Health-related Millennium Development Goals

At the United Nations Millennium Summit in 2000, 193 world leaders signed the Millennium Declaration, a commitment to meet eight international development goals by 2015. The Declaration places emphasis on world peace, security and development and encompasses principles underlying environmental protection, human rights and effective governance. The Declaration spells out the Millennium Development Goals (MDGs) to guide a comprehensive and broad-based programme to overcome the root causes of poverty and substantially reduce it by 2015. Each of the eight goals has specific targets, whereas their monitoring is to be performed based on relevant indicators.

Millennium Development Goals in Georgia
World Health Statistics, 2011, WHO

Millenium Development Goals:

1. Eradicate extreme poverty and hunger;
2. Achieve universal primary education;
3. Promote gender equality and empower women;
4. Reduce child mortality;
5. Improve maternal health;
6. Combat HIV/AIDS, malaria, and other diseases;
7. Ensure environmental sustainability;
8. Develop a global partnership for development.

Georgia, as a country, which have signed the Millennium Declaration, adopts the obligation to ensure implementation of Millennium Development Goals, reflects them in national development strategies and reports periodically on the status of implementation of goals.

Health-related progress evaluation indicators are as follows:

- Prevalence of underweight in children under 5;
- Under 5 mortality rate;
- Infant mortality rate;
- Percent of children ages 12-23 months immunized against measles;
- Maternal mortality ratio;
- Proportion of births attended by skilled health personnel;
- Contraceptive prevalence rate;
- Adolescent birth rate;
- Antenatal care coverage;
- Unmet need for family planning;
- HIV prevalence among population aged 15-24 years;
- Proportion of population with advanced HIV infection with access to antiretroviral drugs;
- Incidence and death rates associated with malaria;
- Incidence, prevalence and death rates associated with tuberculosis;
- Proportion of population using an improved drinking water source;
- Proportion of population using an improved sanitation facility.

Prevalence of underweight in children under five

Undernutrition among children remains common in many parts of the world. According to recent estimates, 115 million children under 5 years of age worldwide are underweight. Although global prevalence is decreasing, progress is uneven.

World Health Statistics, 2011, WHO

According to the assessments of United Nations Children's Fund, Georgia is among those countries, where actions taken to reduce malnutrition will remarkably improve indicators of growth and underweight in children under 5, which is correlated with the children mortality rate in this age group.
http://demoscope.ru/weekly/2011/0465/biblio04.php

Cattaneo A, et.al. Strategic directions in health and nutrition aiming at accelerating achievement of MDG 4 and related objectives in the countries of Central and Eastern Europe and Commonwealth of Independent States, 2008, UNICEF

In those countries, where routine statistics are collected using aggregated forms, the assessment of prevalence of underweight in children is performed by different surveys. The full-scale Multiple Indicator Cluster Survey (MICS) is one of such surveys. Its methods and standards were developed to collect information related to conditions of children and women. In 1995, 2000 and 2005-2006, three rounds of surveys were carried out worldwide in more than 50 countries. The latest MICS in Georgia was performed in 2005 by the National Centre for Disease Control and National Statistics Office of Georgia with the financial and technical support of UNICEF. According to the survey in Georgia only 2.1% of children under the age of 5 years were moderately underweight, and the index of extremely underweight children was 0.3%. Almost 5% of children suffered from moderately retarded growth or they were underweighted compared with their height.

In 2009, a Georgian National Nutrition Survey was performed. This survey was aimed on studying the nutrition status of different groups in the country. The survey results showed that in Georgia underweight is not frequent in children aged under five. Prevalence of underweight was less than 2.3% in all total, as well as in separate groups. These data correspond to child growth standards, recommended by World Health Organization (Georgian National Nutrition Survey, 2009).

Prevalence of underweight in children under five (%), 2009

	Severe underweight	Moderate underweight	None (normal)
All	**14 (0.5%)**	**25 (0.6%)**	**2981 (98.8%)**
Sex			
Male	7 (0.4%)	19 (0.9%)	1599 (98.7%)
Female	7 (0.6%)	6 (0.4%)	1382 (99.0%)
Age			
< 12 Months	3 (0.4%)	7 (0.8%)	561 (98.7%)
12-23 Months	3 (0.7%)	4 (0.7%)	627 (98.6%)
24-35 Months	1 (0.1%)	2 (0.3%)	573 (99.6%)
36-47 Months	5 (1.3%)	4 (0.6%)	518 (98.1%)
48-59 Months	2 (0.2%)	8 (0.8%)	702 (99.0%)

	Severe underweight	Moderate underweight	None (normal)
Region			
Tbilisi	3 (0.8%)	1 (0.3%)	360 (98.8%)
Ajara and Guria	2 (0.6%)	1 (0.3%)	337 (99.1%)
Imereti and Racha-Lechkhumi	1 (0.5%)	2 (1.0%)	204 (98.6%)
Kakheti	2 (0.7%)	1 (0.3%)	304 (99.0%)
Kvemo Kartli	2 (0.3%)	8 (1.1%)	751 (98.7%)
Samegrelo	1 (0.4%)	3 (1.1%)	272 (98.6%)
Samtskhe-Javakheti	3 (0.6%)	8 (1.6%)	490 (97.8%)
Shida Kartli and Mtskheta-Mtianeti	0	1 (0.4%)	263 (99.6%)

Source: Georgian National Nutrition Survey

Under-five mortality rate*

The total number of deaths of children under 5 years old fell from 12.4 million in 1990 to 8.1 million in 2009. The mortality rate in children under 5 years old has fallen correspondingly from 89 per 1000 live births in 1990 to 60 per 1000 live births in 2009, representing a reduction of about one third.

World Health Statistics, 2011, WHO

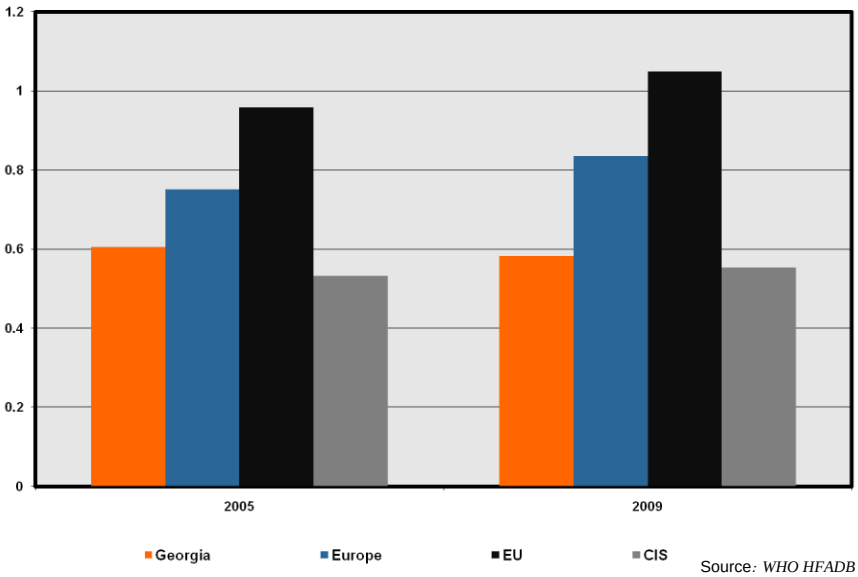
Maternal and Child Health protection is considered as one of the main priorities of healthcare in Georgia, which is reflected in implementation of many governmental programmes.

National Statistics Office of Georgia (GeoStat) and routine medical statistics collected by the National Center for Disease Control and Public Health (NCDC&PH) are the main sources of data about under five mortality rate. Official statistical data periodically are assessed implementing different surveys. Particularly, in Georgia, the full-scale Reproductive Health Survey (GERHS) is conducted with the 5-years intervals. Apart from that, the WHO periodically makes estimates of indicators for country, regional and global levels. Difference between official and evaluative data is caused by the quality of recording. In 2009, according to the assessment of the WHO, a ratio of the recorded and estimated values of the under-five mortality rates in Georgia is still lagging behind the same indicator in the European Union (see Figure 1.1).

According to the last assessment of the WHO, in 2010, under-five mortality rate in Georgia was 22.0, which is different from official and survey data.

* *See additional information in the chapter "Maternal and Child Health".*

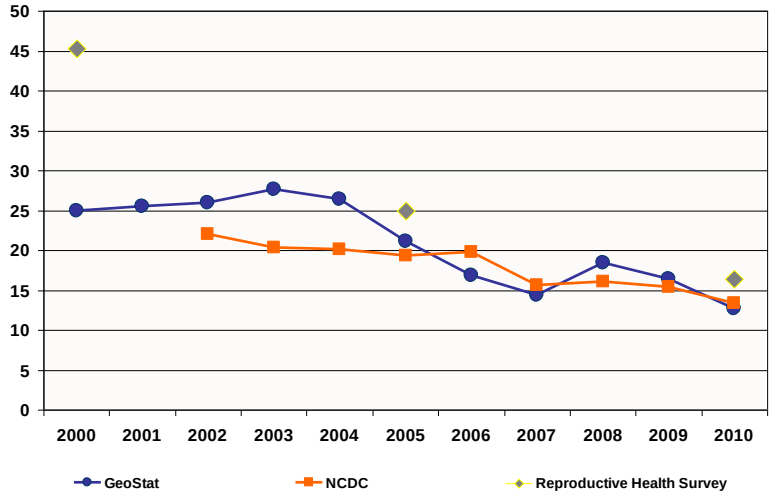
Figure 1.1 **Ratio reported to estimated under-five mortality rates,, Georgia, the European Region, the European Union, the CIS**



Source: *WHO HFADB*

In Georgia, since 2003, according to the official statistics, there has being registered a trend of decline of under-five mortality rate. According to the National Statistics Office of Georgia the indicator has decreased from 27.6 to 12.7; the same indicator has dropped from 20.3 to 13.4, according to the Medical Statistics (See Figure 1.2).

Figure 1.2 **Under-five mortality rate per 1000 live births, Georgia**



Thus, according to the official statistics, under-five mortality rate was quite low and varied from 12.7 to 13.4. Taken into account the fact, that in many countries statistical reporting has certain drawbacks, survey data are very important. According to GERHS data under-five mortality rate, in 2010, reached 16.4.

Under-five mortality rates, GERHS

	1995-1999	2000-2004	2005-2009
Indicator per 1000 live births	45.3	25.0	16.4

The WHO has defined 16.0 as the target indicator for under-five mortality rate for the year 2015. Thus, the task of the Millennium Development Goal 4: the reduction of under-five mortality rate by 2/3 was almost accomplished by the year 2010.

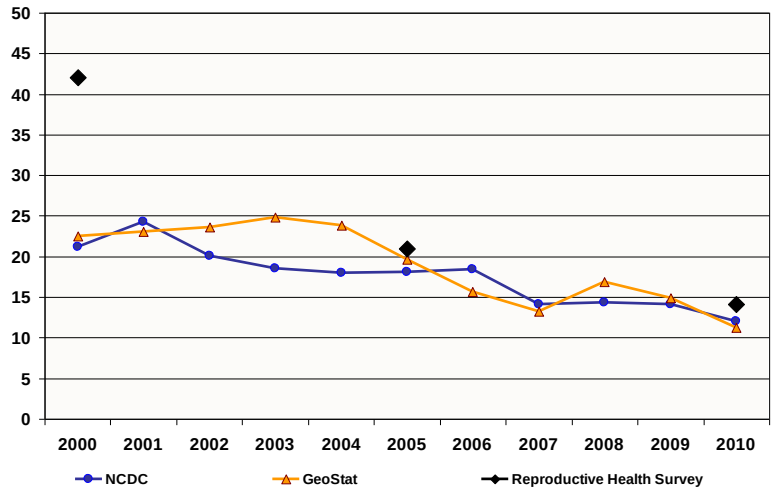
Infant mortality rate*

According to World Health organization global data, in 2009, 40% of all deaths among children under 5 years old occurred in the neonatal period (deaths during the first 28 days of life)*. 3/4 of newborns die during the first week. Correspondingly, reduction of infant mortality is the priority task in all countries.*

World Health Statistics, 2011, WHO

In 2000-2010, according to official statistics and survey data, there was a decline of infant mortality rate. In 2010, the indicattors from these two sources came closer to each other (See Figure 1.3).

Figure 1.3 **Infant mortality rate per 1000 live births, Georgia**



Infant mortality rates, GERHS

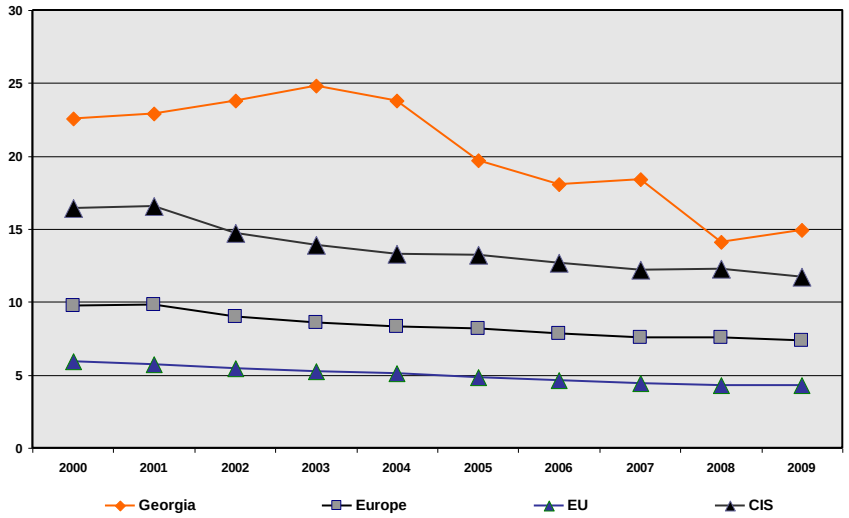
	1995-1999	2000-2004	2005-2009
Rate per 1000 live births	41.6	21.1	14.1

Infant mortality rate in Georgia is quite high if compared to European countires. In 2009, this indicator in Georgia was about twice as high as the average rate for the European region. While comparing indicators we should also take into consideration a pace of their change, which is

* *See additional information in the chapter "Maternal and Child Health".*

much faster in Georgia than in European and CIS countries. In Georgia in 2000 – 2009, infant mortality rate dropped by 34%, although, in European and CIS countries the reduction of this indicator stood at 28% (See Figure 1.4).

Figure 1.4 Infant mortality rate per 1000 live births, Georgia, the European region, the European union, the CIS



Source: WHO HFADB

In 2010, perinatal period diseases made up 73.3%, respiratory system diseases - 5.1%, and birth defects - 2.4% in the structure of infant mortality.

Percent of children ages 12-23 months immunized against measles*

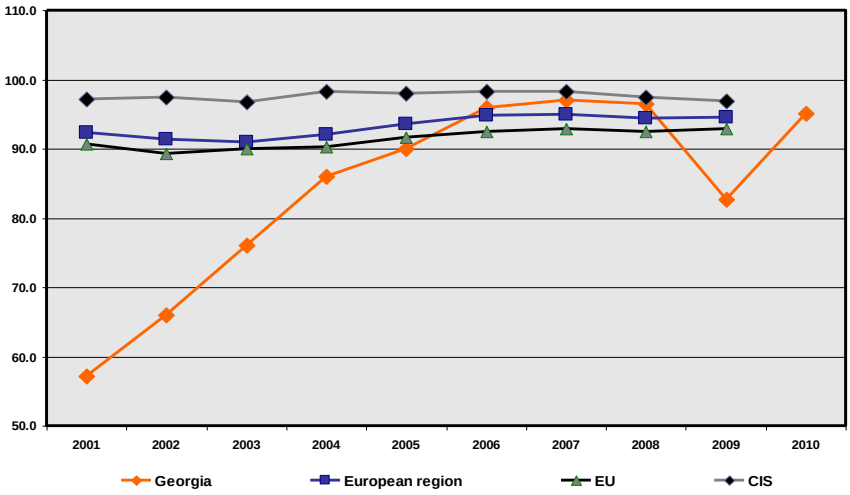
Management of diseases exposed to preventive vaccination is especially significant in achieving Millennium Development Goals, which becomes the guarantee of improving the situation. By 2009, global measles immunization coverage was 82% among children aged 12-23 months. This was up from 73% in 1990 with low-income countries experiencing the highest increase during that time.

World Health Statistics, 2011, WHO

During last years, Georgia maintained good preventive immunization coverage. The trend of increase of measles immunization rate has been obvious since 2001; in 2010, vaccination coverage achieved 95.1% (See Figure 1.5).

* *See additional information in the chapter "Population's health status" – Infectious diseases.*

Figure 1.5 Immunization against measles; coverage of 12 months olds (%) Georgia, the European region, the European Union, the CIS



Source: WHO HFADB

Maternal mortality ratio*

The number of women dying as a result of complications during pregnancy and childbirth has decreased by 34% - from 546 000 in 1990 to 258 000 in 2008. Although such progress is notable, the annual rate of decline of 2.3% is less than half of the 5.5% needed to achieve the target of reducing the maternal mortality ratio by three quarters According to recent estimates, percentage of decrease is twice as little. Almost all maternal deaths (99%) in 2008 occurred in developing countries.

World Health Statistics, 2011, WHO

The health and lives of newborn babies are closely related to maternal health and life because not enough and adequate care during pregnancy, childbirth and puerperal period is associated with the lack of care in infants. Infants whose mothers died due to causes related to pregnancy have more risks of dying compared to others.

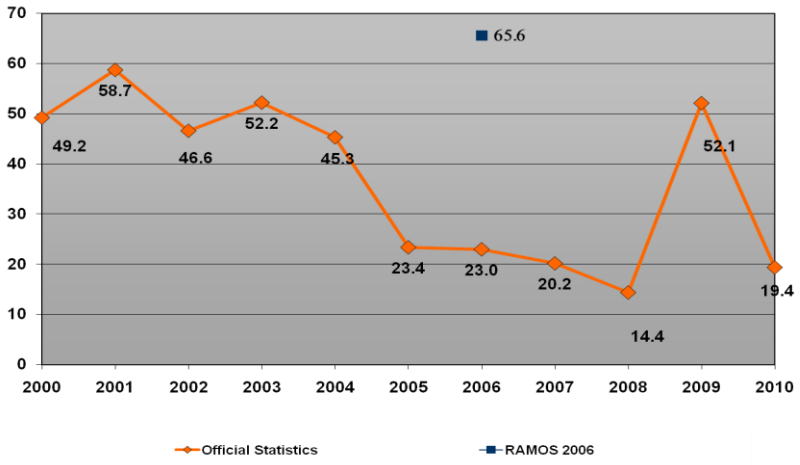
UNICEF, 2005

In general, complications of pregnancy and childbirth are the main causes of disability and death in women of reproductive age. This is especially typical for developing countries.

In 2003-2008, in Georgia a trend of decrease of maternal mortality ratio was registered. The Reproductive Age Mortality Study (GERAMOS), which investigated the year 2006, showed that officially reported data significantly differed from the survey data (See Figure 1.6).

* *See additional information in the chapter "Maternal and child health".*

Figure 1.6 **Maternal mortality ratio per 100000 live births, Georgia**

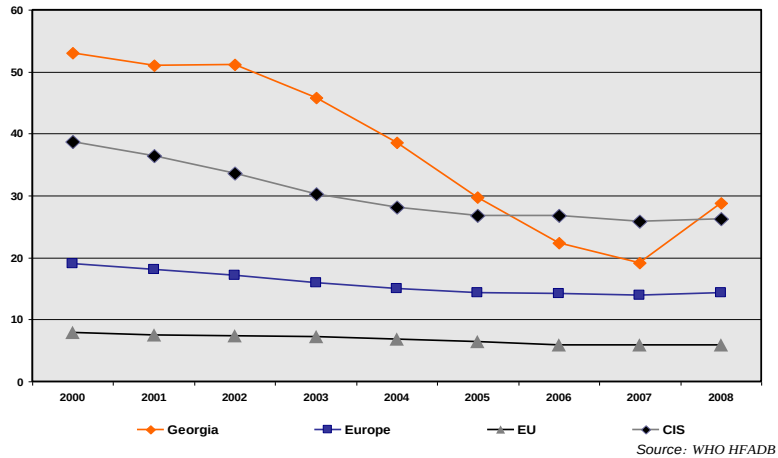


In 2009, maternal mortality ratio sharply increased, this can be explained by several reasons: in general, improvement of registration of deaths, active search of cases of maternal deaths by NCDC&PH, fusion of data from medical and demographic statistics, deaths due to pandemic influenza (H1N1).

In 2010, maternal mortality ratio per 100000 live births was 19.4; this was by 62.8% lower than the similar indicator in 2009. The indicator is counted based on the fusion of data from National Statistics Office of Georgia and National Centre for Disease Control and Public Health.

Method of moving averages is widely used to compare maternal mortality ratios. This method better evaluates dynamics of changing data and corrects “leaps”. According to the WHO data, three-year moving average of maternal mortality ratio in Georgia is higher than in countries of the European region, although the tendency of its decline is clearly notable. Since 2000, three-year moving average of maternal mortality ratio in Georgia has decreased by 49%. A decline of this indicator in was far lower in countries of the European Union (28%) and the CIS (36%) (See Figure 1.7).

Figure 1.7 **Maternal mortality ratio per 100000 live births, 3-year moving average, Georgia, the European Region, the European Union, the CIS**



Source: WHO HFADB

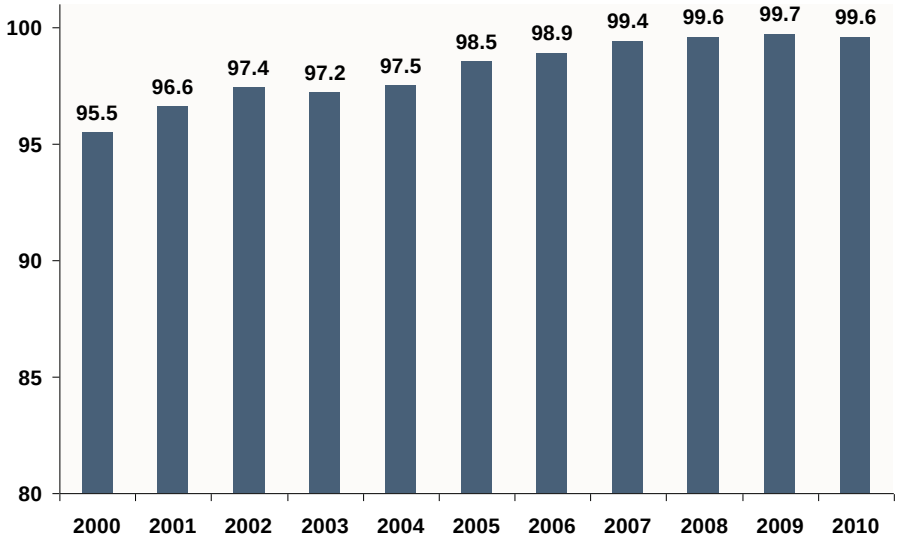
Proportion of births attended by skilled health personnel

The proportion of deliveries attended by skilled health personnel rose from 58% in 1990 to 68% in 2008.

World Health Statistics, 2011, WHO

Proportion of births attended by skilled medical personnel is traditionally high in Georgia. According to data from routine medical statistics, this indicator was 99.6% in 2010 (See Figure 1.8).

Figure 1.8 Proportion of births attended by skilled medical personnel (%), Georgia



Surveys conducted in Georgia also confirm high proportion of births attended by skilled medical personnel. According to the MICS 2005, almost all deliveries (93.8%) had been attended by professionals. Most of these deliveries were attended by doctors and only 4.5% of deliveries were attended by nurses and midwives; 95.5% of deliveries were in healthcare institutions.

According to the data of **GERHS**, in 1999 and 2005, approximately 8% of women delivered at home and most of them did not get qualified medical assistance. In 2010, this indicator reduced to 1.2%.

Proportion of births attended by skilled medical personnel (%), GERHS

	1995-1999	2000-2004	2005-2009
Births attended by skilled medical personnel	92.2	92.5	98.8

Contraceptive prevalence rate

Latest estimates suggest that 63% of women in developing countries aged 15–49 years who are married or in another type of union are using some form of contraception.

World Health Statistics, 2011, WHO

A large proportion of women in the countries of the Caucasus – Armenia, Azerbaijan and Georgia – rely on traditional methods, particularly withdrawal, to control their fertility. Partly as a result, these countries have high rates of abortion.

Progress for Children: A Report Card on Maternal Mortality (No. 7), UNICEF, 2008

Use of contraception is the significant determinant of the difference between ratios of fertility and abortion.

According to the MICS2005, 31.5% of married or having partners women used some type of contraception. The most popular method is intrauterine contraceptive device, which was used by 8.2% of sexually active women. Another common method – periodic abstinence (calendar / rythmic method) - was used by 6.7% of sexually active women, and 5.9% of sexually active women used condom. 11.8% of sexually active women used traditional and 20% - modern methods of contraception.

According to the GERHS, prevalence of contraception (including modern methods) in Georgia was increasing in 1995-2009 and in 2010 it totaled to 32%. Increase of contraception prevalence was mainly caused by increase of usage of modern methods (8.9%). Decrease of usage of traditional methods of contraception shows slow dynamics.

Contraceptive prevalence (%) in women aged 15-44, GERHS

	1995-1999	2000-2004	2005-2009
Any method of contraception	24.7	28.4	32.0
Among them			
Modern methods	12.1	16.1	21.0
Traditional methods	12.6	12.3	11.0

Use of condom during the last sexual intercourse, GERHS

	1995-1999	2000-2004	2005-2009
Women aged 15-44	6.3	5.3	8.3

Adolescent birth rate

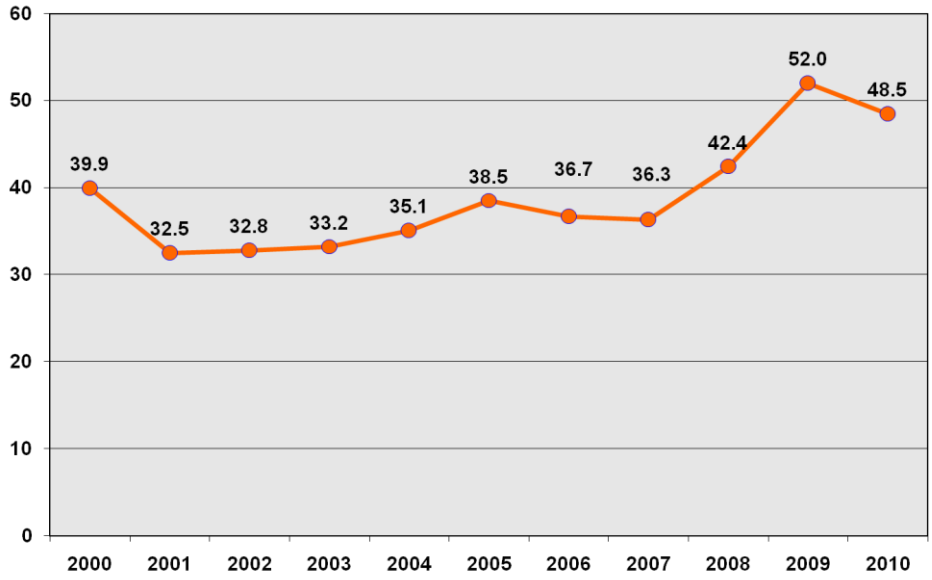
Between 1990 and 2007, declines in adolescent birth rates were significant. However, most progress occurred during the first decade. Since 2000, progress has stalled.

How Universal is Access to Reproductive Health? A review of the evidence, September 2010, UNFPA

According to the National Statistics Office, in Georgia, in 2000-2009, fertility rate of women aged under 20 increased by 30.2%, although, in 2010, compared to the previous year, it decreased

by 6.7%. Decrease in adolescent fertility can be explained by certain measures taken by the country, namely projects implemented in Georgia by international organizations (WHO, UNFPA, UNICEF, JSI, and etc.), which supported components related to adolescent reproductive health. Implementation of appropriate educational programs can be seen as one way of achieving the further progress (See Figure 1.9).

Figure 1.9 Adolescent fertility rate per 1000 women aged under 20, Georgia



According to official statistics, women aged under 20 were responsible for 12.6% of live births. Approximately the same proportion showed the **GERHS** (2010 – 13.7%).

Proportion of live births to women aged under 20 (%), GERHS

	1995-1999	2000-2004	2005-2009
Proportion of live births to women aged under 20	14.6	14.6	13.7

Antenatal care coverage

Although, 80% of pregnant women received antenatal care at least once during the period 2000-2010, only 53% received the WHO-recommended minimum of four antenatal visits.

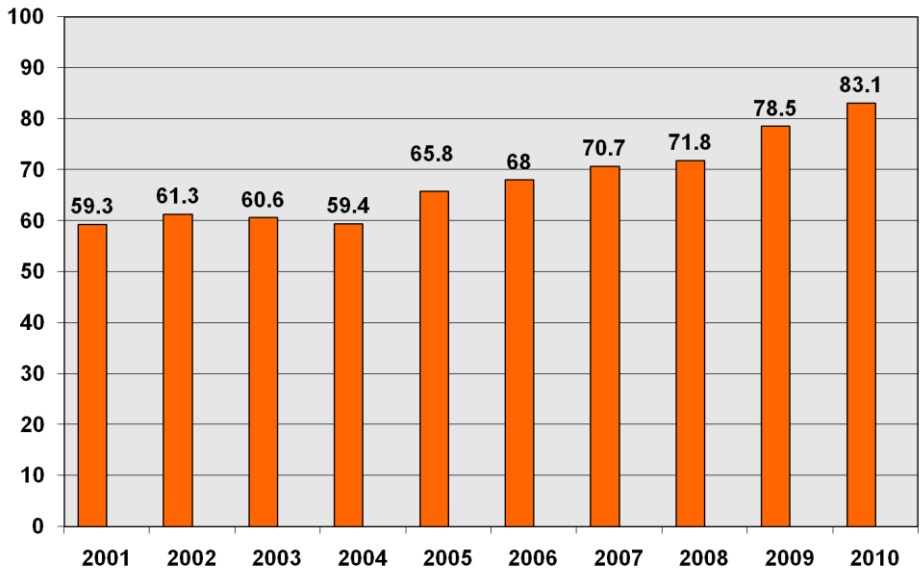
World Health Statistics, 2011, WHO

Standard prenatal care during non-complicated pregnancies involves routine visits related to gestational age, namely: monthly visits until 12-week pregnancy; visits once in two months during 12-30 week pregnancy and weekly or once visits during two months until childbirth.

According to the new model recommended by WHO, the first visit involves proper evaluation of the health status and potential risk-factors and according to the results there are two groups of

pregnant women: 1. Women who should be included in the basic antenatal care program (75% of pregnant women) and 2. Women who need higher level of care.
Antenatal and postnatal care is one of the central components of mother and child health system in Georgia. Since 2000, according to official statistics, coverage with 4 complete antenatal visits has been increasing and in 2010 it totaled to 83.1% (See Figure 1.10).

Figure 1.10 Coverage with 4 complete antenatal care visits (%),, Georgia



According to the MICS2005 data, antenetal care coverage was quite high in Georgia. During pregnancy almost all women (97.4%) visited antenatal care institutions at least once.

According to the GERHS, antenatal care coverage rates significantly exceeded data of routine statistics: it was almost universal in period 2005-2009 and totaled to 98.4%.

Antenatal care coverage (at least 4 visits and at least 1 visit) (%), GERHS

	1995-1999	2000-2004	2005-2009
1 visit	90.8	95.4	98.4
4 visits	85.3	80.7	92.7

Unmet need for family planning

At the global level in 2007, unmet need for family planning was 11 per cent. In the least developed countries, it was more than 24 per cent. Since 1990, the unmet need for family planning has declined significantly in a few regions.

How Universal is Access to Reproductive Health?
A review of the evidence. September 2010, UNFPA

In Georgia, in 1995-2009, according to the GERHS2010, the rate of unmet need for family planning reduced and reached 7.7%.

Unmet need for family planning (%), GERHS

	1995-1999	2000-2004	2005-2009
Women aged 15-44	14.8	10.1	7.7

HIV prevalence among population aged 15-24 years *

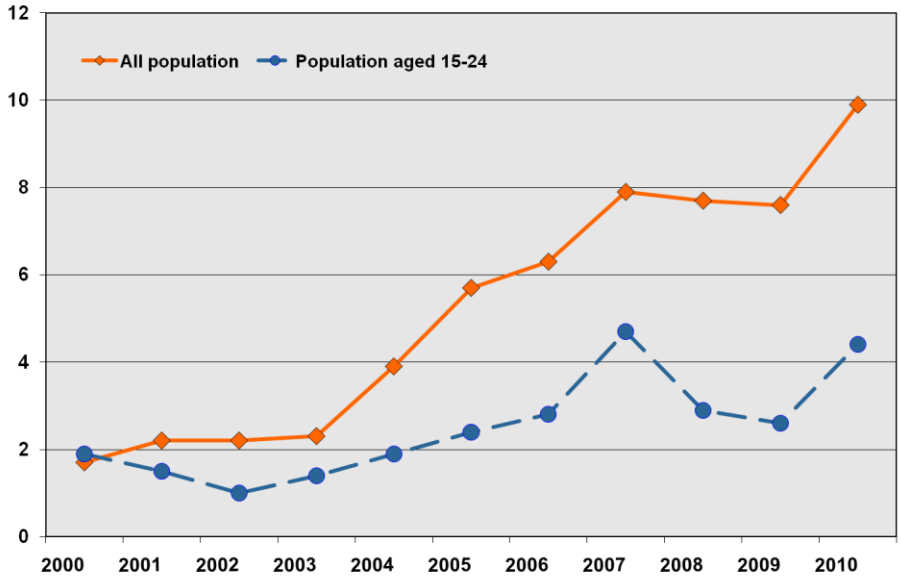
The number of people living with HIV worldwide continues to grow, reaching an estimated 33.3 million people in 2009 - 23% higher than in 1999. In 2009, there were an estimated 2.6 million new infections and 1.8 million HIV/AIDS-related deaths.

The annual number of estimated new HIV infections is steadily declining. In 2009, the estimated number of new HIV infections was 19% lower than in 1999.

World Health Statistics, 2011, WHO

In 2000-2007, in Georgia incidence of HIV-infection was sharply growing. It increased in the total population 4.6-times and in the group aged 15-24 – 2.5-times. After slight decrease during the following years, it increased again in 2010. In new cases, according to the modes of transmission, injecting drug users (47.2%) and heterosexual intercourses (43.5%) constituted a significant share (See Figure 1.11).

Figure 1.11 Incidence of HIV/AIDS per 100000 populations, Georgia



According to the World Health Statistics, Georgia is among the countries with low prevalence of HIV/AIDS and it holds one of the last places even among them. However, taken into consideration expert estimates and supporting factors (such as fast growth of HIV/AIDS prevalence in adjoining countries, rather high level of spreading of injecting drug use, growing migration, and etc.) there is still a great risk for a fast growth of HIV/AIDS morbidity in Georgia.

* *See additional information in the chapter "Population's health status" – Infectious diseases.*

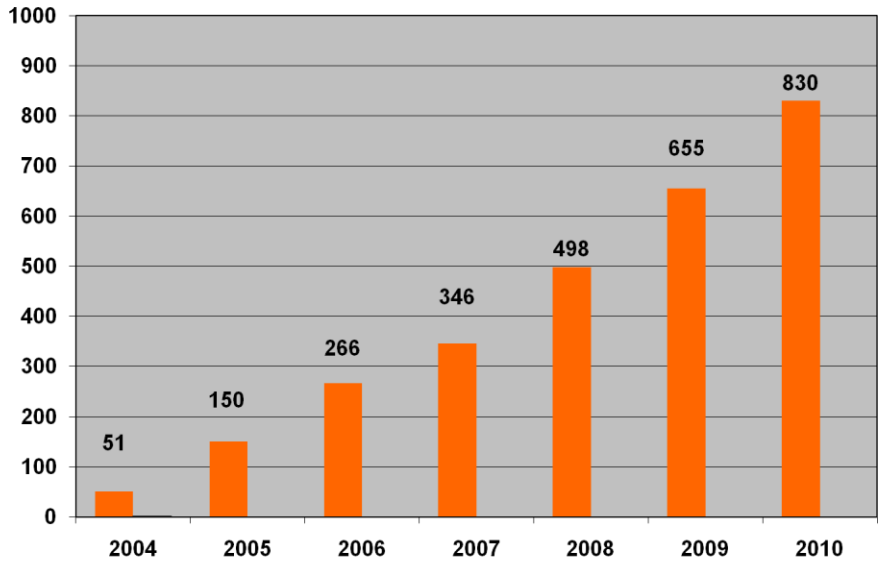
Proportion of population with advanced HIV infection with access to antiretroviral drugs

The increasing number of people living with HIV reflects in part the life prolonging effects of antiretroviral therapy (ART). As of December 2009, ART was available to more than 5 million people in low-income and middle-income countries. An additional 700 000 people received treatment in high-income countries in 2009, bringing the global total to almost 6 million.

World Health Statistics, 2011, WHO

In recent years the number of patients receiving antiretroviral therapy has grown. In 2004-2010, the number of patients receiving antiretroviral therapy grew 16-times (see Figure 1.12).

Figure 1.12 Number of people receiving antiretroviral therapy in Georgia



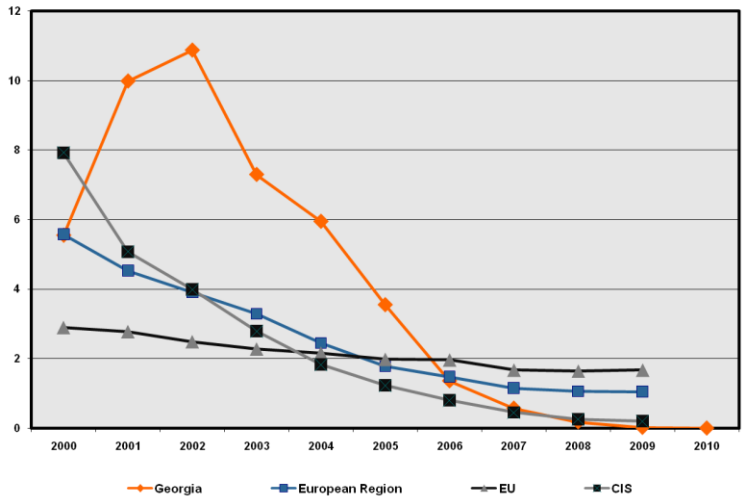
Incidence and death rates associated with malaria

A growing number of countries have recorded decreases in the number of confirmed cases of malaria and/or reported admissions and deaths since 2000. In 2009, the WHO European Region reported for the first time no cases of Plasmodium falciparum malaria.

World Health Statistics, 2011, WHO

In 2005, all the countries of European Region of the WHO adopted the Tashkent Declaration: "The Move from Malaria Control to Elimination". Georgia assumed the obligation to fight malaria by signing the Tashkent Declaration. Georgian national strategy implies stopping malaria transmission by 2013 and further certification of malaria elimination. Since 2002 incidence of malaria in Georgia has been decreasing and totals to zero in 2010 (See Figure 1.13). No of deaths due to malaria were registered in Georgia.

Figure 1.13 Incidence of malaria per 100000 populations, Georgia, the European Region, the European Union, the CIS



Source: WHO HFADB

Incidence, prevalence and death rates associated with tuberculosis *

The annual global number of new cases of tuberculosis continues to increase slightly as slow reductions in incidence rates per capita are offset by population increases. In 2008, the treatment success rate reached 86% worldwide and 87% in countries with a high burden of disease. In 2009, prevalence was estimated at 12-16 million cases, with an estimated 9.4 million new cases. An estimated 1.3 million HIV-negative people died from tuberculosis in the same year. Mortality due to this disease has fallen by more than a third since 1990, and if the current rate of decline is sustained at the global level, the MDG targets of halving tuberculosis prevalence and deaths by 2015 could be achieved.

World Health Statistics, 2011, WHO

After dissolution of the Soviet Union, tuberculosis has become one of the most significant problems of public health in Georgia. According to WHO data, incidence of tuberculosis per 100000 population in 1989-1996 increased from 29.6 to 165.0. During the following years detection and registration systems for tuberculosis were significantly improved and epidemiologic situation somehow streamlined. Since 1997, average prevalence rate totaled to 142.2; incidence rate – 96.1.

In 2005-2006, survey of the first-line anti-tuberculosis drug resistance (DRS), recommended by WHO, was conducted in Georgia. According to the results of the survey, a multidrug-resistent tuberculosis was revealed in 6.8% of smear-positive new cases and in 27.4% of retreated cases. Although, the second-line anti-tuberculosis therapy has gradually become available within the national TB program; since 2008 adequate therapy became available for all patients.

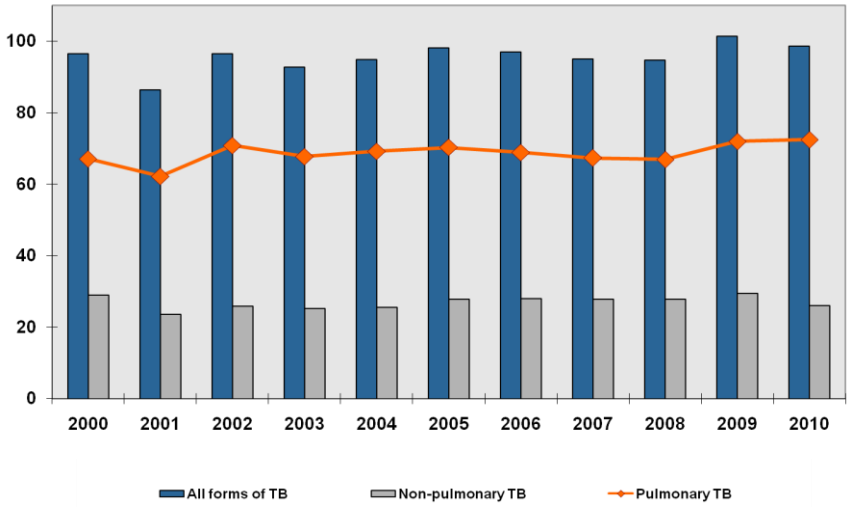
A control of tuberculosis has been established in Georgia at the level of primary healthcare with the support of the Global Fund. Systems of sputum sample collection and transportation, routine implementation of DRS were introduced. DOTS (directly observed treatment, short-course) has

* *See additional information in the chapter "Population's Health Status" – Infectious diseases.*

been extended and fully implemented, express diagnostic methods have been introduced in national reference and regional reference laboratories; massive active and passive screenings have been implementated in the penitential sector and etc.

In 2010, compared to the previous year, there was noted a reduction of tuberculosis morbidity. Prevalence rate decreased by 4.1%, incidence - by 2.8% (See Figure 1.14).

Figure 1.14 Incidence of tuberculosis per 100000 populations, Georgia



Tuberculosis morbidity, official and estimated data, Georgia, 2010

	Official statistics	WHO
Number of registered cases of tuberculosis	5806	5100
Prevalence per 100000 population	130.4	118.0
New cases of tuberculosis	4392	4600
Incidence rate per 100000 population	98.6	107.0
Tuberculosis death rate per 100000 population	2.0	4.6

Source: National Centre for Tuberculosis and Lung Diseases, www.who.int/tb/data

Proportion of population using improved drinking-water sources

The percentage of the world's population with access to improved drinking-water sources increased from 77% to 87% between 1990 and 2008. One component of Target 7.C of MDG 7 is to halve the proportion of the population without sustainable access to safe drinking-water. Given the current rate, it is likely that this component will be met. Nevertheless, in 2008 some 884 million people still relied upon unimproved water sources - 84% of whom were living in rural areas.

World Health Statistics, 2011, WHO

Georgia is rich in drinking-water resources, although, providing the population with improved drinking-water still represents a problem. The main source of drinking water is groundwater, (90% in the water supply system). Most of the rural area population still uses water from individual wells and natural springs.

According to the MICS2005, 94.2% of population used improved drinking-water source. 78.9% of households have drinking-water piped into dwelling, for 17.3% it takes less than 30 minutes to bring water.

According to the GERHS proportion of population, to whom piped water, which properly met hygienic rules, is available has not essentially changed in the period of 2000-2009. For urban population, compared to rural, this indicator was 30% higher.

Availability of piped water, (%), GERSH

	2000-2004	2005-2009
Urban	96.1	96.8
Rural	66.2	65.9

Proportion of population using an improved sanitation facility

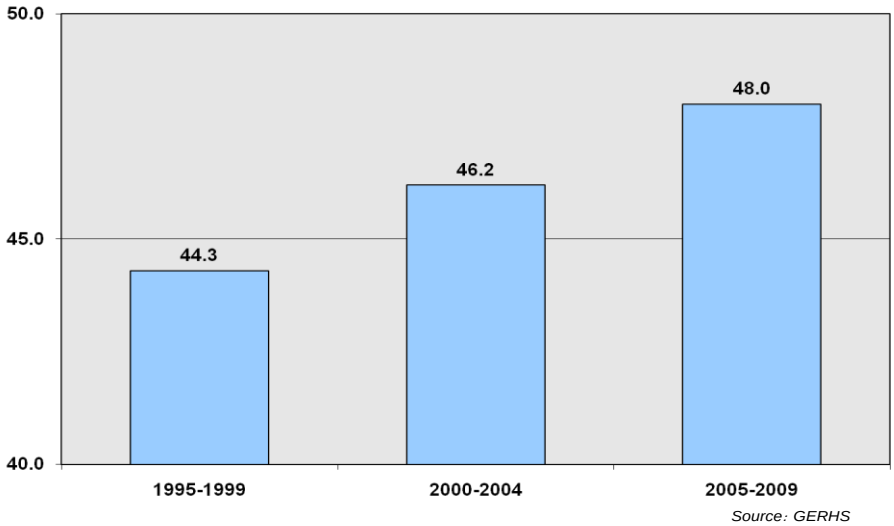
The other component of Target 7.C is to halve the proportion of the population without sustainable access to basic sanitation. Current rates of progress towards this are insufficient. In 2008, 2600 million people were not using improved sanitation facilities, including over 1100 million people with no access to toilets or sanitation facilities of any kind. If current trends continue, this component of Target 7.C will not be met.

World Health Statistics, 2011, WHO

According to the MICS2005, most of the population of Georgia (96.8%) lived in households with improved sanitation facilities. 56.3% of children aged 0-2 years were provided with toilets which followed proper hygienic rules.

According to the GERHS, availability of flashing toilets in households increased by 3.7% during 1995-2009 (See Figure 1.15).

Figure 1.15 Changes in availability of flashing toilets in households (%)



Source: GERHS

Table 1.1 Under-five mortality rate per 1000 live births, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	21.9	36.7	22.9	21	21.9	25.1	21.1	20.9	15.5	12.8	10.2
Tbilisi	43.7	37.3	35.4	31.9	28	28.4	29.6	21.1	24.6	21.5	16.9
Kakheti	23.2	21.2	17.7	9.7	13.5	8.2	9.1	7.8	7.4	9.5	8.8
Imereti	25.8	24.1	17.8	17.2	21.6	20	19.9	19.4	17	19.1	19.6
Samegrelo	10.6	9.9	8.1	9.1	6.9	6.8	6.7	5.9	2.7	4.0	3.9
Shida Kartli	28.2	35.4	13.5	17.6	14.1	8.5	8.2	5.8	3.1	9.1	9.1
Kvemo Kartli	13.3	9.8	9.1	5.7	8.0	5.5	5.9	5.4	3.7	5.5	7.7
Guria	21.2	13.4	10.2	10.3	12.3	5.6	12.4	7.9	3.1	1.8	1.8
Samtskhe-Javakheti	12.5	11.1	7.2	8.5	9	7.5	7.2	3.9	5.9	7.8	8.2
Mtskheta-Mtianeti	10.2	13.1	10.8	6.6	11.7	7.1	9.1	6.6	6.3	5.7	2.3
Racha-Lechkhumi and Kvemo Svaneti	8.0	3.3	14.0	8.4	10.8	0	0	8.1	0	0	13.3
Georgia	**27.2**	**26.7**	**22.1**	**20.3**	**20.1**	**19.4**	**19.7**	**15.6**	**16.0**	**15.4**	**13.4**

Table 1.2 Under-five mortality rate per 1000 live births, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	28.0	28.7	29.5	30.1	27.3	20.8	16.9	15.2	19.0	18.0	14.0
Female	20.9	21.9	22.2	24.8	25.4	21.4	17.0	13.6	18.0	15.0	11.0
Both sexes	**24.9**	**25.5**	**26.0**	**27.6**	**26.4**	**21.1**	**16.9**	**14.4**	**18.0**	**16.0**	**13.0**

Source: National Statistics Office of Georgia

Table 1.3 Infant mortality rate per 1000 live births, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	35.4	33.4	20.4	18.0	21.4	23.0	20.7	19.1	15	12	9.0
Tbilisi	39.5	34.0	32.4	28.8	24.7	26.5	27.6	18.6	22	20	15
Kakheti	20.7	10.9	16.0	9.7	11.8	7.2	8.4	7.9	7.4	8.7	7.5
Imereti	24.5	22.4	16.4	17.2	19.7	19.7	18.8	18.8	15	19	19
Samegrelo	9.6	8.9	7.0	9.1	5.7	6.5	6.5	5.7	2.2	3.6	3.7
Shida Kartli	26.9	33.7	12.1	16.5	13.4	8.6	7.1	5.4	3.1	8.7	8.0
Kvemo Kartli	12.5	7.1	8.6	4.8	7.3	5.2	5.2	4.9	2.8	3.3	4.1
Guria	19.5	12.5	10.2	8.5	7.8	5.6	10.1	10.1	2.1	1.8	1.8
Samtskhe-Javakheti	11.6	9.4	6.3	6.6	8.6	6.6	6.3	2.9	5.9	7.3	6.4
Mtskheta-Mtianeti	10.2	13.1	10.8	6.6	10.0	7.1	9.1	2.2	6.3	5.7	2.3
Racha-Lechkhumi and Kvemo Svaneti	8.0	3.3	14.0	8.4	10.8	0.0	0.0	8.1	0	0	13
Georgia	**21.2**	**24.3**	**20.1**	**18.5**	**18.0**	**18.1**	**18.4**	**14.1**	**14**	**14**	**12.0**

Table 1.4 Infant mortality rate per 1000 live births, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	25.5	25.8	26.6	26.8	24.4	19.5	15.6	14.4	17.0	17.0	13.0
Female	19.2	20.0	20.3	22.4	23.0	19.8	15.9	12.1	17.0	13.0	9.8
Both sexes	**22.5**	**23.1**	**23.6**	**24.8**	**23.8**	**19.7**	**15.7**	**13.3**	**17.0**	**15.0**	**11.0**

Source: National Statistics Office of Georgia

Table 1.5 Measles immunization coverage in children ages 12-23 months **(%), Georgia, 2000-2010**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	76.7	97.4	93.5	91.4	93.5	94.0	92.2	93.8	86.7	68.9	98.5
Kakheti	82.0	86.9	96.7	83.5	90.9	97.0	96.2	93.2	97.5	77.6	98.8
Imereti	78.7	86.3	100.0	89.5	86.0	96.2	96.9	97.8	98.9	89.5	93.4
Samegrelo	72.3	83.6	89.4	72.9	83.5	95.8	91.9	97.9	96.5	82.7	91.8
Shida Kartli	77.9	91.1	80.0	77.5	81.9	98.6	92.7	100.0	98.8	82.0	100.0
Kvemo Kartli	67.3	97.5	82.9	61.9	76.0	85.0	96.7	96.3	96.9	80.8	83.7
Guria	87.4	89.0	100.0	86.9	81.0	93.1	93.5	96.2	98.9	91.1	99.7
Samtskhe-Javakheti	78.5	92.9	94.2	84.0	100.0	95.1	98.0	90.6	92.5	81.8	95.3
Mtskheta-Mtianeti	70.6	71.1	83.7	73.9	93.4	92.9	94.4	94.5	94.2	93.3	95.8
Racha-Lechkhumi and Kvemo Svaneti	76.2	86.5	85.3	86.1	94.2	93.8	86.8	96.6	93.2	93.8	96.4
Georgia	**62.3**	**90.0**	**92.9**	**82.2**	**86.5**	**91.2**	**95.1**	**97.0**	**96.5**	**82.7**	**94.3**

Table 1.6 Maternal mortality ratio per 100000 live births, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	21.7	43.6	89.9	47.3	44.2	45.6	22.7	0	73.8	48.7	0
Tbilisi	68.6	63.1	48.9	70.9	59.4	31	34.9	14.1	8.2	34.3	18.9
Kakheti	55.9	32.2	0	0.0	34.6	0	0	0	0	0	53.4
Imereti	56.9	44.9	62.9	49.1	62.6	0	30.8	58.6	0	109.3	43.4
Samegrelo	24.7	31.6	0.0	29.5	29.9	29.5	27.0	0	48.4	44.8	0
Shida Kartli	0	0	71.4	0	0	0	0	0	0	0	0
Kvemo Kartli	38.0	155.9	24.7	51.4	26.0	0	0	46.9	0	20.4	0
Guria	84.6	0.0	0	0.0	0	111.1	0	0	0	0	0
Samtskhe-Javakheti	44.5	133.7	0	47.0	0	0	0	47.8	0	86.3	45.5
Mtskheta-Mtianeti	0	0	0	0	0	176.7	0	0	0	0	0
Racha-Lechkhumi and Kvemo Svaneti	398.4	0	0	0	0	0	0	0	0	0	0
Georgia	**49.2**	**58.7**	**42.2**	**49.9**	**43.13**	**23.4**	**23.0**	**20.2**	**14.3**	**43.8***	**19.4**

** 43.8 maternal mortality counted by Disease Control Centre. By fusion data of GeoStat and NCDC, this indicator is 52.1*

Table 1.7 Proportion of births attended by skilled health personnel (%), Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	90.2	89.5	94.5	93.8	95.8	97.4	97.8	98.6	98.7	99.3	99.3
Tbilisi	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kakheti	81.1	84.3	90.6	85.2	81.8	89.7	88.3	98.1	96.6	97.7	95.8
Imereti	98.7	98.8	98.8	99.4	99.5	100.0	99.9	100.0	100.0	100.0	99.9
Samegrelo	99.0	98.7	98.4	99.2	99.6	99.6	100	99.8	99.9	99.9	99.5
Shida Kartli	97.5	99.5	99.7	99.9	98.5	99.9	99.6	99.9	100.0	99.9	99.9
Kvemo Kartli	89.3	91.6	91.5	91.7	93.1	96.8	98.2	96.2	99.1	99.0	99.8
Guria	93.5	96.7	96.0	92.7	96.6	99.1	100.0	100.0	100.0	99.3	99.8
Samtskhe-Javakheti	99.7	98.6	94.9	99.8	99.7	96.8	98.8	99.2	99.6	99.1	98.8
Mtskheta-Mtianeti	99.0	99.5	98.6	89.7	98.5	93.7	99.5	100.0	100.0	100.0	100.0
Racha-Lechkhumi and Kvemo Svaneti	91.7	99.3	100.0	96.2	82.6	96.4	95.6	100.0	96.2	98.9	100.0
Georgia	**95.5**	**96.6**	**97.4**	**97.2**	**97.5**	**98.5**	**98.9**	**99.4**	**99.6**	**99.7**	**99.6**

Table 1.8 Adolescent fertility rate, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per 1000 women aged under 20	39.9	32.5	32.8	33.2	35.1	38.5	36.7	36.3	42.4	52.0	48.5

Source: National Statistics Office of Georgia

Table 1.9 Antenatal care coverage (4 complete visits) in women aged 15-49 (%), Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Abkhazia	NA	NA	NA	NA	12.5	NA	78.2	81.6	NA	NA	77.2
Ajara	69.4	81.8	81.0	73.1	77.2	80.8	82.8	86.2	85.2	86.4	88.9
Tbilisi	59.2	59.6	58.2	60.1	60.4	65.4	66.8	70.8	73.9	79.7	80.8
Kakheti	71.1	75.9	72.8	66.2	56.6	63.8	61.4	61.0	61.4	75.7	86.5
Imereti	59.5	71.9	57.2	53.7	54.8	62.5	69.2	69.9	70.3	80.5	86.0
Samegrelo	65.7	81.6	57.5	60.1	52.5	61.2	71.0	77.8	80.3	87.7	91.6
Shida Kartli	58.2	79.1	61.9	67.0	84.4	93.0	93.4	96.7	96.2	95.3	97.9
Kvemo Kartli	64.0	70.7	54.6	53.3	43.6	50.6	45.0	40.5	39.6	47.9	63.4
Guria	61.3	82.2	55.8	54.9	51.8	57.8	61.3	55.0	56.2	69.7	75.9
Samtskhe-Javakheti	54.2	54.6	52.7	61.6	59.9	67.2	64.9	75.6	79.4	83.7	85.8
Mtskheta-Mtianeti	45.9	52.0	52.9	59.6	43.9	54.5	45.2	51.3	65.4	79.3	71.5
Racha-Lechkhumi and Kvemo Svaneti	41.6	65.4	58.4	64.2	51.3	66.8	55.2	71.0	49.0	55.3	77.9
Georgia	61.6	59.3	61.3	60.6	59.4	65.8	68.0	70.7	71.8	78.5	83.1

Table 1.10 Incidence of HIV infection per 100000 populations, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	5.8	2.4	3.2	3.8	6.2	7.5	11.1	14.0	8.4	9.7	9.1
Tbilisi	2.6	3.3	4.7	3.6	6.7	7.9	7.9	9.5	11.8	11.7	14.1
Kakheti	0.7	0.5	0.3	0.7	0.8	2.5	4.2	3.5	2.7	6.0	5.2
Imereti	1.0	1.0	1.4	1.3	3.5	4.4	6.4	8.7	6.3	5.2	10.4
Samegrelo	2.5	6.1	2.8	5.0	4.6	11.5	8.3	12.6	12.0	9.8	13.5
Shida Kartli	0.0	0.6	1.0	0.3	0.7	1.6	2.6	3.5	3.8	3.8	5.2
Kvemo Kartli	0.0	0.6	0.4	0.6	0.2	1.6	3.6	3.3	2.8	2.5	4.0
Guria	0.7	0.0	2.8	0.7	1.4	7.9	7.2	4.3	2.9	4.3	7.9
Samtskhe-Javakheti	0.0	0.0	0.0	0.0	5.4	3.9	2.9	1.0	0.0	1.4	1.9
Mtskheta-Mtianeti	0.8	0.8	0.0	0.8	0.8	1.6	1.6	3.2	2.5	0.0	3.7
Racha-Lechkhumi and Kvemo Svaneti	1.9	0.0	0.0	0.0	4.1	4.1	2.0	0.0	0.0	0.0	2.1
Georgia	1.7	2.2	2.2	2.3	3.9	5.7	6.3	7.9	7.7	7.6	9.9

Table 1.11 Incidence of HIV infection per 100000 populations by age and sex, Georgia, 2000-2010

	2006	2007	2008	2009	2010
Male					
0-14	1.2	2.2	1.5	0.5	2.0
15-24	1.6	2.7	2.4	0.8	4.7
25+	14.7	17.4	16.9	17.2	21.2
Total	9.7	11.8	11.4	11.2	14.8
Female					
0-14	0.2	2.0	1.3	0.5	1.0
15-24	3.8	6.5	3.3	4.1	3.9
25+	4.7	5.1	6.4	6.4	8.1
Total	3.6	4.8	4.9	4.9	6.0

Table 1.12 Incidence of malaria per 100000 populations, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	0	0	0	0.8	0.53	0	0	0	0	0	0
Tbilisi	0.5	1.1	0.7	0.7	0.4	0.2	0.1	0.1	0	0.2	0
Kakheti	29.2	81.6	104.9	66.6	28.2	13.8	7.6	3.5	0.7	0	0
Imereti	0	0	0.1	0.1	0.3	0	0	0	0	0	0
Samegrelo	0.2	0	0	0	0	0	0.2	0	0	0	0
Shida Kartli	0	0	0.3	0.3	0	0	0	0	0.3	0	0
Kvemo Kartli	9.4	14.8	7.2	6.6	23.5	19.3	10.2	1.8	0.8	0	0
Guria	0	18.7	1.4	0	0	0.7	0.25	0.7	0	0	0
Samtskhe-Javakheti	0	0	0.5	0	8.7	0	0	0	0	0	0
Mtskheta-Mtianeti	0	0	0.8	0	0	0	0	0	0	0	0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0	0	0	0	0	0	0	0
Georgia	3.8	9.9	10.9	7.2	5.9	3.5	1.4	0.6	0.2	0.02	0

Table 1.13 Incidence of tuberculosis per 100000 populations, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	150.5	101.5	111.4	140.7	151.3	163.3	148.9	141.8	129.0	124.8	121.2
Tbilisi	99.1	104.6	123.2	114.8	110.3	101.7	106.5	106.6	124.0	111.6	101.4
Kakheti	97.3	81.4	80.6	73.4	70.7	68.0	56.2	67.8	54.8	59.5	58.8
Imereti	70.5	55.6	59.6	70.6	77.6	82.8	64.2	59.4	57.6	64.7	54.9
Samegrelo	101.1	89.9	108.6	96.5	105.8	111.4	101.4	95.4	89.3	101.9	87.7
Shida Kartli	95.7	85.5	83.8	83.9	84.1	68.1	87.0	68.7	62.0	70.6	67.0
Kvemo Kartli	61.2	52.1	75.4	58.5	62.5	74.4	57.5	68.6	69.3	80.3	69.0
Guria	118.7	125.5	136.8	97.8	97.7	110.9	97.1	76.3	82.9	78.2	81.1
Samtskhe-Javakheti	41.4	28.4	39.5	41.8	37.1	63.6	74.4	55.8	46.7	50.1	30.5
Mtskheta-Mtianeti	46.7	63.1	65.4	71.7	71.8	70.2	92.5	92.1	72.8	70.2	88.6
Racha-Lechkhumi and Kvemo Svaneti	53.2	100.6	47.1	69.2	78.5	45.1	30.7	18.6	29.2	46.1	27.3
Georgia	96.1	86.4	96.5	92.8	94.8	98.1	96.9	95.0	94.7	101.4	99.6

Table 1.14 Prevalence of tuberculosis per 100000 populations, Georgia, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ajara	186.9	138.4	146.0	186.1	211.4	238.6	207.9	203.4	180.2	164.3	164.1
Tbilisi	147.0	153.4	174.6	171.8	173.0	160.8	145.7	152.3	164.5	138.9	124.6
Kakheti	123.7	122.9	137.8	109.2	104.4	103.9	85.1	97.3	70.0	77.4	71.4
Imereti	93.2	89.2	89.0	107.9	117.8	125.2	97.7	89.5	82.7	84.5	72.0
Samegrelo	165.9	143.7	170.1	150.0	170.8	185.6	163.5	176.6	129.7	141.8	118.0
Shida Kartli	127.8	111.5	115.3	125.8	125.5	103.2	127.2	109.8	90.4	96.1	90.0
Kvemo Kartli	87.3	88.0	113.8	100.1	119.0	123.6	100.6	114.5	102.6	106.9	89.6
Guria	154.7	160.1	171.7	122.4	129.0	153.5	130.1	109.4	102.3	105.5	100.5
Samtskhe-Javakheti	68.3	52.0	87.2	92.4	67.4	86.2	108.4	91.8	70.2	70.6	54.4
Mtskheta-Mtianeti	63.1	86.1	113.2	110.4	117.2	129.1	129.5	126.7	89.8	99.7	116.3
Racha-Lechkhumi and Kvemo Svaneti	63.4	141.7	64.7	100.8	115.8	76.5	51.2	39.3	41.8	54.5	37.7
Georgia	133.4	128.8	145.2	143.4	149.7	153.2	143.1	147.0	133.0	135.9	131.6