reproductive health, and child health and nutrition. The 1999 KDHS also contributes to the growing international database on demographic and health-related variables.

1.7.1 Sample Design and Implementation

The sample for the 1999 KDHS successfully interviewed 4,800 women 15-49 years of age and 1,440 men 15-59 years of age. Survey estimates are presented for six geographic regions. The six survey regions were defined as follows:

- (1) Almaty City
- (2) South Region: Almatinskaya, Zhambylskaya, Kyzylordinskaya, and South-Kazakhstanskaya *oblast*
- (3) West Region: Aktyubinskaya, Atyrauskaya, Mangistauskaya, and West-Kazakhstanskaya *oblast*

¹ A detailed description of definitional differences and different estimates of infant mortality is presented in chapter 9 of this report.

- (4) North Region: Akmolinskaya, Kostnaiskaya, Pavlodarskaya, and North-Kazakhstanskaya *oblast*
- (5) Central Region: Karagandinskaya *oblast*
- (6) East Region: East-Kazakhstanskaya *oblast*

The sampling frame for the 1999 KDHS consisted of the lists of health blocks obtained from local health-care departments and the National Committee on Health (for urban areas), and of the lists of villages obtained from the National Statistical Agency.

The 1999 KDHS sample is a stratified two-stage sample. Stratification was achieved by dividing each survey region into urban and rural areas. In the first stage of selection, 251 health blocks and villages were selected as primary sampling units (PSUs) with probability proportional to the population count. A complete listing of the households residing in the selected blocks and villages was carried out. The lists of households served as the sampling frame for the systematic selection of 6336 households in the second stage. Women age 15-49 were identified and interviewed in selected households. Every third household was identified as selected for the male survey, and in those households, all men age 15-59 were interviewed.

Details concerning the 1999 KDHS sample design are provided in Appendix A and the estimation of sampling errors is included in Appendix B.

1.7.2 Questionnaires

Three questionnaires were used for the 1999 KDHS: the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. These questionnaires were based on the model survey instruments developed for the MEASURE *DHS+* program and were adapted to the data needs of Kazakhstan during consultations with specialists in the areas of reproductive health and child health and nutrition in Kazakhstan. The questionnaires were developed in English and then translated into Russian and Kazakh. A pretest was conducted in April 1999. Based on the pretest experience, the questionnaires were further modified.

The Household Questionnaire was used to enumerate all usual members and visitors in a sample household and to collect information relating to the socioeconomic position of the household. In the first part of the Household Questionnaire, information was collected on age, sex, educational attainment, and relationship to the head of household for each person listed as a household member or visitor. A primary objective of the first part of the Household Questionnaire was to identify women and men who were eligible for the individual interview. In the second part of the Household Questionnaire, questions were included on the dwelling unit, such as the number of rooms, the flooring material, the source of water, and the type of toilet facilities, and on the availability of a variety of consumer goods.

The Women's Questionnaire was used to collect information from women age 15-49 on the following major topics:

- Background characteristics
- Pregnancy history
- Outcome of pregnancies, antenatal and postnatal care
- Child health and nutrition practices
- Child immunization and episodes of diarrhea and respiratory illness
- Knowledge and use of contraception

- Marriage and fertility preferences
- Husband's background and woman's work
- Knowledge of HIV/AIDS and other sexually transmitted infections
- Maternal and child anthropometry
- Hemoglobin measurement of women and children.

The Men's Questionnaire was used to collect information from men age 15-59 on the following topics:

- Background characteristics
- Reproduction
- Contraceptive knowledge and use
- Marriage
- Fertility preferences and attitudes about family planning
- Knowledge of HIV/AIDS and other sexually transmitted infections.

1.7.3 Training and Fieldwork

The 1999 KDHS questionnaires were pretested in April 1999. Eight interviewers were trained during a one-week period at the Academy of Preventive Medicine of Kazakhstan. The pretest included one week of interviewing in an urban area (Almaty City) and one week in a rural area (Talgat District of Almaty Oblast). A total of 110 women were interviewed. Pretest interviewers were retained to serve as supervisors and field editors for the main survey.

Sixty-four persons, mostly physicians, were recruited as field supervisors, editors, health investigators and interviewers for the 1999 KDHS and were trained at the Academy of Preventive Medicine for three and a half weeks in June and July 1999. Male interviewers responsible for the men's interviews were trained separately. Training consisted of lectures and practice in the classroom, as well as interviewing in the field. The training of health investigators, who were responsible for anthropometric measurements (height and weight) and hemoglobin testing of women and children, was accomplished by two days in the classroom and three days in the field.

At the end of the training, the field staff were divided into seven groups according to their assignments to the survey teams. Nine people, including one supervisor, one editor, five female interviewers, one male interviewer, and one male health investigator, were selected for each of the seven survey teams.

The 1999 KDHS field staff represented various medical-research and educational institutions in Kazakhstan, including Kazakhstan State Medical University, Karaganda State Medical Academy, South Kazakhstan State Medical Academy, International Kazakh-Turkish University, National Research Center for Maternal and Child Health, National Research Center for Pediatrics and Pediatric Surgery, National Institute of Nutrition, Institute of Tuberculosis, School of Public Health, National Medical College, and Zhezkazgan Department of Health. The Academy of Preventive Medicine recruited five field coordinators who were responsible for facilitating the communication and coordination between the Academy and the interviewing teams.

All seven 1999 KDHS interviewing teams began collecting data in Almaty City on July 12, 1999. On July 26, 1999, the teams began fieldwork in the remaining survey regions of Kazakhstan. Data collection was completed on September 25, 1999.

1.7.4 Data Processing

Questionnaires were returned to the Academy of Preventive Medicine for data processing. The office editing staff checked that questionnaires for all selected households and eligible respondents were returned from the field. The few questions that had not been precoded (e.g., occupation) were coded at this time. Data were then entered and edited on microcomputers using the Integrated System for Survey Analysis (ISSA) package, with the data entry software translated into Russian. Office editing and data entry activities began on July 12, 1999, and were completed on October 15, 1999.

1.7.5 Response Rates

Table 1.1 presents information on the coverage of the 1999 KDHS sample including household and individual response rates. A total of 6,301 households were selected in the sample, of which 5,960 were occupied at the time the fieldwork was conducted. The main reason for the difference was that some dwelling units that were occupied at the time of the household listing operation were either vacant or the residents were away for an extended period at the time of interviewing. Of the 5,960 occupied households, 5,844 were interviewed, yielding a household response rate of 98 percent.

In the interviewed households, 4,906 women were eligible for the individual interview (i.e., all women 15-49 years of age who were either usual residents or visitors who had spent the previous night in the household). Interviews were successfully completed with 4,800 of these women, yielding a response rate of 98 percent. The principal reason for nonresponse was a failure to find an eligible woman at home after repeated visits to the household.

A total of 1,531 eligible men (i.e., all men 15-59 years of age who were either usual residents or visitors who had spent the previous night in the household) were identified in every third household. Interviews were successfully completed with 1,440 of these men, yielding a response rate of 94 percent.

<u>Table 1.1 Results of the household and individual interviews</u>			
Number of households, number of interviews and response rates, Kazakhstan 1999			
Result	Residence		Total
	Urban	Rural	
WOMEN			
Household interviews			
Households sampled	4,311	1,990	6,301
Households found	4,038	1,922	5,960
Households interviewed	3,939	1,905	5,844
Household response rate	97.5	99.1	98.1
Individual interviews			
Number of eligible women	2,989	1,917	4,906
Number of eligible women interviewed	2,927	1,873	4,800
Eligible woman response rate	97.9	97.7	97.8
MEN			
Household interviews			
Households sampled	959	591	1,550
Households found	915	572	1,487
Households interviewed	899	569	1,468
Household response rate	98.3	99.5	98.7
Individual interviews			
Number of eligible men	897	634	1,531
Number of eligible men interviewed	850	590	1,440
Eligible man response rate	94.8	93.1	94.1