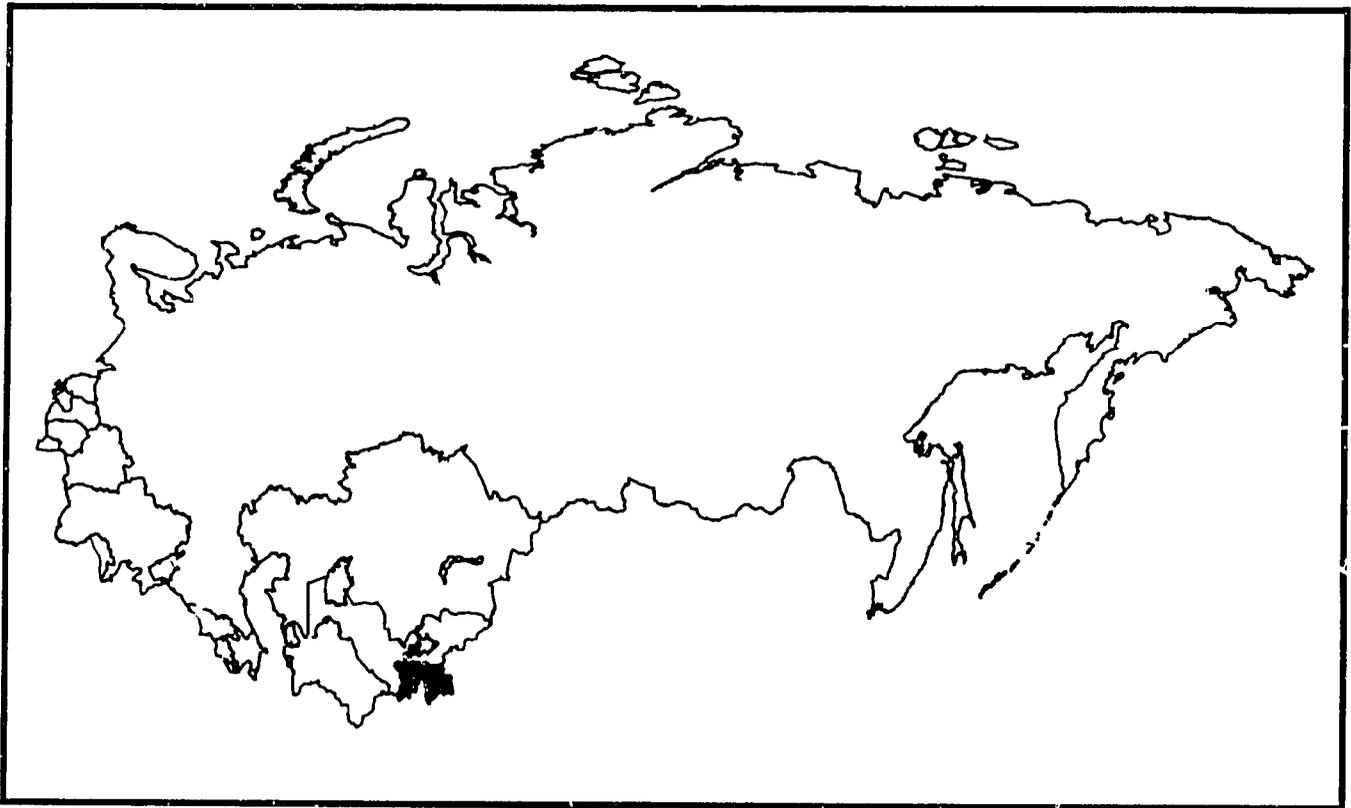

Tajikistan

USAID Health Profile

(Selected Data)

April 24, 1992



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This is one of a series of country profiles produced by the Center for International Health Information (CIHI), a USAID resource managed by the International Science and Technology Institute (ISTI). U.S. Bureau of the Census (BUCEN) made available its extensive demographic data files. Each profile includes summary descriptions, tables and graphs about the demographic and health conditions in republics of the Commonwealth of Independent States (C.I.S.).

The series of profiles is intended to provide current and trend data in a concise format to project design teams, evaluation teams, technical consultants, and other interested individuals and organizations. As summary documents, they do not provide comprehensive descriptions of either the demographic profile or health sector of the republics. Furthermore, the incipient nature of the C.I.S. necessitates the reporting of information from the era of the former U.S.S.R. While dated in some instances, policy changes in the U.S.S.R. made in the latter part of the 1980's, including the introduction of new forms of health insurance and arrangements to encourage private health providers, may well provide the foundation for the shape of the health sector in the coming decade.

This first series of C.I.S. profiles was compiled rapidly with readily available data. Occasionally, where the background documentation of the source material was sketchy and time prevented further verification, the data was included anyway in hopes that the mere inclusion of the data would stimulate further clarification by the various users of the profiles. On behalf of USAID, CIHI is planning to update the C.I.S. profiles as rapidly as new data becomes available and in response to commentary on the data in the current profiles. Accordingly, the authors of the profiles request that any more recent or more accurate data be forwarded to CIHI at the address below or to CIHI care of the USAID, Bureau of Research & Development, Office of Health, SA-18, Room 1200, Washington, D.C. 20523-1817.

Requests for additional information regarding C.I.S. republic profiles, health and population profiles for selected developing countries, and other reports prepared by CIHI should be transmitted directly to CIHI or through USAID as described above.



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**Tajikistan
USAID Health Profile**

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INTRODUCTION: An Overview of the C.I.S.

Of the 15 republics that once made up the Union of Soviet Socialist Republics, 11 joined together and formed the Commonwealth of Independent States (C.I.S.). The Republic of Georgia and the Baltic States -- Latvia, Lithuania and Estonia -- chose to remain outside the commonwealth and became independent countries. While this configuration has remained constant for many months, it is possible that the current commonwealth arrangement will be a transitional step to total separation.

While situations vary greatly from republic to republic, the recent political, economic and social transitions have created several challenges which are common throughout the entire C.I.S. The republics are moving from a totalitarian government and centrally controlled economy to a more democratic system based on free market principles. As a result, prices have risen rapidly and now far exceed individual and family incomes. The purchasing power of the population has fallen and it has become increasingly difficult to purchase essential goods.

The availability of goods has also been affected by the transition. While the former USSR achieved status as a large, industrialized nation, the structure of its economic network divided labor among republics and regions, so each republic had its own sector of emphasis. However, this specialized structure rendered republics dependent on each other and made self-sufficiency nearly impossible. Now that the republics have declared independence within the C.I.S., ties among republics have been interrupted and production, distribution and trade systems have broken down. Consequently, production capabilities and supplies of numerous essential goods in each republic have been threatened.

The combination of rising prices and a breakdown in trade and production has resulted in a shortage of even the most basic commodities. Food supplies have been particularly affected and, consequently, people are reducing their consumption. This trend further jeopardizes the already fragile health status of much of the C.I.S. population, as described below.

In the former USSR, selected population groups within each republic received subsidies from the national government. Due to the economic and social stresses of the transition, the number of people dependent on this assistance has increased. However, this increased demand for assistance comes at a time when public finance is stretched to its limit and new tax and revenue raising systems are not yet established. In addition, minimum wage is currently the criteria used to determine who should receive government support. Minimum wage, however, has not kept pace with rapidly rising prices and this criteria no longer accurately reflects who is actually in need of assistance. Likewise, new mechanisms must be created to respond to new problems: the dramatic increase of unemployment and destitution in the C.I.S.

Health services are threatened by the lack of hard currency and the breakdown of intra-republic trading. Without these two elements, supplies of essential drugs, vaccines and supplies are rapidly decreasing. While vaccination coverage rates have been relatively high in many republics, depletion of vaccine stocks has been particularly extensive and the potential exists for epidemics of infectious childhood diseases. Vaccine production has been hampered by inadequate, old facilities, shortages of specimens, and insufficient, outdated equipment. For the same reasons, essential drugs and medical supplies are limited and may soon be depleted.

The population of the C.I.S. receives little information on family planning issues. Limited availability and substandard quality of contraceptives have resulted in a high rate of abortion. The breakdown of intra-republic trade and trade with countries outside the C.I.S. has intensified the shortage of contraceptives.

INTRODUCTION (continued)

While severe hunger has been averted, the nutritional well-being of the C.I.S. population may be threatened. Rising food prices, little variety in available food and perceived scarcity all contribute to poor nutrition. Improper nutrition increases susceptibility to infections and anemia is common among pregnant women.

The state of the environment has a major impact on the health of the population. In many areas of the C.I.S., environmental contamination by chemical and radioactive pollutants is believed to be harming people's health and causing a variety of chronic conditions and birth defects.

While the challenges faced by the C.I.S. republics are similar in some aspects to those of other countries where international donor organizations work, their problems cannot be compared to those of developing countries. The republics present a unique situation: They have many capabilities but lack the necessary means to implement them. Many republics have access to modern, nationally developed technologies, but their facilities are old and unacceptable for production, the distribution and trade systems are disrupted, and lack of funding often renders continued production impossible.

As political reforms and economic privatization proceed, the nation's most vulnerable groups -- primarily women, children, aging adults and people with disabilities -- need protection. The basic needs of these groups must be met in order to avoid unnecessary human suffering and further social upheaval.

An Overview of the Central Asian Republics

In June 1990, the five Central Asian Republics (Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan, and Kyrgyzstan) signed an agreement of mutual cooperation. Totalling approximately 4 million square kilometers, the Central Asian Republics comprised about 20 percent of the former USSR. The Central Asian Republics share a common Moslem identity. They spoke as a unit when the Central Asian Republics announced they would join the new Commonwealth of Independent States in December 1991.

A region of semi-arid and desert lands, approximately 11 percent of the Central Asian Republics' land is arable. Nonetheless, 40 percent of output in the region comes from agriculture, as compared to the former USSR's average agricultural output of 20 percent. One unexpected result of the Central Asian Republics being located far from Moscow's central control is that the private sector in agriculture is relatively strong. The Central Asian Republics are also resource rich, producing approximately half of the former USSR's output of oil and natural gas.

Within the Central Asian Republics, distribution of resources is unequal, providing incentive for economic integration among the republics. Kazakhstan, Turkmenistan, and Uzbekistan are resource rich but their access to water sources is limited, whereas Tajikistan and Kyrgyzstan are relatively poor in resources, yet have the headwaters of major rivers within their borders.

Water scarcity and pollution may restrict growth of the Central Asian Republics economies. In addition, water rights and land issues contribute greatly to ethnic tension.

Given the former USSR strategy of economic specialization at the republic level, few of the now independent states have an adequately diversified economic base. As a result of this strategy, the Central Asian Republics' economies are heavily dependent on trade. Until new trade agreements are reached and commodities begin to flow freely, the Central Asian Republics will remain extremely vulnerable to economic and related political shocks.

Moreover, there is a risk that assistance strategies, designed by donor countries focusing on the European Republics, will overlook the unique ethnic, religious and geographic characteristics of the five Central Asian Republics.

TAJIKISTAN

Capital: Dushanbe

President: Rakhman Nabiyev

Prime Minister: Izatullo Khayeyev

TERRITORY

Size¹: 143,000 sq. km
 Percent of former USSR¹: 0.6%

To the west and north, Tajikistan borders Uzbekistan and Kyrgyzstan, and to the south and east, Afghanistan and China. Much of Tajikistan's territory is mountainous. Only seven percent of the land is flat and arable.²

POPULATION

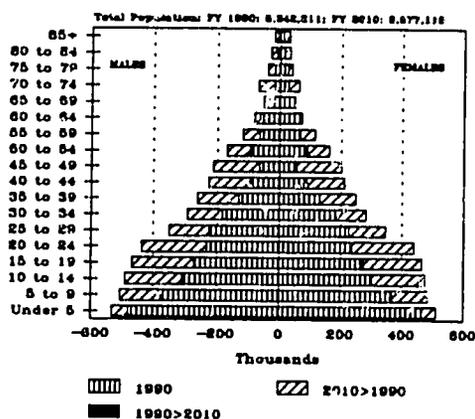
Population¹: 5.3 million (1990)
 Percentage of former USSR¹: 1.8%

Annual average population growth in Tajikistan during the 1980s was high, averaging 3.0 percent, compared to 0.7 percent for all of the former USSR. As a result, the child dependency ratio is high: a ratio of 95.0 is reported in Tajikistan, compared to a ratio in the low forties in Russia.³

Overall, the people of Tajikistan are well educated and the level of literacy is high.²

Of the approximately 5.1 million people in Tajikistan in 1989, the total number of males was 2,538,000 and females totalled 2,571,000. There were approximately 987 males per 1,000 females.⁴

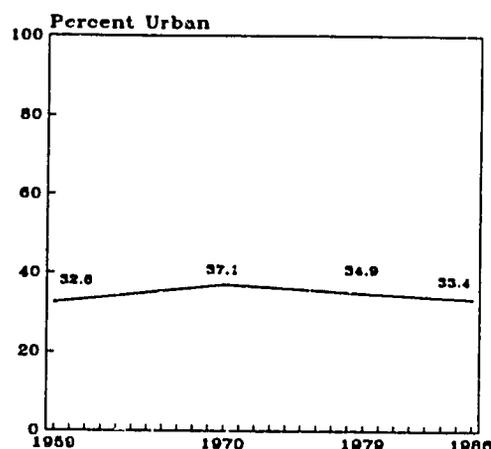
Figure 1:
 Current and Projected Population by Age and Gender in Tajikistan: 1990-2010



Level of urbanization:

Tajikistan and its fellow Central Asian republics are primarily rural, a status which has changed little in the last 30 years. In 1959, approximately 32.6 percent of the population lived in urban areas. By 1970, this percent increased to 37.1, but by 1979 it dropped to 34.9.⁵ By 1989, the percent had decreased further to 32.6, with a total of 1,668,000 people living in urban areas and 3,441,000 living in rural areas.⁴

Figure 2:
 Urbanization in Tajikistan



Language fluency

About 36 percent of Tajikistan's population speaks Russian fluently, while only 3.5 percent of Russians living in the republic speak Tajik fluently.¹

Population by nationalities

Ethnic Tajiks make up 62.4 percent of Tajikistan's population; 23.5 percent are Uzbek and 7.6 percent are Russian.¹

A resurgence of nationalism, cultural pride and ethnic identity has grown in Tajikistan along side the transition to the new economic system. Attempts to settle Armenians in the republic two years ago caused civil riots.³

TAJIKISTAN: USAID Health Profile (continued)

Nationalities in Tajikistan ⁴ (1989)	
Total	5,093,000
<u>Republic Nationalities</u>	
Tajik	3,172,000
Byelarussian	1,198,000
Russian	388,000
Kyrgyz	64,000
Ukrainian	41,000
Turkmen	20,000
Kazakh	11,000
Uzbek	7,000
Armenian	6,000
Azerbaijani	2,000
Georgian	1,000
Lithuanian	1,000
Moldovan	1,000
Latvian	0
Estonian	0
Other*	88,000
<u>Autonomous Republic Nationalities</u>	
Tartars	72,000
North-Ossetians	8,000
Dagestanis	1,000
Mordvinians	6,000
Bashkirs	7,000

* includes Jews, Germans and others

ECONOMIC OVERVIEW

Tajikistan is one of the poorest republics of the C.I.S. and the Central Asian republics. Its net material product per capita in 1988 was less than half of Russia's, and among the Central Asian republics, Tajikistan has the lowest per capita net material product (two thirds the level of Kazakhstan). The republic relies on oil, gas and food imports.²

Agriculture is the largest sector of Tajikistan's economy and the republic is the leading producer of cotton among the Central Asian republics.²

The impact of the transition to a free market system has created economic hardships in Tajikistan similar to those in other C.I.S. republics. Intra-republic trading has collapsed, creating a shortage of goods and services in a country which depends on outside sources for much of its food and energy, particularly fuel. Tajikistan now relies on barter with other C.I.S. republics.²

Since the dissolution of the former USSR, price inflation is common and market prices of basic food and services has increased five to 20 times. Individual and family income has not increased proportionately with inflation and consequently the population's purchasing power has been cut in half.² Although Tajikistan is committed to a market economy, development of supportive legislation and privatizing activities has been slow.³

Production

Tajikistan produces 0.8 percent of the total net output of the C.I.S. In 1988, the republic's net output was 1.5 percent of the total for the former USSR.¹

The economy of Tajikistan is predominately agrarian; 40 percent of employment is in agriculture, a large portion of which is state, collective and private farms.² Almost one half of Tajikistan's total agricultural employment is in the private sector; in Russia it was under 10 percent.³

Cotton is the main crop and Tajikistan is the leading producer of this crop among the other Central Asian republics. Other crops include barley, millet, rice and wheat. Vegetable and fruit production is increasing.² However, these crops and cotton, a water and pesticide intensive crop, compete for scarce water resources. This scarcity could seriously hamper Tajikistan's agricultural development.³

Some amounts of antimony, fluorite, lead, molybdenum, tungsten, zinc and uranium are mined. While natural gas deposits exist, they have not been exploited.²

Industrial production in Tajikistan focuses on metal

TAJIKISTAN: USAID Health Profile (continued)

cutting machine., refrigerators, freezers, washing machines and vegetable oil. Exports include light industrial goods: mainly textiles and some nonferrous metals.³

Oil, Gas and Coal Production in Tajikistan⁶

	Oil*	Gas**	Coal
1970	.2	.4	n/a
1975	.3	.4	n/a
1980	.4	.2	n/a
1985	.4	.3	n/a
1986	.4	.3	n/a
1987	.3	.3	n/a
1988	.3	.2	n/a
1989	.2	.2	n/a

* Crude oil production, including gas condensate, in million metric tons

** Natural gas production, in billion cubic meters

INCOME OVERVIEW

In 1989, forty-six percent of the republic's population had a per capita monthly income between 75 and 200 rubles; the income of 51 percent was under 75 rubles and only three percent had an income over 200 rubles.³

EMPLOYMENT OVERVIEW

Approximately 1.2 million people in Tajikistan were employed in 1989. Employment is distributed as follows⁷:

Employment by Branch (1989)	
Industry	224,000
Agriculture*	164,000
Transportation	102,000
Communications	15,000
Construction	136,000
Public services**	144,000
Social security***	89,000
Education	178,000
Culture & art	24,000
Science & services	32,000
Credit & state insurance	7,000
Administration	30,000
Other	17,000

Employment by Branch (continued)

- * includes employment on state farms and in forestry
- ** includes employment in trade, public dining, material technical supply and procurement, housing and municipal economy
- *** includes employment in health, physical, cultural and social security

HEALTH OVERVIEW

Total population ¹ :	5.3 million	1990
Crude birth rate ² :	38.4 per 1,000 population	1990
Crude death rate ² :	6.2 per 1,000 population	1990
Infant mortality rate ² :	48.9 per 1,000 live births	1987
Maternal mortality ratio ¹⁰ :	38.9 per 100,000 live births	1989

The health system of the former USSR was chronically neglected, and the individual republics of the C.I.S. have inherited this legacy and its problems. Areas demanding the most immediate attention in the C.I.S. are the quality of care given by physicians and nurses; shortage of medical supplies, pharmaceuticals and equipment; inadequate facilities; and, finally, the population's lack of access to information about basic health practices and family planning.²

While the republic has developed a relatively sound health care system, the system now faces uncertainty and possible collapse due the rapid transition of the economic and political systems. Women, children, pensioners and people with disabilities are particularly vulnerable in this situation, especially since women and children already experience chronic health problems.²

In addition, a high fertility rate and moderate mortality rate has resulted in the fastest population

TAJIKISTAN: USAID Health Profile (continued)

growth of all republics in the C.I.S.² Policy in the former USSR encouraged large families by providing political recognition, economic subsidies and special incentives to parents with eight or more children. But the current economic decline has made payment of this support impossible and consequently, these large families cannot provide sufficient food for their children.¹¹

On national and local levels, inventories of many basic vaccines, drugs and medical supplies are completely exhausted. The worsening economic situation and the disruption of trade has diminished or depleted vaccine supplies. Consequently, vaccination coverage has begun to drop and the risk of disease outbreak is high. Depleted supplies include basic medications, antibiotics, antiseptics, syringes and other consumables. Although patients in hospitals must often provide such supplies themselves, the supplies have been unavailable on the private market as well.¹¹

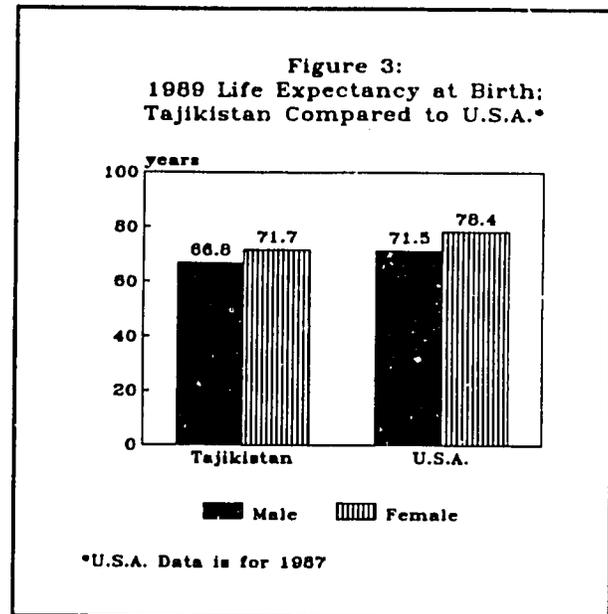
Hygiene is often inadequate.² The percentage of Tajik homes with no sewage systems, running water or central heat in 1985 was 72 percent, a higher percentage than any of the other Central Asian republics.³

Severe hunger has been averted so far, but rampant inflation has reduced purchasing power, compromising food consumption and nutrition.² For example, an estimated 5,000 families (most of them large) in Dushanbe and its suburbs are disadvantaged and suffer from malnutrition. Often by the time a malnourished child is brought to a Dushanbe hospital for respiratory or other diseases, irreversible long term damage has already been done that institutional feeding cannot remedy.¹¹

The ability of health officials to respond to the various situations described above is hampered by a shrinking health budget which is already the smallest budget compared to other ministries. Major support from the former USSR for drugs and supplies totalled about US\$ 25 million in 1991, but this amount was reduced later that year and has stopped completely in 1992. In addition, medical staff salaries have not kept pace with inflation. These fiscal pressures make the need for privatization of medical services more urgent.²

Life expectancy

Life expectancy at birth in Tajikistan in 1989 was 66.8 years for males and 71.7 years for females, compared to 71.5 and 78.4 years for males and females, respectively, in the United States in 1987.¹²



Mortality rate

Since the early 1970s, the course of mortality rates in all of the former USSR republics has generally followed the trends typical for the all-Union level. Mortality rates gradually increased for more than a decade before steady improvement began in 1985-86, but by the late 1980s, Russia was the only republic with a mortality rate lower than in 1970. Ukraine, Georgia and Armenia are approximately at the 1970 mortality level.¹³

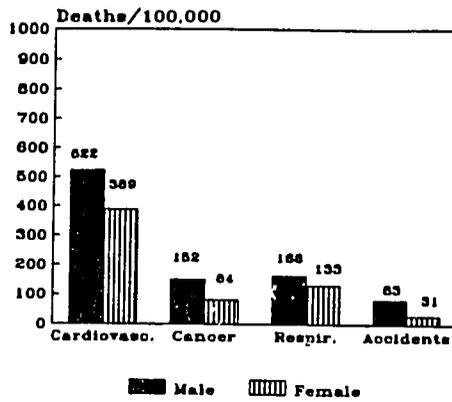
In Tajikistan, mortality rates for males rose from 8.5 in 1970-71 to 9.8 in 1986-87 and for females the rate increased from 6.7 in 1970-71 to 7.3 in 1986-87.¹³

Causes of death

The main causes of death in Tajikistan are cardiovascular conditions, respiratory conditions, cancer and accidents. In 1988, a total of 1,136.6 males and 810.3 females (both per 100,000 population) died from these and other causes.¹⁰

TAJIKISTAN: USAID Health Profile (continued)

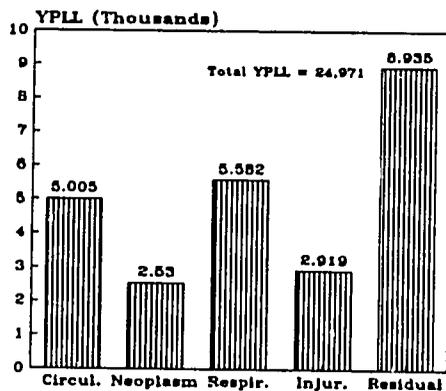
Figure 4:
Mortality Rates by Cause of Death in Tajikistan



Years of potential life lost (YPLL)

Each year in Tajikistan, males lose a total of 24,971 years of potential life per 100,000 population due to various causes of death. Respiratory conditions are the most common, causing 5,582 YPLL. Death caused by circulatory conditions total 5,005 YPLL, injuries total 2,919 YPLL, neoplasms total 2,530 YPLL, and other causes (residual) total 8,935 YPLL.¹⁴

Figure 5:
Years of Potential Life Lost by Cause of Death in Tajik Males

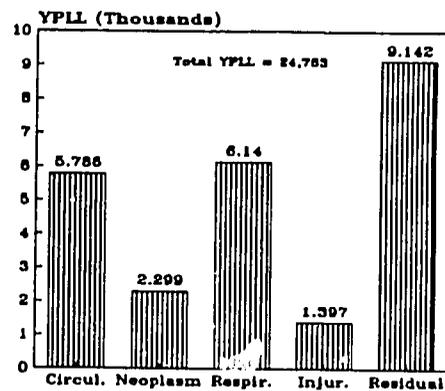


Figures are per 100,000 population

Females in Tajikistan annually lose a total of 24,763 years of potential life per 100,000 population due to

various causes of death. Like Tajik males, respiratory conditions are the leading cause, totaling 6,140 YPLL. Circulatory conditions total 5,786 YPLL, neoplasms total 2,299 YPLL, injuries total 1,397 YPLL, and other causes (residual) total 9,142 YPLL.¹⁴

Figure 6:
Years of Potential Life Lost by Cause of Death in Tajik Females



Figures are per 100,000 population

Fertility rate

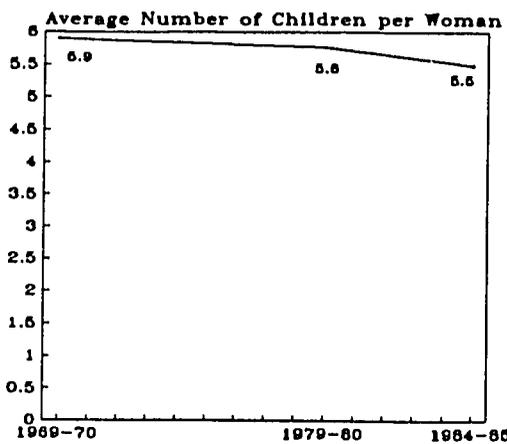
While family size tends to be large in Tajikistan, the fertility rate in this republic actually dropped between 1969 and 1985. In 1969-70, the fertility rate was 5.9; by 1979-80, this rate had fallen to 5.8 and by 1984-85, it was 5.5.⁵

In 1976, the fertility rate in the Central Asia republics of Tajikistan, Turkmenistan and Uzbekistan began to decline. At the same time, the proportion of ethnic Russians in the republics also began to decline, which suggests that the drop in fertility is actually occurring among Central Asian nationalities.⁵

To account for under-registration of births, the U.S. Bureau of the Census (BUCEN) adjusted the total fertility rate (TFR) for 1990 to be 5.2 children per woman. The projected TFR for 2010 is 3.19 children.¹⁷

TAJIKISTAN: USAID Health Profile (continued)

Figure 7:
Total fertility Rate in Tajikistan



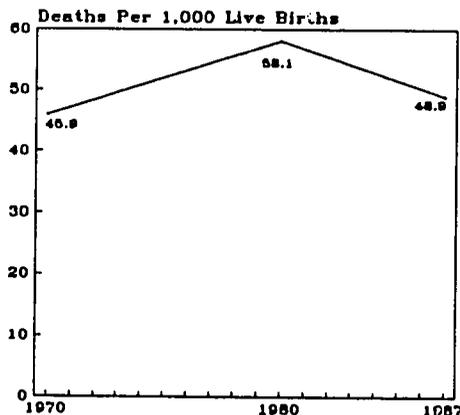
Maternal mortality

The maternal mortality ratio in 1989 was 38.9 deaths per 100,000 live births.¹⁰ Further information on factors affecting women's health can be found in sections below.

Infant mortality

The infant mortality rate in Tajikistan increased from 45.9 deaths per 1,000 live births in 1970 to 58.1 deaths in 1980, and then fell to 48.9 deaths in 1987.⁹ The rate continued to decrease and by 1989, it was 46.0 deaths, almost the same as in 1970.²

Figure 8:
Infant Mortality Rate in Tajikistan

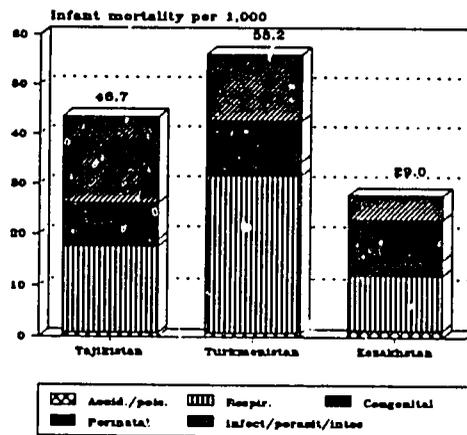


**Infant Mortality Rates (per one thousand live births)¹³
According to Place of Residence (1975-86)
Tajikistan vs. Former USSR**

	1975		1980		1986	
	Tajik.	USSR	Tajik.	USSR	Tajik.	USSR
Urban	68.2	25.8	62.9	23.5	43.4	21.1
Rural	86.1	37.0	56.4	32.5	47.8	31.4

Of the 46.69 infant deaths (per 1,000 live births) reported in Tajikistan in 1986, 17.40 were caused by infectious, parasitic and intestinal diseases; 16.90 were caused by respiratory diseases; 1.31 were caused by congenital anomalies; 7.22 were caused by perinatal conditions; and 0.73 were caused by accidents and poisonings.¹³

Figure 9:
Infant Mortality Rates (1986) by Cause
In Turkmenistan, Tajikistan & Kazakhstan



In 1986, Tajikistan's perinatal mortality rate (from 28 weeks of pregnancy to the end of the seventh day of life) of 20.33 percent was the highest of all the republics in the former USSR.¹³

The official Soviet statistics for infant mortality rates understate the actual levels by approximately 50 percent, according to BUCEN estimates. The definition of infant mortality in the former USSR varied significantly from the standard international definition from WHO. BUCEN estimates infant mortality for 1990 to be 72.00 deaths per 1,000 live births and for 2010 to be 34.87 deaths.¹⁷

TAJIKISTAN: USAID Health Profile (continued)

Child health

The health status of Tajikistan's children is in many ways similar to other populations in developing countries which have moderate-level mortality rates, and the current economic crisis in the republic introduces new health risks. Acute respiratory infections (ARIs), diarrheal diseases, vaccine-preventable diseases, malnutrition, malaria and other infections and nutritional disorders are the leading causes of morbidity and mortality among children under five years of age.²

Among children under five years, 62 percent of mortality is linked to ARIs, including pneumonia; among children under 15 years, ARIs account for up to 40 percent of the deaths. The Ministry of Health data, while not entirely reliable, shows that ARIs total 37 percent of registered infant morbidity. Supplies of antibiotics for ARI treatment are insufficient, and standard treatment procedures for these infections are not frequently practiced.²

Diarrheal disease was attributed to 29.7 percent of under five mortality in 1991. An increase in diarrhea morbidity between 1989 and 1991 is primarily due to the more dangerous acute dysenteric form of diarrhea. Oral rehydration solution (ORS) is commonly prescribed by Tajik physicians, but standard guidelines have not been developed. Inappropriate use of antibiotics and widespread use of unnecessary drugs further complicate the situation.²

Malaria is endemic along Tajikistan's southern border with Afghanistan and incidence is reported to have increased 1.5 times from 1990 to 1991. The rising incidence is due to a lack of insecticides and the breakdown of control measures amidst civil conflict. Hepatitis (mostly A type) incidence increased 50 percent between 1990 and 1991; hepatitis B vaccine is not available in the republic.²

The incidence of tuberculosis and micronutrient deficiencies are unknown. Vitamin A deficiency has not been reported but goiter has been reported, particularly in inaccessible mountainous areas. The level of low birth weight babies is reportedly low (seven percent under 2.5 kg); second and third degree malnutrition is only about 10 to 12 percent.²

Breastfeeding

The median length of breastfeeding in Tajikistan is about 12 months, but ceasing or abbreviating breastfeeding is reported.²

Dried baby foods are widely used as an alternative to breastfeeding, but since they were imported from Russia and Ukraine, they are now in short supply. The government under the former USSR operated "milk kitchens," which supplied free food to infants; coverage through the kitchens, however, was variable. These facilities were extremely popular but likely contributed to the low number of women who breastfeed. As supplies run out at these kitchens, the nutritional status of many vulnerable children will be jeopardized.²

Women's reproductive health

The reproductive health needs of Tajikistan's women are not being met, particularly in the areas of family planning, safe motherhood, maternal and child health services and control of sexually-transmitted diseases.²

The average family size in Tajikistan is large since women marry early, births are closely spaced, and the use of contraceptives is low. The total fertility rate in Tajikistan is about five children per woman, compared to the Russian rate of 3.2 children per woman. In 1991, the average size of a rural family was 5.3 members while urban families averaged 3.4 members. Nine percent of families have 10 or more children.²

About 96 percent of deliveries are performed under some kind of medical supervision. Women suffer from a high prevalence of nutritional anemias: official statistics report 20 to 30 percent, but anecdotal evidence suggests prevalence as high as 60 to 70 percent.²

Of 1.2 million women of reproductive age, only about 13 percent use modern contraceptives, even though IUDs, oral pills and condoms are in principle provided for free by government service delivery outlets. The IUD is the most commonly used method. Russian-made IUDs are of inferior quality and some doctors are reluctant to insert

TAJIKISTAN: USAID Health Profile (continued)

them; IUDs from Yugoslavia and Finland are more popular but supplies are limited. The use of oral pills is very low because both women and medical staff are concerned about side effects. As a result of the limited use of contraceptive methods, abortions are frequent, although the precise level is unclear.²

The prevalence of syphilis, gonorrhea and other STDs is low, suggesting that AIDS is not a major threat at this time. Tajikistan's blood supply is screened and intravenous drug abuse is rare. Only two people have been identified as HIV positive thus far.²

Women's status

Women play a significant role in Tajik society. Female life expectancy exceeds that of men's by nearly seven years.²

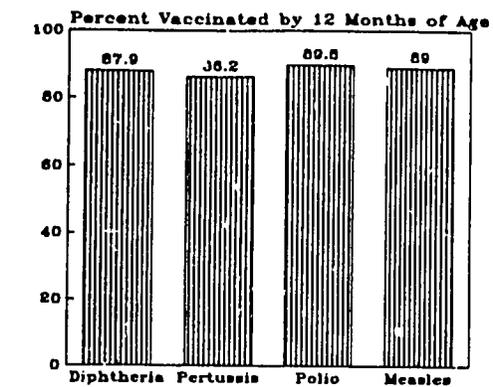
Primary education and literacy are high among women. Thirty-five percent of Tajik women are part of the work force, although this percentage is lower than in other Central Asian republics. Liberal social policies include three years of maternity leave at 25 percent of salary and allowances to titular nationalities to encourage child bearing. Despite the importance of their role in the workforce, Tajik women continue to carry the double burden of work and domestic responsibilities.²

Women are active in political and social issues, particularly through organizations such as the Union of Tajik Women and the Women's Committee to the Cabinet of Ministers. However, only eight percent of the 230 members of the Parliament and two of the 16 cabinet ministers are women.²

Vaccine coverage

In 1989, vaccine coverage in infants in Tajikistan vaccinated up to 12 months of age had reached the following levels: 89.9 percent vaccinated against polio, 87.9 percent against diphtheria and 86.6 percent against pertussis. Vaccination coverage against measles in children by 24 months of age was 89.0 percent.¹⁵

Figure 10:
1989 Vaccination Coverage
in Tajik Infants



*Children up to 2 yr for measles vaccine

However, the economic transition and the disruption of trade with other C.I.S. republics and other nations has greatly diminished or entirely depleted Tajikistan's vaccine supplies. Consequently, vaccination coverage has begun to drop and the risk of disease outbreaks is high.¹⁶

While the WHO/EPI reports vaccine coverage to be almost 95 percent, the Tajik Ministry of Health reports that actual coverage is probably lower due to inaccessibility during winter months, loss of vaccine potency and variable vaccine supply. In fact, potency problems often result in children having to receive measles vaccination more than once.²

The possibility of an outbreak of measles is high since measles vaccine has not been available since late 1991. Measles vaccine donated by UNICEF will run out by summer and as of April 1992, no other vaccine donation was expected.¹⁶ The Ministry of Health estimates that of the 450,000 units of measles vaccine required in 1992, only 15 percent (70,000 units) are expected to be received.²

Supplies of other vaccines are at critically low levels. To prevent the cessation of vaccination programs, standard childhood vaccines are needed to provide continuing coverage for newborns through the winter, when the risk of immunizable diseases is at its peak.¹⁶

Tajikistan's current cold chain status is tenuous,

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revealing the need for cold chain equipment and technical assistance for its implementation.¹⁶ In fact, refrigeration is available in only half of the cold chain's peripheral units.² The supplies of disposable syringes and needles necessary for safe vaccination are also currently insufficient.¹⁶

Environmental factors and health

According to the Ministry of Health, about 65 percent of the population currently has access to piped water, although in rural areas this level is only 40 percent. However, even in areas with piped water supply, water quality is poor, a condition which has contributed to a relatively high incidence of diarrheal diseases and hepatitis A. About two-thirds of the rural population gets its drinking water from open sources.²

Chemical and pesticide pollutants are the main contributors to environmental hazards in Tajikistan. Pesticide use in Tajikistan has been measured at 19 kg per hectare, compared with 2 kg in other republics of the former USSR. Indiscriminate pesticide application is very high, particularly for cotton, where application is often done by airplane. Pesticide residue in mothers' breast milk has been reported by the Research Institute on Child and Mother Protection, although specific data was not provided.²

A high incidence of respiratory ailments, particularly asthma, neurological and congenital disorders and immunosuppression among children is also attributed to chemical pollution.²

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Sources

1. U.S. Information Agency. "Tajikistan: Fact Sheet."
2. UNICEF/WHO Collaborative Mission with participation of UNFPA, UNDP and WFP. "The Invisible Emergency: A Crisis of Children and Women in Tajikistan." February 1992.
3. Landy, Laurie. "Official Donor Aid to the Former Soviet Union -- The Central Asian Republics (CAR): Economic Background and Initial Programming Thoughts."
4. Center for International Research. U.S. Bureau of the Census. U.S. Department of Commerce. "Supplement to - SA/USSR: Facts and Figures." October 1991.
5. Joint Economic Committee. Congress of the United States. "Gorbachev's Economic Plans." Vol. 1. November 23, 1987.
6. U.S. Bureau of the Census. U.S. Department of Commerce. "USA/USSR: Facts and Figures." 1988-89.
7. Heleniak, Tim. "Employment by Branch for the USSR and Republics: 1960 to 1989." Center for International Research. U.S. Bureau of the Census. May 1990.
8. Center for International Research. U.S. Bureau of the Census. U.S. Department of Commerce. 1990.
9. Rowland, Diane, and Alexandre V. Telyukov. "Soviet Health Care from Two Perspectives." Health Affairs. Fall 1991:71-86.
10. Center for International Research. U.S. Bureau of the Census. U.S. Department of Commerce. "Commonwealth of Independent States: Health Status." January 1992.
11. Site report from Team Dudley. "Initial Observations on Emergency Needs." Dushanbe, Tajikistan. February 6, 1992.
12. Kingkade, W. Ward. "Health." Center for International Research. U.S. Bureau of the Census. U.S. Department of Commerce. August 1991.
13. Mezentseva, Elena, and Natalia Rimachevskaya.

"The Soviet Country Profile: Health of the U.S.S.R. Population in the 70s and 80s--An Approach to a Comprehensive Analysis." Social Science and Medicine 31.8 (1990):867-877.

14. Kingkade, W. Ward. "Regional Variations in Soviet Mortality by Cause of Death: An Analysis of Years of Potential Life Lost." Center for International Research. U.S. Bureau of the Census. Department of Commerce. August 1991.
15. World Health Organization/Expanded Program on Immunization. February 1991.
16. Reporting cable from American Embassy/Dushanbe to AIDW. Unclassified cable Dushanbe #00045. April 1992.
17. Center for International Research. U.S. Bureau of the Census. U.S. Department of Commerce. "Tajikistan: 1989-2050 Using Adjusted Population, Fertility, Mortality and Migration." April 1992.

Figures

1. U.S. Bureau of the Census. March 1992.
2. Center for International Research. U.S. Bureau of the Census.
3. Center for International Research. U.S. Bureau of the Census.
4. Center for International Research. U.S. Bureau of the Census.
5. Center for International Research. U.S. Bureau of the Census.
6. Center for International Research. U.S. Bureau of the Census.
7. U.S. Bureau of the Census.
8. Soviet Health Data.
9. Statistical Yearbook 1987. Moscow 1988. Cited in Mezentseva and Rimachevskaya, Soc. Sci. Med. 31(8).
10. Expanded Program on Immunization/World Health Organization.

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Data Notes Indicator Definitions

DEMOGRAPHIC INDICATORS

TOTAL POPULATION: Mid-year estimate of the total number of individuals in a country.

YEARS OF POTENTIAL LIFE LOST: The weighted difference between the number of years of life expectancy in absence of all preventable mortality and the number of years lost due to preventable mortality. Since deaths of children result in a greater loss of life span than deaths of adults, the differences in loss of potential life are taken into account by using a type of measure which heavily weights the importance of child death.

LIFE EXPECTANCY AT BIRTH: An estimate of the average number of years a newborn can expect to live. Life expectancy is computed from age-specific death rates for a given year. It should be noted that low life expectancies in developing countries are, in large part, due to high infant mortality.

MORTALITY RATE: Basic cause-specific death rates are usually expressed in deaths per 100,000 because for most causes of deaths the rates of occurrence are so low.

CHILDREN UNDER 1: Mid-year estimate of the total number of children under age one.

INFANT MORTALITY RATE (IMR): The estimated number of deaths in infants (children under age one) in a given year per 1,000 live births in that same year. An IMR may be calculated by direct methods (counting births and deaths) or by indirect methods (applying well-established demographic models).

MATERNAL MORTALITY RATIO: The estimated number of maternal deaths per 100,000 live births where a maternal death is one which occurs when a woman is pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management. Although sometimes referred to as a rate, this measure is a ratio because the unit of the numerator (maternal deaths) is different than that of the denominator (live births). Extremely difficult to measure, maternal mortality can be derived from vital registration systems (usually underestimated), community studies and surveys (requires very large sample sizes) or hospital registration (usually overestimated).

TOTAL FERTILITY RATE: An estimate of the average number of children a woman would bear during her lifetime given current age-specific fertility rates.

VACCINATION COVERAGE RATES

VACCINATION COVERAGE IN CHILDREN: An estimate of the proportion of living children between the ages of 12 and 23 months who have been vaccinated before their first birthday -- three times in the cases of polio and DPT and once for both measles and BCG. Vaccination coverage rates are calculated in two ways. Administrative estimates are based on reports of the number of vaccines administered divided by an estimate of the pool of children eligible for vaccination. Survey estimates are based on sample surveys of children in the target age group and may or may not include children without vaccination cards whose mothers recall that their children had been vaccinated.

Commonwealth of Independent States

