MINISTRY OF LABOUR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

NATIONAL CENTRE FOR DISEASE CONTROL AND PUBLIC HEALTH

HEALTH CARE

STATISTICAL YEARBOOK

2011

GEORGIA

TBILISI
2012

Data collected from statistical reports of the medical institutions of the Ministry of Labour, Health and Social Affairs, the Ministry of Defense, the Ministry of Internal Affairs and other institutions of Georgia have been used in this yearbook. The book also contains vital statistics received from the National Statistics Office of Georgia.

The yearbook is prepared by the Department of Medical Statistics of National Centre for Disease Control and Public Health named after L.Sakvarelidze of the Ministry of Labour, Health and Social Affairs of Georgia.

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PREFACE

The yearbook “Health Care” is the annual edition of the Ministry of Labour, Health and Social Affairs containing the basic statistical indicators of the population health status and resources of the health care system. The yearbook has been published since 1996.

The yearbook is prepared by the National Centre for Disease Control and Public Health named after L.Sakvarelidze of the Ministry of Labour, Health and Social Affairs of Georgia on the basis of branch statistical reports.

2006-2011 data are presented according to the WHO International Statistical Classification of Diseases the Tenth Revision.

The methodology of the calculation, recommended by the WHO and the UNO, that provides comparability of indicators over countries, is applied to the calculation of the resulted indicators given in the yearbook. Definitions and formulas for the calculation of indicators can be found in the glossary of the yearbook.

This yearbook discusses indicators of public health, provides Millennium Development indicators for Georgia, describes maternal and child health status, and data on communicable and non-communicable diseases according to the classes of diseases, such as infectious and parasitic diseases, neoplasms, the circulatory system diseases, endocrine diseases, the respiratory system diseases, the genitourinary system diseases, mental and behavioral disorders, as well as basic demographic data, and etc.

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CHAPTER 1.

HEALTH-RELATED MILLENNIUM DEVELOPMENT GOALS

In 2000, the General Assembly following the United Nations Millennium Summit adopted the Millennium Declaration, which spelled 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.

Georgia, as a country, which has 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.

Goal 1
Eradicate extreme poverty and hunger

Target: *Halve the proportion of people who suffer from hunger*

Indicator

- *Prevalence of underweight children under-five years of age*

Prevalence of underweight in children under five

One key target of the United Nations Millennium Development goals is to reduce the prevalence of underweight among children younger than 5 years. In Georgia, as well as in other countries, where routine statistics are collected using aggregated forms, the assessment of prevalence of underweight in children is performed using population based 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. 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 share of extremely underweight children was 0.3%.

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 5. Prevalence of underweight was less than 2.3% in total, as well as in separate groups. These data correspond to child growth standards, recommended by World Health Organization.

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

	Severe underweight	Moderate underweight	None (normal)
All	**14 (0.5%)**	**25 (0.6%)**	**2981 (98.8%)**
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%)
Regions			
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, 2009

Goal 4
Reduce under five mortality rate

Target 10: Reduce by two-thirds, between 1990 and 2015, the under-five mortality

Indicators

- *Under five mortality rate*
- *Proportion of 12-23 months aged children immunized against measles*

Under five mortality rate*

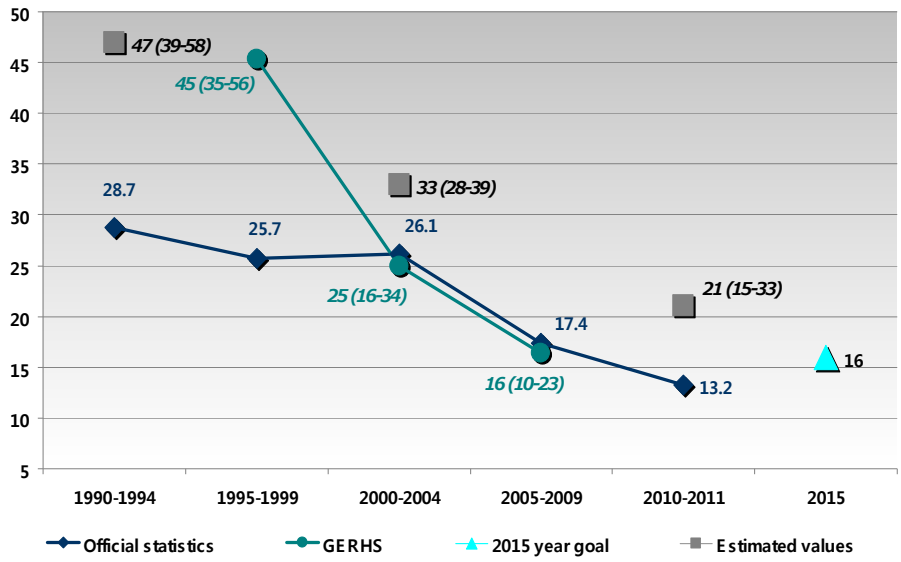
Under 5 mortality reduction is one of the main indicators of the Millenium development goals and presents the subject of special attention of the WHO. Infant and neonatal mortalities are inclusions of this indicator.

National statistics service is the main source of mortality data in Georgia. According to these data, under 5 mortality has been declining since 2000.

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

According to the UN Inter-agency Group for Child Mortality Estimation Group (IGME) estimates under 5 mortality rate in Georgia was 47 per 1000 live births in 1990. Thus, the MDG goal, which must be reached by 2015, is 16.0 (Figure 1.1).

Figure 1.1 **Under five mortality rate per 1000 live births, five years average, Georgia**

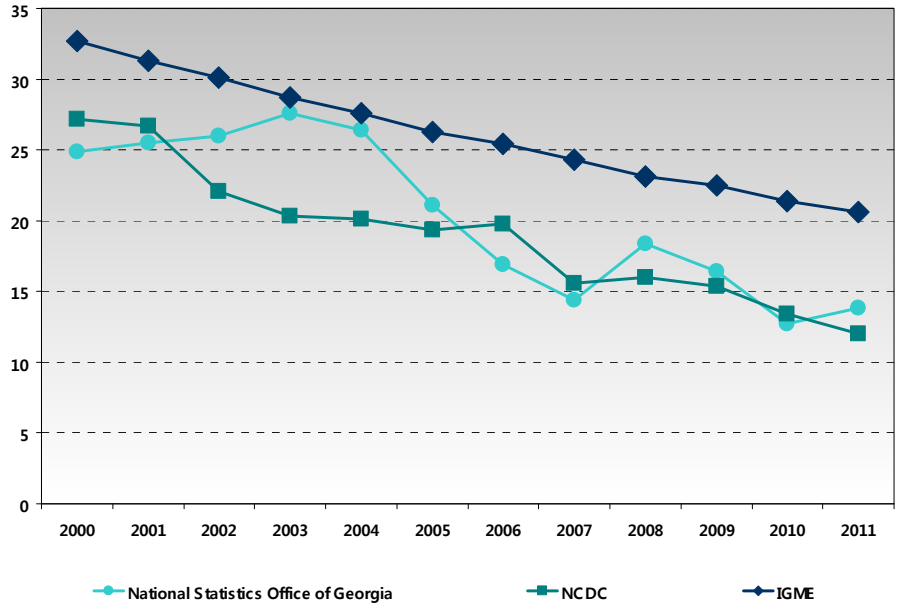


In Georgia, three rounds of the full-scale Reproductive Health Surveys (GERHS) were conducted with the 5-years intervals. The data collected during the first round of the survey (1995-1999) differed significantly from the official statistics; in 2000-2004 and 2005-2009 this discrepancy decreased. It should be underlined, that the under 5 mortality rate according to the GERHS was higher than that of official statistics (in 1995-1999this difference was about 64%).

Routine medical statistics on under 5 mortality, collected by the National Centre for Disease Control and Public Health (NCDC&PH), come from in-patient networks (number of hospital deaths) and from out-patient facilities (number of deaths at home). According to the health statistics in 2011, under 5 mortality rate per 1000 live births is less than that registered by vital statistics (Figure 1.2).

The IGME updates of the under 5 mortality estimate made in 2011 were once again higher than the one presented by official statistics, but these estimates also have got a declining tendency (Figure 1.2).

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

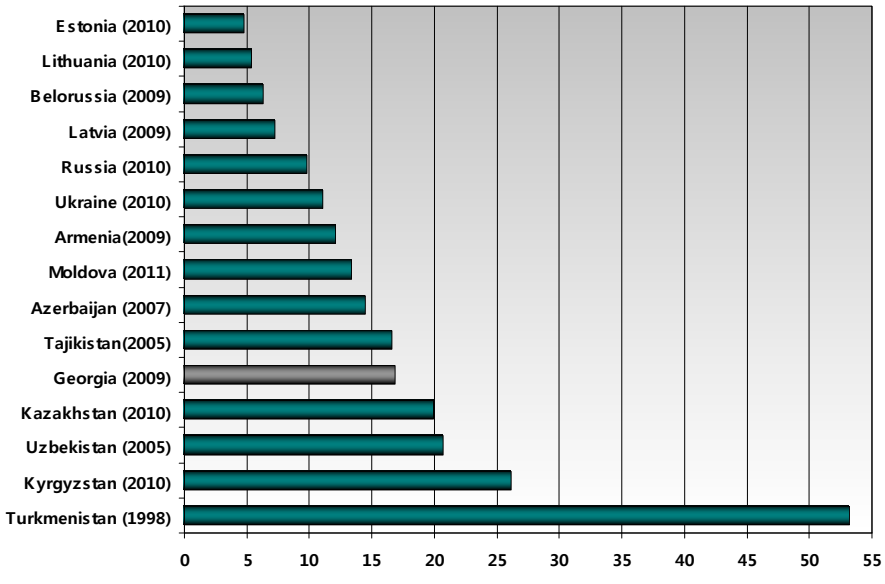


Under five mortality rates per 1000 live births, Georgia, 2000-2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Health statistics	27.2	26.7	22.1	20.3	20.1	19.4	19.7	15.6	16.0	15.4	13.4	12.0
Vital statistics	24.9	25.5	26.0	27.6	26.4	21.1	16.9	14.4	18.0	16.0	13.0	13.8
GERHS	45.8	-	-	-	-	25.1	-	-	-	-	16.4	-

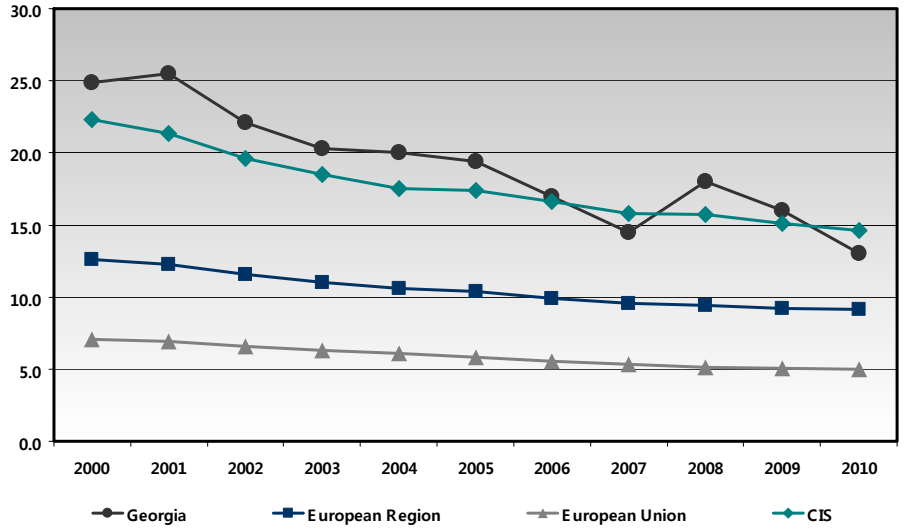
Despite the downward trend, the under 5 mortality rate in Georgia still maintains the higher value in comparison to the European and the former Soviet Union countries. It's lower only than in Central Asian Republics and 2 or 3 times higher than the rates of the Baltic States and Belarus.

Figure 1.3 **Under five mortality rate per 1000 live births, former Soviet Union countries, last available year**



Source: WHO HFADB

Figure 1.4 **Under five mortality rate per 1000 live births**

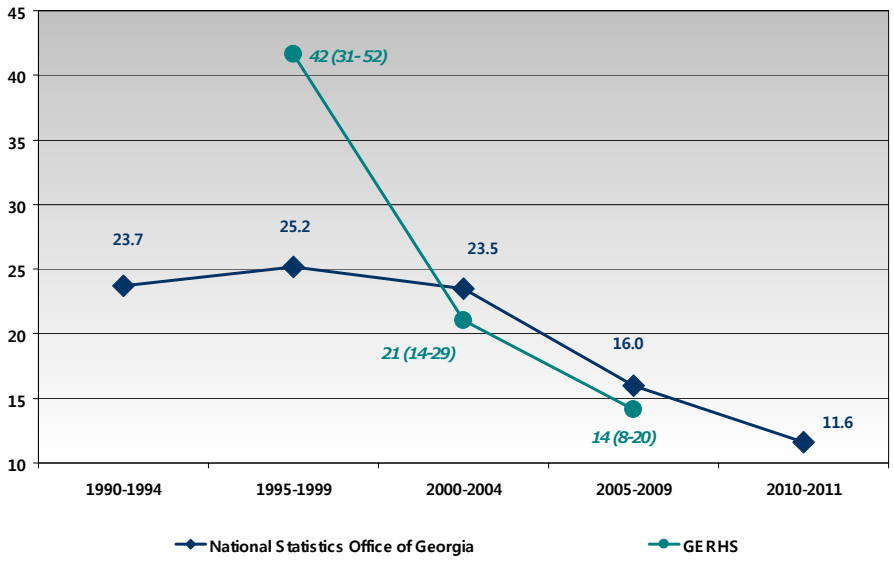


Source : WHO HFADB & NCDC Georgia

According to the WHO global data, almost 40% of all deaths in children aged under 5 occurred during the neonatal period. In 2011, this share in Georgia amounted to 88.1%.

Since 1995, according to either official statistics or surveys data, there was a decline of infant mortality rate. According to the survey data, throughout 1995-2009, five years average infant mortality rate decreased by 66.1%. According to official statistics, the decrease of the same indicator within the same years amounted to 36.5%. In 2011, the infant mortality rate decreased more by 27.5% (Figure 1.5).

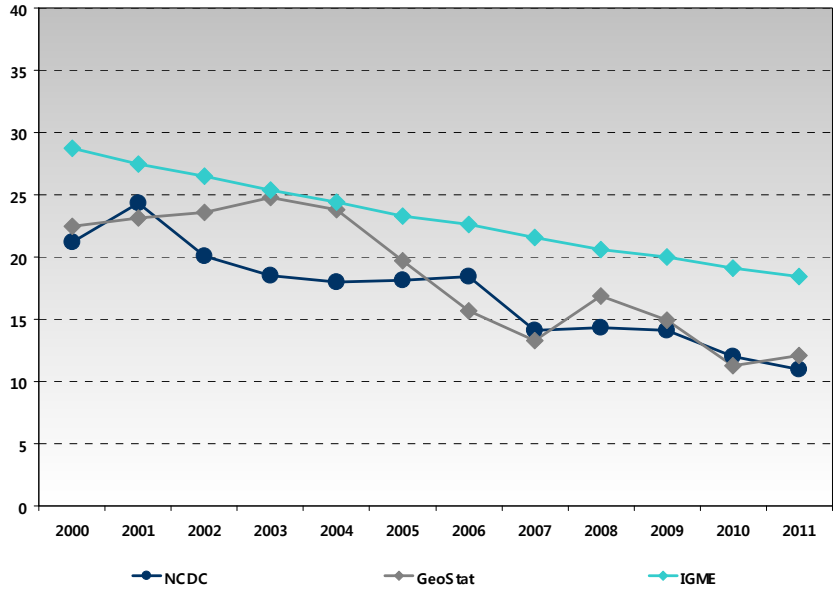
Figure 1.5 **Infant mortality rate per 1000 live births, five years average, Georgia**



Infant mortality rates by 1000 live births, Georgia

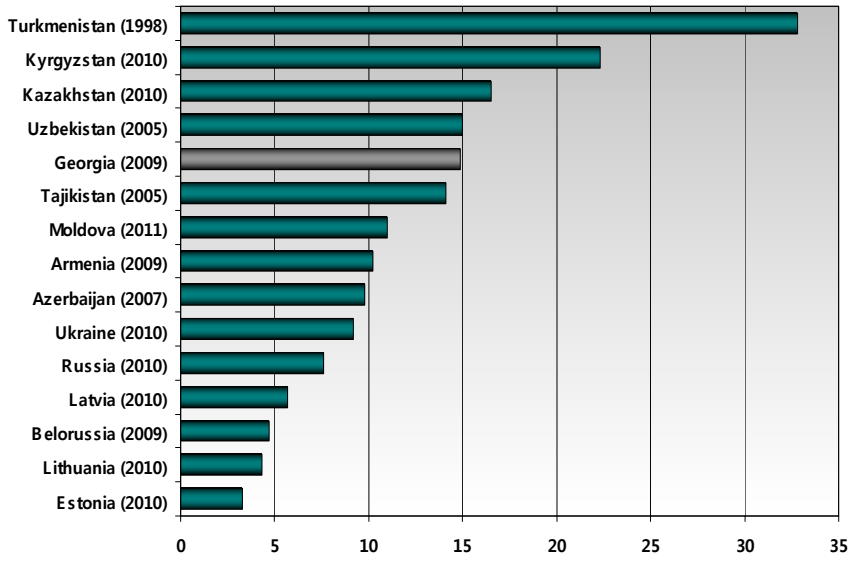
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Health statistics	21.2	24.3	20.1	18.5	18.0	18.1	18.4	14.1	14.3	14.1	12.0	11.0
Vital statistics	22.5	23.1	23.6	24.8	23.8	19.7	15.8	13.3	17.0	14.9	11.2	12.1
GERHS	41.6	-	-	-	-	21.1	-	-	-	-	14.1	-

Figure 1.6 **Infant mortality rate per 1000 live births, Georgia**



In Georgia infant mortality rate is significantly higher than in the most of former Soviet Union countries. Infant mortality rate in Baltic countries is almost 5 times lower compared to Georgia.

Figure 1.7 **Infant mortality rate per 1000 live births, former Soviet Union countries, last available year**



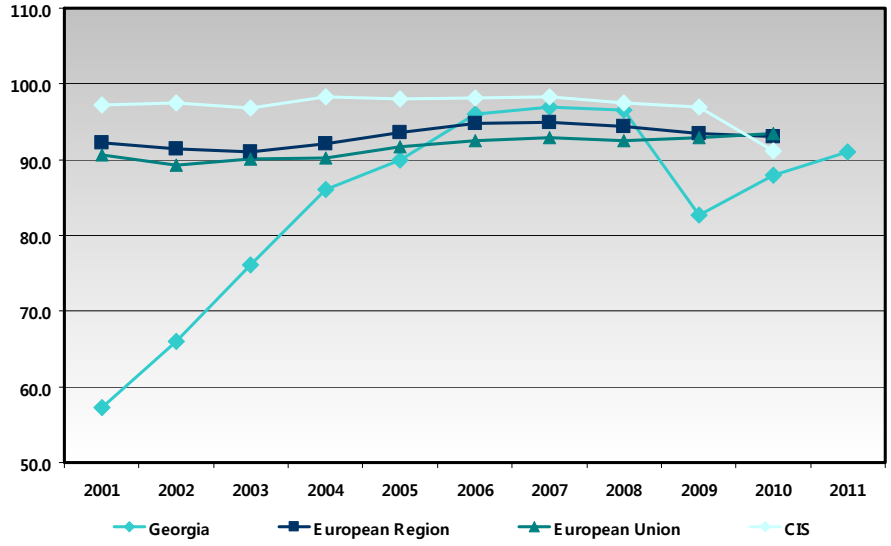
Source: WHO HFADB

Children aged 12-23 months immunized against measles*

One of the main indicators of vaccine preventable diseases management is coverage of infants with immunization against measles. The global coverage of children aged 12-23 months with anti measles immunization is 82%.

During 2001-2008, Georgia maintained good preventive immunization coverage. In 2009, there was a decrease of this indicator. In 2010 it again came closer to the level of the coverage in the European Union and the European region and in 2011, it achieved 91% (Figure 1.8).

Figure 1.8 Percent of 12 months olds children vaccinated against measles



Source: NCDC Georgia & WHO HFADB

Goal 5
Improve maternal health

Target 11: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Indicators

- *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*

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

Maternal mortality ratio *

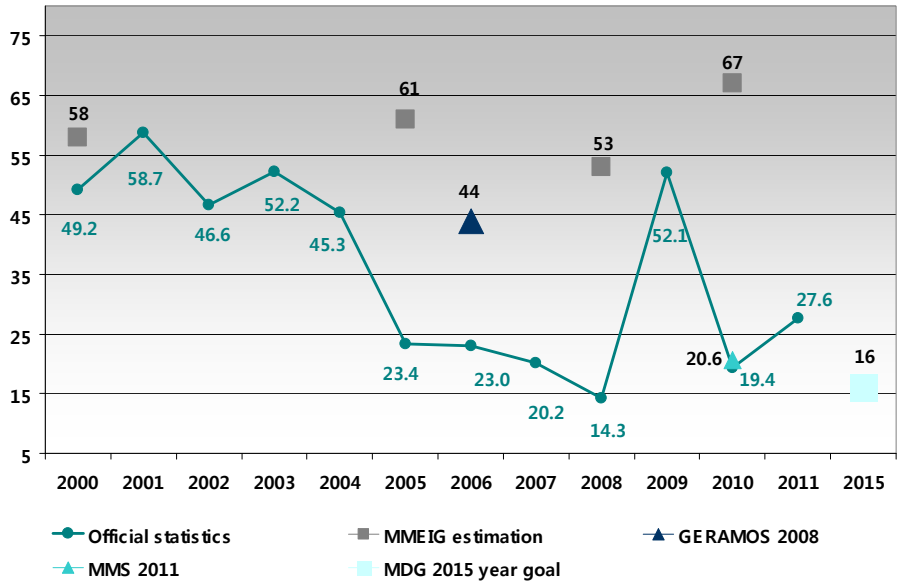
The target of reducing the maternal mortality to 3/4 is especially significant in achieving the Millennium Development Goals. In order to meet this goal the maternal mortality rate needs to be reduced by 5.5% annually. According to the recent UN estimates, percentage of decrease is twice less.

According to the UN Maternal Mortality Estimation Interagency Group (MMEIG) estimate for Georgia the maternal mortality ratio was 63 per 100000 live births. Thus, the goal for this indicator for 2015 is 16.

According to the Geostat and NCDC matched data the downward trend of maternal mortality rates was noted in Georgia. In 2009, the rate reached a maximum value, which was caused by generally improving the death registration and pandemic influenza (Figure 1.19).

Notables that the Reproductive Age Mortality Study (RAMOS2008) results are strongly different from the official data. According to this study, 67.7% of the maternal deaths happened in hospitals. Considering this, the Maternal Mortality Study was conducted in 2011 (MMS2011). During the study all hospital death of women aged 15–49 happened in 2010 were checked. Results of MMS2011 are close to the official statistics (Figure 1.19).

Figure 1.9 **Maternal mortality ratio per 100000 live births, Georgia**



Maternal mortality rate, Georgia

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009**	2010	2011
Official statistics	49.2	58.7	42.2	49.9	43.1	23.4	23.0	20.2	14.3	52.1	19.4	27.6
GERAMOS	-	-	-	-	-	-	44.0	-	-	-	-	-
MMS2011	-	-	-	-	-	-	-	-	-	-	20.6	-

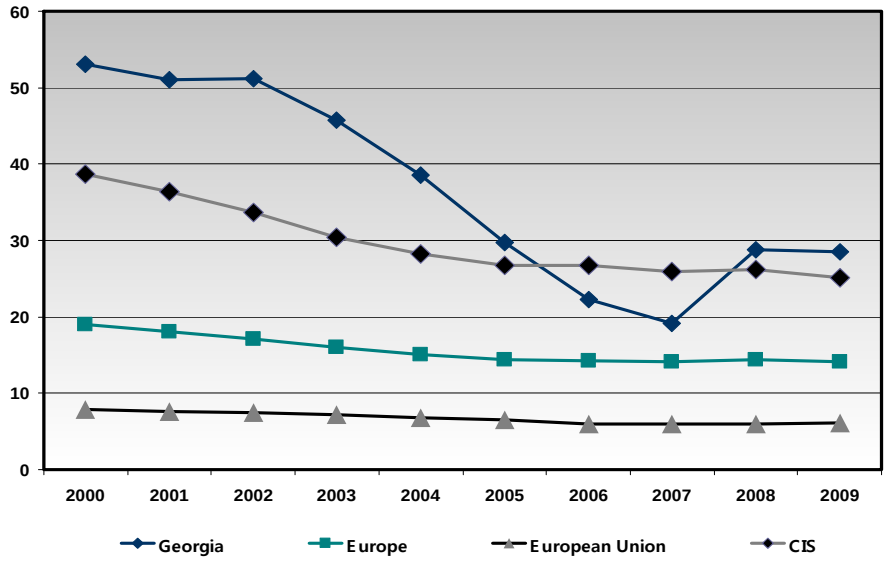
** See additional information in the chapter "Maternal and Child Health".*

*** Since 2009 NCDC and National Statistics office of Georgia provide combined data on maternal mortality; the mortality rate is calculated by National Statistics office of Georgia based on registered live births.*

The WHO Health for All Database provides maternal mortality estimates on a yearly basis, which include the three-year moving average rate.

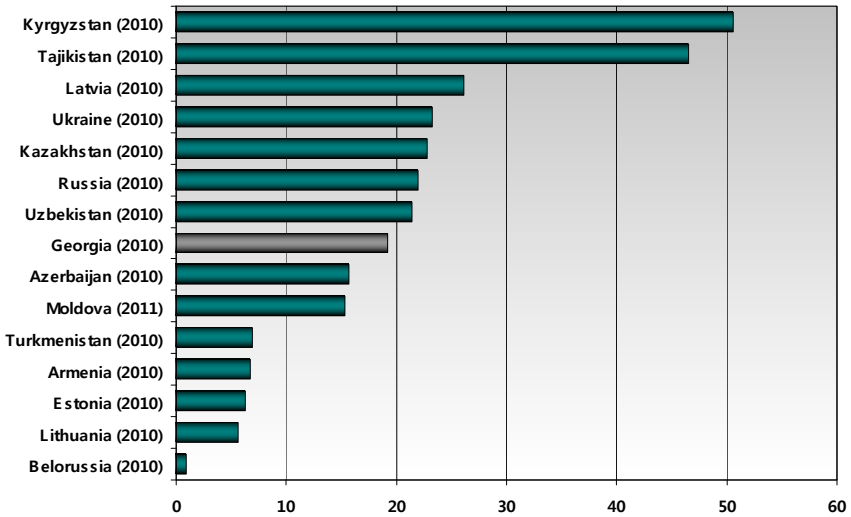
For Georgia, as well as for those countries where the number of cases of maternal deaths is relatively small, the spasmodic changes of indicator from year to year is typical, therefore, the method of moving averages for 3 or 5 years is widely used to compare maternal mortality ratios. This method better evaluates dynamics of changing data for prolonged periods. According to the WHO data, three-year moving average of maternal mortality ratio in Georgia, is higher than in countries of the European region, the European Union and the CIS (Figure 1.10, 1.11).

Figure 1.10 **Maternal mortality ratio per 100000 live births, 3-years moving average**



Source: WHO HFADB

Figure 1.11 **Maternal mortality ratio per 100000 live births, former Soviet Union, last available year**



Source: WHO HFADB

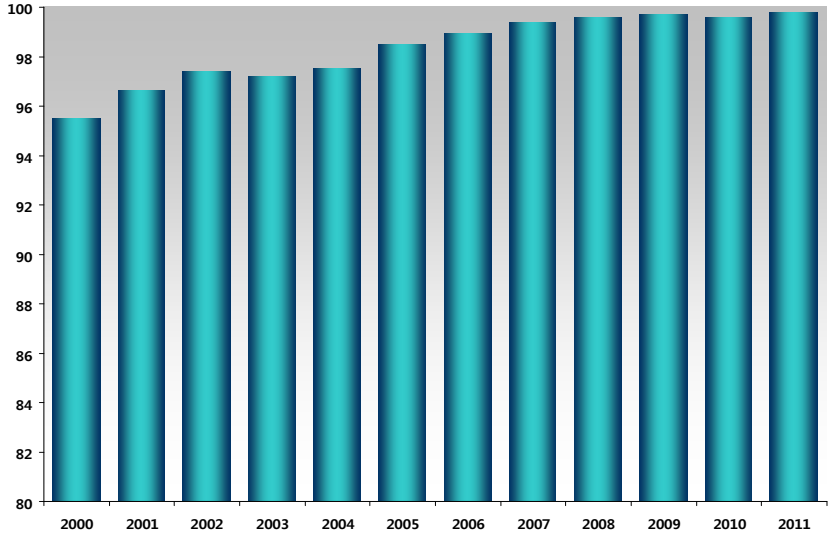
For better revealing the cases of maternal deaths with the NCDC initiative the maternal mortality surveillance system was developed. According to this system each death of a woman of the reproductive age must be notified within 24 hours and must be a subject of an epidemiological

study, which must be conducted using the standard protocols. A verbal autopsy must be used, if necessary.

Proportion of births attended by skilled health personnel

The proportion of births attended by skilled medical personnel achieved its highest point of 99.8% in 2011 (Figure 1.12).

Figure 1.12 **Proportion of births attended by skilled medical personnel (%), Georgia**



According to the MICS 2005, 93.8% of deliveries had been attended by skilled health professionals.

According to the GERHS data, in 1995-1999 and 2000-2004, about 8% of women delivered at home and most of them did not get qualified medical assistance. In 2009, this indicator reduced to 1.2%. The difference of these data and official statistics is due to incomplete registration of home deliveries.

Proportion of births attended by skilled medical personnel (%)

	1995-1999	2000-2004	2005-2009	2011
Health statistics	95,8	96,9	99,2	99.8
GERHS	92.2	92.5	98.8	-
MICS	-	-	93.8	-

Contraceptive prevalence rate

Estimates of the contraceptive prevalence rate are based on survey results. According to the MICS2005, 31.5% of married or having partners women used some type of contraception. The most popular method is an intrauterine contraceptive device, which was used by 8.2% of sexually active women. Another common method – periodic abstinence (calendar / rhythm method) - was used by 6.7% of sexually active women; 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 reached 32%. An increase of the contraceptive

prevalence was mainly caused by increasing in usage of modern methods (8.9%). Decrease of usage of traditional methods of contraception shows slow dynamics.

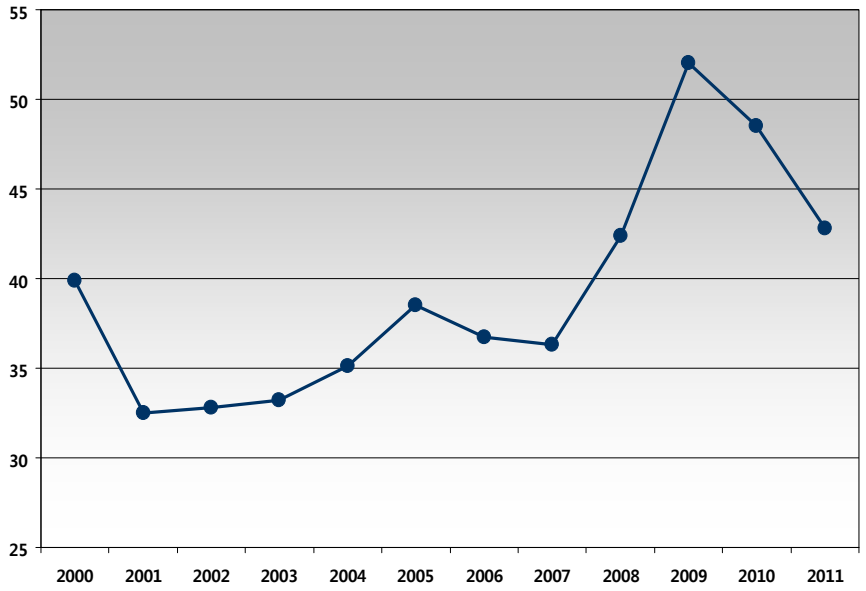
Contraceptive prevalence (%) in women aged 15-44, Georgia

	1995-1999	2000-2004	2005-2009
Reproductive health survey GERHS			
Any method of contraception	24.7	28.4	32.0
Including			
Modern methods	12.1	16.1	21.0
Traditional methods	12.6	12.3	11.0
Multiple Indicator Cluster Survey MICS			
Any method of contraception	-	-	31.5
Including			
All modern methods	-	-	20.0
All traditional methods	-	-	11.8
Intrauterine contraceptive device	-	-	8.2
Periodic abstinence	-	-	6.7
Condom	-	-	5.9

Adolescent birth rate

In 2011, according to the National Statistics Office, the decrease of birth rate of women aged under 20, continued. In 2011, the rate decreased by 11.8%, compared to the previous year (Figure 1.13).

Figure 1.13 **Adolescent fertility rate (birthsper 1000 women ages 15 – 19), Georgia**



Correspondingly the proportion of children born alive by women aged under 20 and it reached 11.2%.

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

	1990-1994	1995-1999	2000-2004	2005-2009	2010-2011
Vital statistics	15.6	18.9	12.9	13.9	11.9
GERHS	-	14.6	14.6	13.7	-

Antenatal care coverage

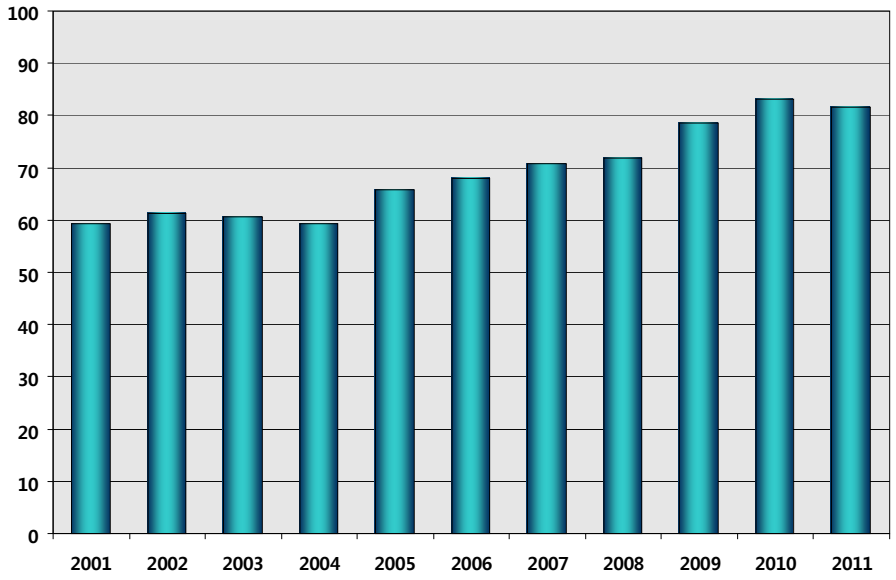
According to the WHO, globally, 80% of pregnant women received antenatal care at least once during the period 2000-2010; only 53% received the WHO-recommended minimum of four antenatal visits.

According to the new model recommended by the 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 it exceeded the WHO global indicator.

In Georgia, information on antenatal care is collected from maternity homes, women consultation centers. Since 2000, according to the official statistics, coverage with 4 complete antenatal visits has been increasing and in 2011 it totaled to 81.6% (Figure 1.14).

Figure 1.14 Percent of women receiving at least 4 antenatal care visits, Georgia



According to the GERHS, it is possible to receive the data about antenatal visits counted to any providers. Correspondingly coverage rates exceeded data of routine statistics: it was almost universal in period 2005-2009 and totaled to 98.4%.

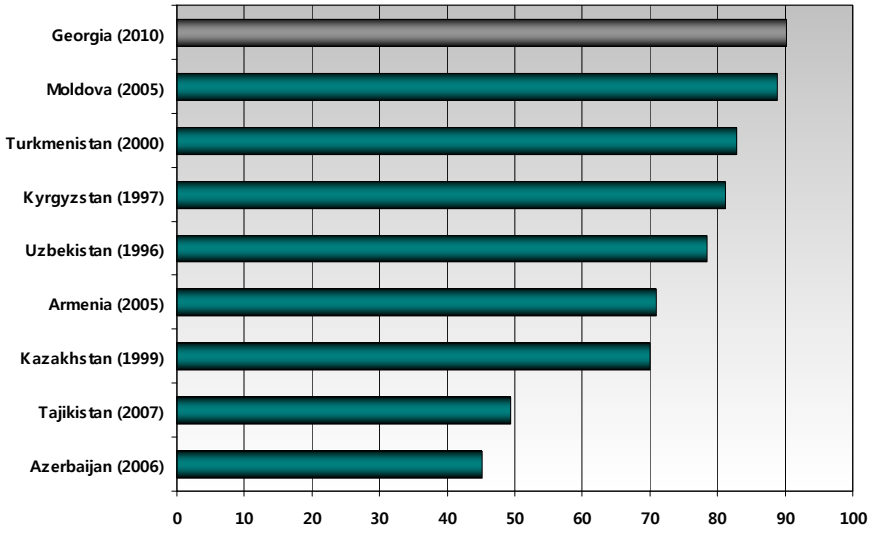
According to the MICS2005 data, antenatal care coverage was quite high in Georgia. During pregnancy almost all women (97.4%) visited antenatal care institutions at least once.

Antenatal care coverage (%)

	1995-1999	2000-2004	2005-2009
Reproductive Health Survey GERHS			
1 visit	90.8	95.4	98.4
4 or more visits	85.3	80.7	90.2
Multiple Indicator Cluster Survey MICS			
1 visit	95.3	-	97.4

According to the UN agencies official data, in Georgia antenatal care coverage is higher than in the former Soviet Union countries (Figure 1.15).

Figure 1.15 **Percent of women receiving at least 4 antenatal care visits, former Soviet Union countries, last available year**



Source: The Official UN Site for MDG, GERHS

Unmet need for family planning

According to GERHS, the rate of unmet need for family planning reduced throughout 1995-2009, in Georgia.

Unmet need for family planning (%), GERHS

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

Goal 6
Combat HIV/AIDS, Malaria and other diseases

Targets

- *Have halted by 2015 and begun to reverse the spread of HIV/AIDS*
- *Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases*

Indicators

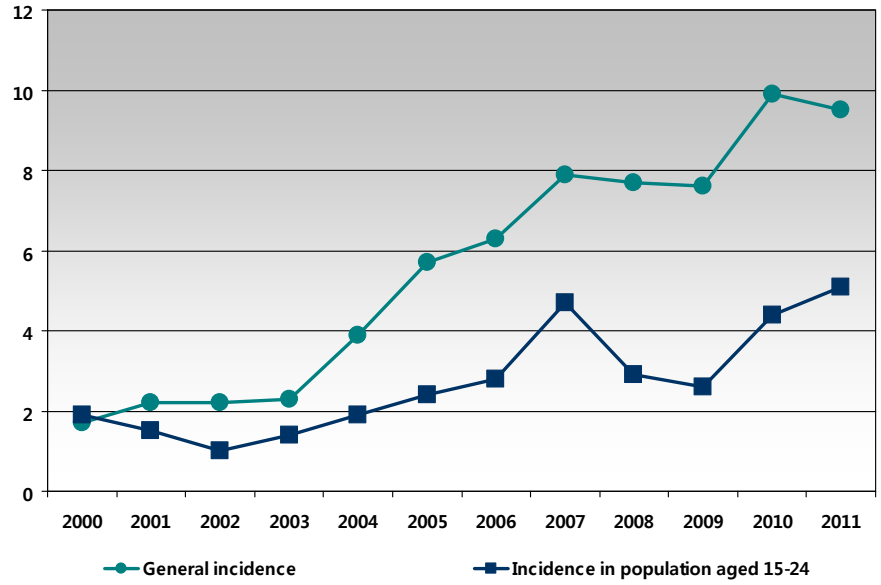
- *HIV prevalence among population aged 15-24 years*
- *Proportion of population with advanced HIV infection with access to antiretroviral drugs*
- *Use of condom during the last sexual intercourse*
- *Prevalence and death rates associated with malaria*
- *Incidence, prevalence and death rates associated with tuberculosis*

HIV prevalence among population aged 15-24 years*

According to the World Health Statistics, Georgia is among the countries with a low prevalence of HIV/AIDS and it holds one of the last places even among them. In 2011, HIV prevalence rate in Georgia decreased by 4%, compared to the previous year.

Young children and youth represent high risk group for HIV infection. Young people aged *15-24* represent 80 percent of all new HIV cases worldwide. In Georgia, the incidence of HIV-infection started to grow in 2010; among young people aged 15-24 the incidence grew by 15.9% (Figure 1.16).

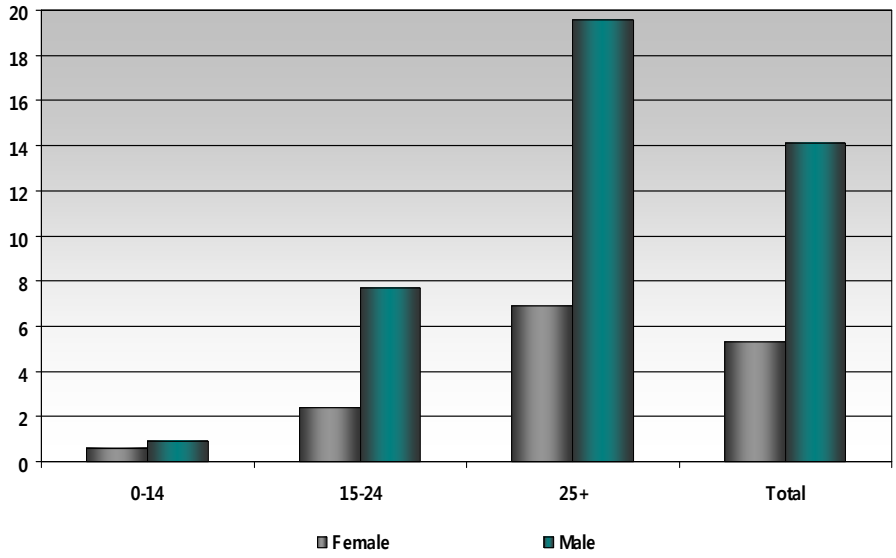
Figure 1.16 Incidence of HIV/AIDS per 100000 population, Georgia



The difference in distribution by age groups of incidences in males and females was minimal (Figure 1.17).

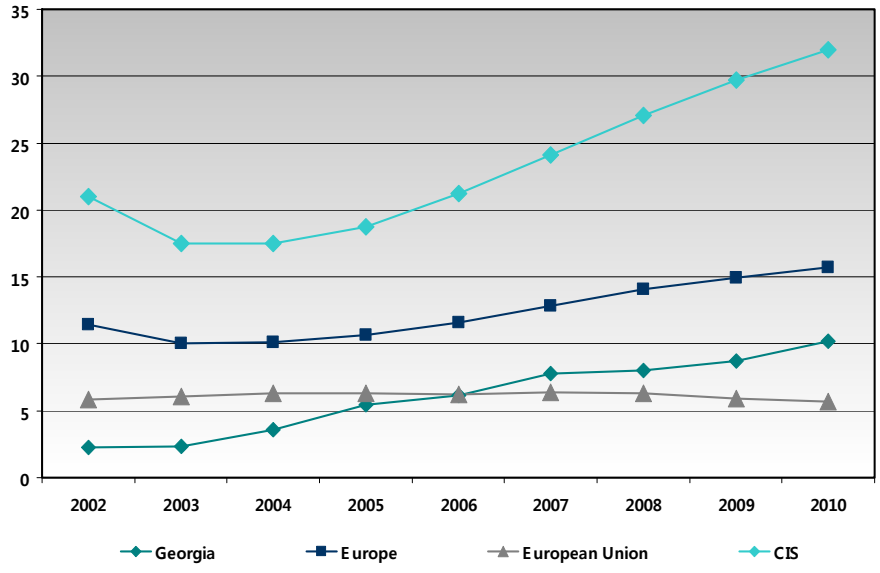
* *See additional information in the chapter "Population health status" – Infectious diseases.*

Figure 1.17 **Incidence of HIV/AIDS per 100000 population by sex and age groups, Georgia, 2011**



According to expert estimates, in Georgia there is a risk for a fast growth of HIV/AIDS incidence due to high spread of HIV/AIDS in neighbouring countries, rather high level of spreading of injecting drug use, growing migration and other reasons (Figure 1.18).

Figure 1.18 **Incidence of HIV infection per 100000 population**

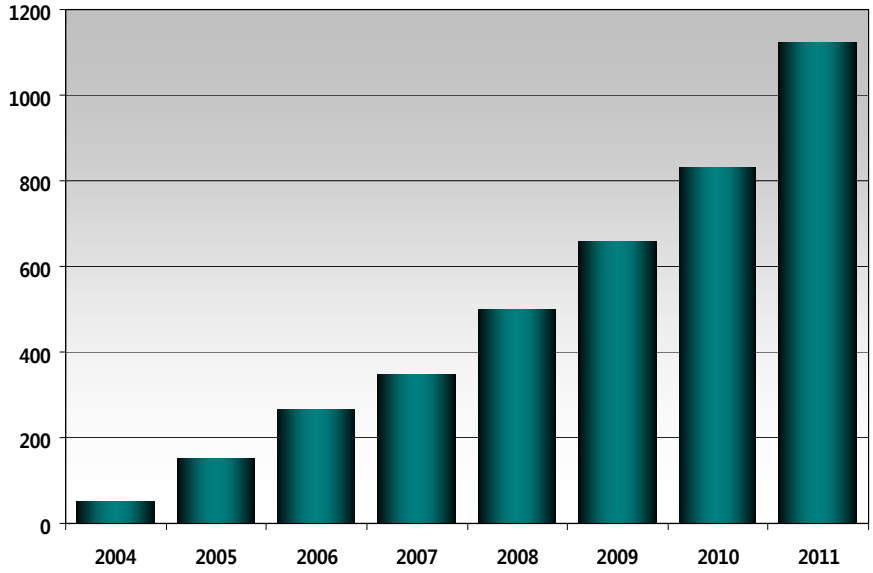


Source: WHO HFADB

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

Throughout 2011, the number of patients receiving antiretroviral therapy has grown by 35.2%. During 2004-2011, this number grew 22 times (Figure 1.19).

Figure 1.19 Number of people receiving antiretroviral therapy in Georgia



Condom use during the last sexual intercourse

In order to prevent unintended pregnancy and sexually transmitted diseases, like HIV, the use of condoms is one of the best methods. The effectiveness and the level of condom use can be evaluated through surveys. According to the GERHS, the use of condom during the last sexual intercourse is rather infrequent, although, in 2005-2009 some increase is noticeable.

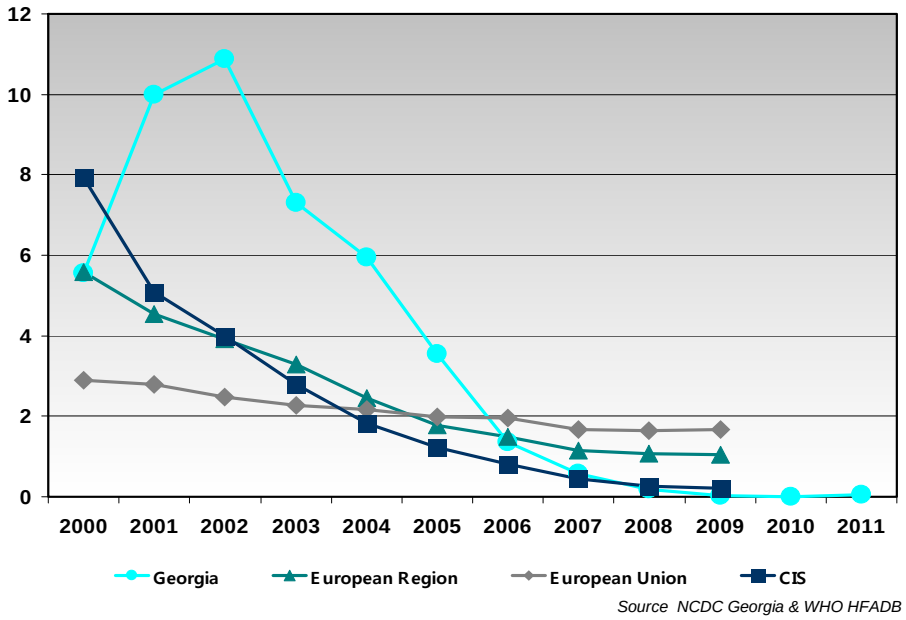
Use of condom during the last sexual intercourse, GERHS

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

Incidence and death rates associated with malaria

In 2005, all the countries of the 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. Since 2002 incidence of malaria in Georgia has been decreasing and in 2011 it totalled to 0.04 (Figure 1.20).

Figure 1.20 Incidence of malaria per 100000 population



Source NCDC Georgia & WHO HFADB

During the current year, no death due to malaria has been registered in Georgia.

Incidence, prevalence and death rates associated with tuberculosis*

The core of WHO/Europe policy on tuberculosis (TB) is the Stop TB Strategy and it's vision is a world free of tuberculosis. The Strategy also supports the development of new and effective tools to prevent, detect and treat TB. It underpins the Stop TB Partnership's Global Plan to Stop TB 2006–2015, and WHO/Europe's Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015.

The main goal of the strategy is the dramatically reduction of the global burden of TB by 2015 in line with the Millennium Development Goals (MDGs) and the Stop TB Partnership targets.
The three main indicators are used to measure the progress toward MDGs achievement according to the WHO recommendations: TB incidence, TB prevalence and deaths due to TB.

According to the WHO, the annual global incidence of tuberculosis, which is a rate of the number of new cases of tuberculosis per population for the determined period, has got a tendency for a slow increase. Even though there are effective TB treatment programs, its incidence would never decline by more than 5–10% annually, if there is no HIV co-infection.

Prevalence of tuberculosis determines the risk of spread of tuberculosis in the population; it is proportional to the frequency of new cases of tuberculosis and average duration of the disease. The WHO proposes two methods for estimating the prevalence of TB. The first is direct measurement using cross-sectional population-based surveys. Such surveys typically require a sample size about 50000 to 100000 people in high-burden countries, and implementation is expensive. Direct, cross-sectional and widespread measurement tool that is quite expensive and should be carried out in high burden countries. The second is indirect method, when the TB prevalence estimated as the incidence of TB multiplied by the average duration of disease (in years). Periodic assessment of the prevalence of TB disease can therefore be more useful for measuring the short-term impact of TB control than efforts to measure changes in TB incidence.

In most countries, where expensive surveys cannot be proposed, the rate of registered cases per 100000 population can be used.

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

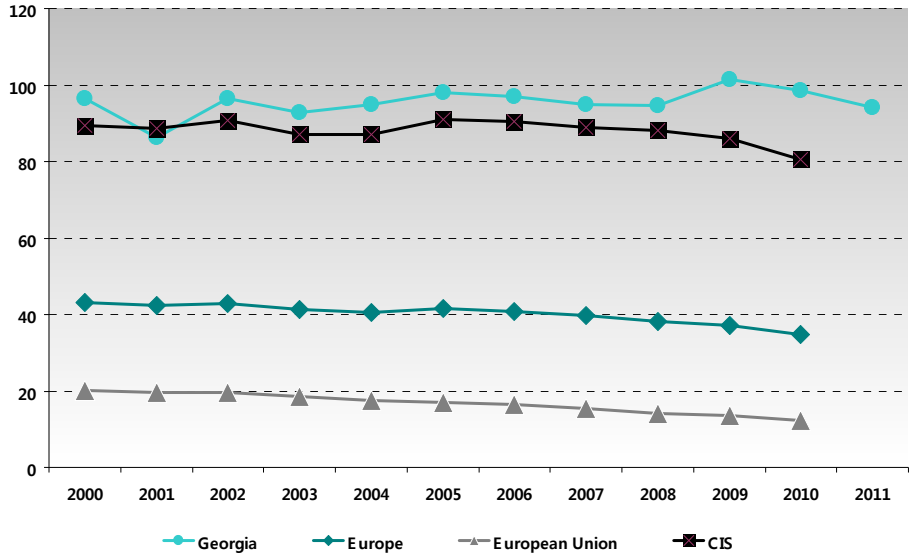
There are three ways to measure TB mortality:

- Direct measurement using vital registration data. This is possible if the death registration data collected in vital registration systems are efficient;
- Direct measurement using verbal autopsy studies; such studies can be a part of a vital registration system or may be done in the frame of other studies and results must be extrapolated to the whole population.
- Indirect measurement using estimates of case-fatality rates and TB incidence, when TB mortality is estimated as TB incidence multiplied by the hospital case fatality rate.

From a TB perspective, a general problem with death certification is that TB may be listed as one of the associated causes of death in the vital registration system rather than recorded as the underlying cause of death. Since national statistics usually consider only the underlying cause of death, they may understate the number of deaths in which TB is a contributing factor.

In Georgia, there has being noted a reduction of tuberculosis incidence since 2009. In 2010, compared to the previous year, the incidence rate decreased by 2.8%, and in 2011, compared to the previous year, it decreased by 4.5%. Despite these decrease, incidence of tuberculosis in Georgia remains quite high, compared to other countries (Figure 1.21).

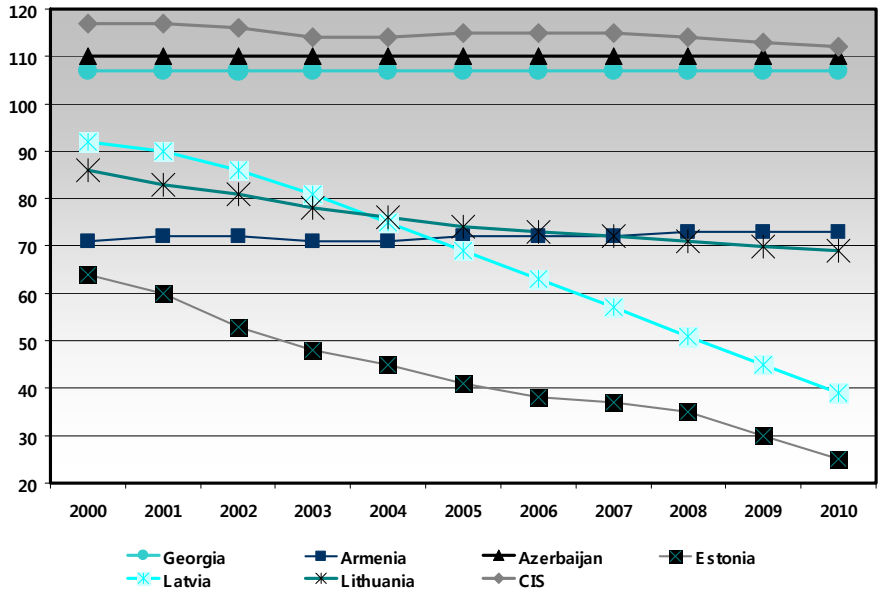
Figure 1.21 Incidence of tuberculosis per 100000 population



Source: WHO HFADB

The WHO provides periodical estimates, which usually differ from the official data. Despite of officially reported reduction of TB incidence since 2009 in Georgia, the estimated TB incidence according to the WHO Health for All Database was unchanged in years and amounted 107 per 100000 population. The estimated TB incidence rate exceeded provided by official sources (Figure 1.22).

Figure 1.22 Tuberculosis, estimated incidence rates



Source: WHO HFADB

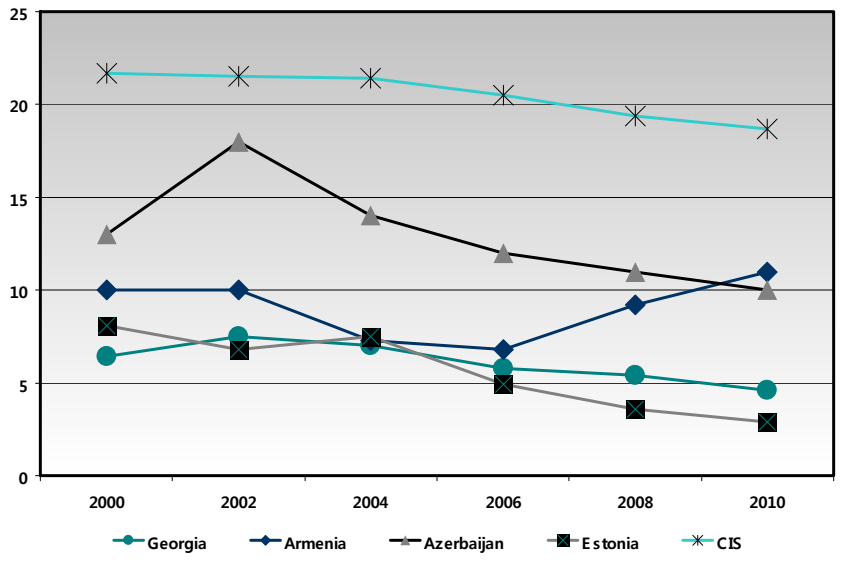
In 2009, there was a small difference between the official data and data drawn from the WHO estimates (difference – 5.2%). In 2010, the difference was 7.9%, while in 2011, it was about 12%.

Registered TB cases, Georgia

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Registered cases	5941	5707	6346	6208	6543	6696	6294	6450	5831	5993	5806	5533
Rate per 100000 population	133.4	128.8	145.2	143.4	149.7	153.2	143.1	147.0	133.0	135.9	130.4	123.4

According to the WHO estimates, the mortality rate due to TB in Georgia shows decreasing trend (Figure 1.23).

Figure 1.23 Tuberculosis, estimated mortality rates per 100000 population



Source WHO HFADB

In 2011, according to the National Statistics Office, an increase of TB mortality was noted in Georgia.

TB, official and estimated data, Georgia

	Official statistics		WHO 2010
	2010	2011	
Number of registered cases of tuberculosis	5806	5533	5100
Prevalence per 100000 population	130.4	123.4	118.0
New cases of tuberculosis	4392	4223	4600
Incidence rate per 100000 population	98.6	94.2	107.0
Tuberculosis death rate per 100000 population	2.0	3.5	4.6

Source: National Centre for Tuberculosis and Lung Disease, National Statistics Office ,WHO

Goal 7
Ensure environmental sustainability

Target *Halve the proportion of people without sustainable access to safe drinking water by 2015*

Indicators

- *Proportion of people with access to safe drinking water*
- *Proportion of people with access to improved sanitation.*

Proportion of people with access to safe drinking water

One component of Target 7.C of MDG 7 is to halve a share of the population without sustainable access to the safe drinking-water. This indicator can be evaluated only through surveys.

According to the MICS2005, 94.2% of population used an 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.

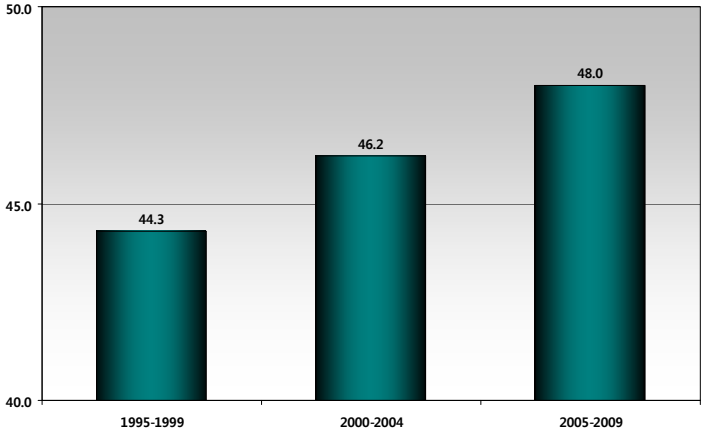
Availability of piped water, (%)

	2000-2004	2005-2009
Reproductive Health Survey GERHS		
Urban	96.1	96.8
Rural	66.2	65.9
Multiple Indicator Cluster Survey MICS		
Total		94.2

Proportion of people with access to improved sanitation

The other component of Target 7.C is to halve the share of the population without sustainable access to basic sanitation. 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, in 1995-2009, in households availability of flash toilets increased by 3.7% (Figure 1.24).

Figure 1.24 Percent of households with flash toilets



Source: GERHS

Table 1.1 Under-five mortality rate per 1000 live births, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	36.7	22.9	21.0	21.9	25.1	21.1	20.9	15.5	12.8	10.2	11.9
Tbilisi	37.3	35.4	31.9	28	28.4	29.6	21.1	24.6	21.5	16.9	15.7
Kakheti	21.2	17.7	9.7	13.5	8.2	9.1	7.8	7.4	9.5	8.8	6.5
Imereti	24.1	17.8	17.2	21.6	20.0	19.9	19.4	17.0	19.1	19.6	17.1
Samegrelo	9.9	8.1	9.1	6.9	6.8	6.7	5.9	2.7	4.0	3.9	4.5
Shida Kartli	35.4	13.5	17.6	14.1	8.5	8.2	5.8	3.1	9.1	9.1	3.6
Kvemo Kartli	9.8	9.1	5.7	8.0	5.5	5.9	5.4	3.7	5.5	7.7	5.2
Guria	13.4	10.2	10.3	12.3	5.6	12.4	7.9	3.1	1.8	1.8	4.2
Samtskhe-Javakheti	11.1	7.2	8.5	9.0	7.5	7.2	3.9	5.9	7.8	8.2	3.1
Mtskheta-Mtianeti	13.1	10.8	6.6	11.7	7.1	9.1	6.6	6.3	5.7	2.3	0
Racha-Lechkhumi and Kvemo Svaneti	3.3	14.0	8.4	10.8	0	0	8.1	0	0	13.3	13.0
Georgia	**26.7**	**22.1**	**20.3**	**20.1**	**19.4**	**19.7**	**15.6**	**16.0**	**15.4**	**13.4**	**12.0**

Table 1.2 Under-five mortality rate per 1000 live births, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Male	28.7	29.5	30.1	27.3	20.8	16.9	15.2	19.0	18.0	14.3	15.8
Female	21.9	22.2	24.8	25.4	21.4	17.0	13.6	18.0	15.0	11.0	11.5
Both sexes	**25.5**	**26.0**	**27.6**	**26.4**	**21.1**	**16.9**	**14.4**	**18.0**	**16.0**	**13.0**	**13.8**

Source: National Statistics Office of Georgia

Table 1.3 Infant mortality rate per 1000 live births, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	33.4	20.4	18.0	21.4	23.0	20.7	19.1	15.0	12.0	9.0	10.6
Tbilisi	34.0	32.4	28.8	24.7	26.5	27.6	18.6	22.0	20.0	15.0	14.7
Kakheti	10.9	16.0	9.7	11.8	7.2	8.4	7.9	7.4	8.7	7.5	4.5
Imereti	22.4	16.4	17.2	19.7	19.7	18.8	18.8	15.0	19.0	19.0	16.4
Samegrelo	8.9	7.0	9.1	5.7	6.5	6.5	5.7	2.2	3.6	3.7	4.0
Shida Kartli	33.7	12.1	16.5	13.4	8.6	7.1	5.4	3.1	8.7	8.0	3.6
Kvemo Kartli	7.1	8.6	4.8	7.3	5.2	5.2	4.9	2.8	3.3	4.1	3.7
Guria	12.5	10.2	8.5	7.8	5.6	10.1	10.1	2.1	1.8	1.8	4.2
Samtskhe-Javakheti	9.4	6.3	6.6	8.6	6.6	6.3	2.9	5.9	7.3	6.4	2.6
Mtskheta-Mtianeti	13.1	10.8	6.6	10.0	7.1	9.1	2.2	6.3	5.7	2.3	0.0
Racha-Lechkhumi and Kvemo Svaneti	3.3	14.0	8.4	10.8	0.0	0.0	8.1	0.0	0.0	13.0	13.0
Georgia	**24.3**	**20.1**	**18.5**	**18.0**	**18.1**	**18.4**	**14.1**	**14.3**	**14.1**	**12.0**	**11.0**

Table 1.4 Infant mortality rate per 1000 live births, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Male	25.8	26.6	26.8	24.4	19.5	15.6	14.4	17.0	17.0	12.5	13.9
Female	20.0	20.3	22.4	23.0	19.8	15.9	12.1	17.0	13.0	9.8	10.2
Both sexes	**23.1**	**23.6**	**24.8**	**23.8**	**19 .7**	**15 .8**	**13 .3**	**17 .0**	**14.9**	**11 .2**	**12 .1**

Source: National Statistics Office of Georgia

Table 1.5 Measles immunization coverage in children ages 12-23 months (%), Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	97.4	93.5	91.4	93.5	94.0	92.2	93.8	86.7	68.9	98.5	98.1
Tbilisi	90.5	93.8	97.5	91.1	85.5	86.9	97.5	98.8	98.4	85.4	85.6
Kakheti	86.9	96.7	83.5	90.9	97.0	96.2	93.2	97.5	77.6	98.8	92.9
Imereti	86.3	100.0	89.5	86.0	96.2	96.9	97.8	98.9	89.5	93.4	89.5
Samegrelo	83.6	89.4	72.9	83.5	95.8	91.9	97.9	96.5	82.7	91.8	93.0
Shida Kartli	91.1	80.0	77.5	81.9	98.6	92.7	100.0	98.8	82.0	100.0	89.6
Kvemo Kartli	97.5	82.9	61.9	76.0	85.0	96.7	96.3	96.9	80.8	83.7	93.7
Guria	89.0	100.0	86.9	81.0	93.1	93.5	96.2	98.9	91.1	99.7	95.2
Samtskhe-Javakheti	92.9	94.2	84.0	100.0	95.1	98.0	90.6	92.5	81.8	95.3	98.3
Mtskheta-Mtianeti	71.1	83.7	73.9	93.4	92.9	94.4	94.5	94.2	93.3	95.8	93.4
Racha-Lechkhumi and Kvemo Svaneti	86.5	85.3	86.1	94.2	93.8	86.8	96.6	93.2	93.8	96.4	92.4
Georgia	**90.0**	**92.9**	**82.2**	**86.5**	**91.2**	**95.1**	**97.0**	**96.5**	**82.7**	**94.3**	**90.7**

Table 1.6 Maternal mortality ratio per 100000 live births, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009*	2010	2011
Ratio per 100000 live births	58.7	42.2	49.9	43.13	23.4	23.0	20.2	14.3	52.1	19.4	27.6

Table 1.7 Proportion of births attended by skilled medical personnel (%), Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	89.5	94.5	93.8	95.8	97.4	97.8	98.6	98.7	99.3	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	84.3	90.6	85.2	81.8	89.7	88.3	98.1	96.6	97.7	95.8	99.2
Imereti	98.8	98.8	99.4	99.5	100.0	99.9	100.0	100.0	100.0	99.9	100.0
Samegrelo	98.7	98.4	99.2	99.6	99.6	100	99.8	99.9	99.9	99.5	100.0
Shida Kartli	99.5	99.7	99.9	98.5	99.9	99.6	99.9	100.0	99.9	99.9	99.9
Kvemo Kartli	91.6	91.5	91.7	93.1	96.8	98.2	96.2	99.1	99.0	99.8	99.8
Guria	96.7	96.0	92.7	96.6	99.1	100.0	100.0	100.0	99.3	99.8	100.0
Samtskhe-Javakheti	98.6	94.9	99.8	99.7	96.8	98.8	99.2	99.6	99.1	98.8	99.5
Mtskheta-Mtianeti	99.5	98.6	89.7	98.5	93.7	99.5	100.0	100.0	100.0	100.0	99.7
Racha-Lechkhumi and Kvemo Svaneti	99.3	100.0	96.2	82.6	96.4	95.6	100.0	96.2	98.9	100.0	98.7
Georgia	**96.6**	**97.4**	**97.2**	**97.5**	**98.5**	**98.9**	**99.4**	**99.6**	**99.7**	**99.6**	**99.8**

Table 1.8 Adolescent fertility rate, Georgia, , 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Per 1000 women aged under 20	32.5	32.8	33.2	35.1	38.5	36.7	36.3	42.4	52.0	48.5	42.8

Source: National Statistics Office of Georgia

** Since 2009 NCDC and National Statistics office of Georgia provide combined data on maternal mortality; the mortality ratio is calculated by National Statistics office of Georgia based on registered live births.*

Table 1.9 Percent of women receiving at least 4 antenatal care visits , Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Abkhazia	NA	NA	NA	12.5	NA	78.2	81.6	NA	NA	77.2	68.5
Ajara	81.8	81.0	73.1	77.2	80.8	82.8	86.2	85.2	86.4	88.9	91.3
Tbilisi	59.6	58.2	60.1	60.4	65.4	66.8	70.8	73.9	79.7	80.8	78.0
Kakheti	75.9	72.8	66.2	56.6	63.8	61.4	61.0	61.4	75.7	86.5	87.7
Imereti	71.9	57.2	53.7	54.8	62.5	69.2	69.9	70.3	80.5	86.0	84.8
Samegrelo	81.6	57.5	60.1	52.5	61.2	71.0	77.8	80.3	87.7	91.6	87.5
Shida Kartli	79.1	61.9	67.0	84.4	93.0	93.4	96.7	96.2	95.3	97.9	96.8
Kvemo Kartli	70.7	54.6	53.3	43.6	50.6	45.0	40.5	39.6	47.9	63.4	55.9
Guria	82.2	55.8	54.9	51.8	57.8	61.3	55.0	56.2	69.7	75.9	79.0
Samtskhe- Javakheti	54.6	52.7	61.6	59.9	67.2	64.9	75.6	79.4	83.7	85.8	90.2
Mtskheta-Mtianeti	52.0	52.9	59.6	43.9	54.5	45.2	51.3	65.4	79.3	71.5	86.2
Racha-Lechkhumi and Kvemo Svaneti	65.4	58.4	64.2	51.3	66.8	55.2	71.0	49.0	55.3	77.9	79.3
Georgia	**59.3**	**61.3**	**60.6**	**59.4**	**65.8**	**68.0**	**70.7**	**71.8**	**78.5**	**83.1**	**81.6**

Table 1.10 Incidence of HIV infection per 100000 populations, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	2.4	3.2	3.8	6.2	7.5	11.1	14.0	8.4	9.7	9.1	9.4
Tbilisi	3.3	4.7	3.6	6.7	7.9	7.9	9.5	11.8	11.7	14.1	12.7
Kakheti	0.5	0.3	0.7	0.8	2.5	4.2	3.5	2.7	6.0	5.2	3.9
Imereti	1.0	1.4	1.3	3.5	4.4	6.4	8.7	6.3	5.2	10.4	6.8
Samegrelo	6.1	2.8	5.0	4.6	11.5	8.3	12.6	12.0	9.8	13.5	12.3
Shida Kartli	0.6	1.0	0.3	0.7	1.6	2.6	3.5	3.8	3.8	5.2	4.1
Kvemo Kartli	0.6	0.4	0.6	0.2	1.6	3.6	3.3	2.8	2.5	4.0	6.7
Guria	0.0	2.8	0.7	1.4	7.9	7.2	4.3	2.9	4.3	7.9	5.0
Samtskhe- Javakheti	0.0	0.0	0.0	5.4	3.9	2.9	1.0	0.0	1.4	1.9	2.8
Mtskheta-Mtianeti	0.8	0.0	0.8	0.8	1.6	1.6	3.2	2.5	0.0	3.7	0.0
Racha-Lechkhumi and Kvemo Svaneti	0.0	0.0	0.0	4.1	4.1	2.0	0.0	0.0	0.0	2.1	2.1
Georgia	**2.2**	**2.2**	**2.3**	**3.9**	**5.7**	**6.3**	**7.9**	**7.7**	**7.6**	**9.9**	**9.5**

Table 1.11 Incidence of HIV infection per 100000 populations by age and sex, Georgia, 2006-2011

	2006	2007	2008	2009	2010	2011
Males	9.7	11.8	11.4	11.2	14.8	14 .0
Females	3.6	4.8	4.9	4.9	6.0	5 .3

Table 1.12 Incidence of malaria per 100000 populations, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	0	0	0.8	0.53	0	0	0	0	0	0	0
Tbilisi	1.1	0.7	0.7	0.4	0.2	0.1	0.1	0	0.2	0	0.1
Kakheti	81.6	104.9	66.6	28.2	13.8	7.6	3.5	0.7	0	0	0
Imereti	0	0.1	0.1	0.3	0	0	0	0	0	0	0
Samegrelo	0	0	0	0	0	0.2	0	0	0	0	0
Shida Kartli	0	0.3	0.3	0	0	0	0	0.3	0	0	0
Kvemo Kartli	14.8	7.2	6.6	23.5	19.3	10.2	1.8	0.8	0	0	0.2
Guria	18.7	1.4	0	0	0.7	0.2	0.7	0	0	0	0
Samtskhe- Javakheti	0	0.5	0	8.7	0	0	0	0	0	0	0
Mtskheta-Mtianeti	0	0.8	0	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	**9.9**	**10.9**	**7.2**	**5.9**	**3.5**	**1.4**	**0.6**	**0.2**	**0.02**	**0**	**0.04**

Table 1.13 Incidence of tuberculosis per 100000 populations, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	101.5	111.4	140.7	151.3	163.3	148.9	141.8	129.0	124.8	119.9	114.3
Tbilisi	104.6	123.2	114.8	110.3	101.7	106.5	106.6	124.0	111.6	100.4	104.7
Kakheti	81.4	80.6	73.4	70.7	68.0	56.2	67.8	54.8	59.5	58.5	56.1
Imereti	55.6	59.6	70.6	77.6	82.8	64.2	59.4	57.6	64.7	54.5	49.6
Samegrelo	89.9	108.6	96.5	105.8	111.4	101.4	95.4	89.3	101.9	86.8	80.9
Shida Kartli	85.5	83.8	83.9	84.1	68.1	87.0	68.7	62.0	70.6	66.4	65.6
Kvemo Kartli	52.1	75.4	58.5	62.5	74.4	57.5	68.6	69.3	80.3	68.0	67.3
Guria	125.5	136.8	97.8	97.7	110.9	97.1	76.3	82.9	78.2	80.7	58.4
Samtskhe- Javakheti	28.4	39.5	41.8	37.1	63.6	74.4	55.8	46.7	50.1	30.2	27.2
Mtskheta-Mtianeti	63.1	65.4	71.7	71.8	70.2	92.5	92.1	72.8	70.2	88.0	76.7
Racha-Lechkhumi and Kvemo Svaneti	100.6	47.1	69.2	78.5	45.1	30.7	18.6	29.2	46.1	27.4	44.5
Georgia	**86.4**	**96.5**	**92.8**	**94.8**	**98.1**	**96.9**	**95.0**	**94.7**	**101.4**	**98.6**	**94.2**

Table 1.14 Prevalence of tuberculosis per 100000 populations, Georgia, 2001-2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ajara	138.4	146.0	186.1	211.4	238.6	207.9	203.4	180.2	164.3	162.3	141.5
Tbilisi	153.4	174.6	171.8	173.0	160.8	145.7	152.3	164.5	138.9	123.3	126.8
Kakheti	122.9	137.8	109.2	104.4	103.9	85.1	97.3	70.0	77.4	71.1	71.1
Imereti	89.2	89.0	107.9	117.8	125.2	97.7	89.5	82.7	84.5	71.5	66.3
Samegrelo	143.7	170.1	150.0	170.8	185.6	163.5	176.6	129.7	141.8	116.9	110.6
Shida Kartli	111.5	115.3	125.8	125.5	103.2	127.2	109.8	90.4	96.1	89.2	83.8
Kvemo Kartli	88.0	113.8	100.1	119.0	123.6	100.6	114.5	102.6	106.9	88.3	86.1
Guria	160.1	171.7	122.4	129.0	153.5	130.1	109.4	102.3	105.5	99.9	72.7
Samtskhe- Javakheti	52.0	87.2	92.4	67.4	86.2	108.4	91.8	70.2	70.6	53.8	47.8
Mtskheta-Mtianeti	86.1	113.2	110.4	117.2	129.1	129.5	126.7	89.8	99.7	115.5	101.4
Racha-Lechkhumi and Kvemo Svaneti	141.7	64.7	100.8	115.8	76.5	51.2	39.3	41.8	54.5	37.9	63.6
Georgia	**128.8**	**145.2**	**143.4**	**149.7**	**153.2**	**143.1**	**147.0**	**133.0**	**135.9**	**130.4**	**123.5**

CHAPTER 2.

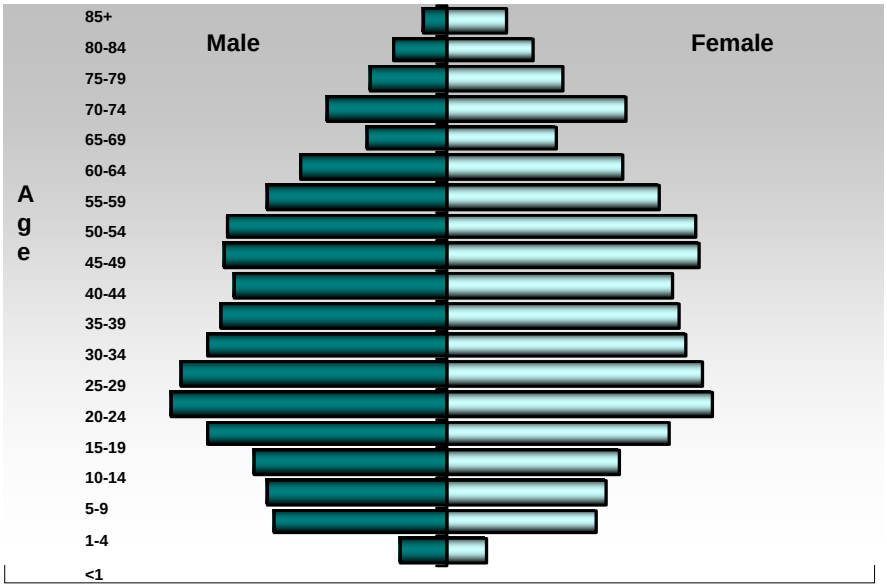
DEMOGRAPHY*

Population

In 2011, the ***mid-year population*** number totaled to 4483400, which is 0.7 percent more compared to 2010.

Female population constituted 52.4% of total number; males - 47.6% (Figure 2.1).

Figure 2.1 **Population pyramid, Georgia, 2011**



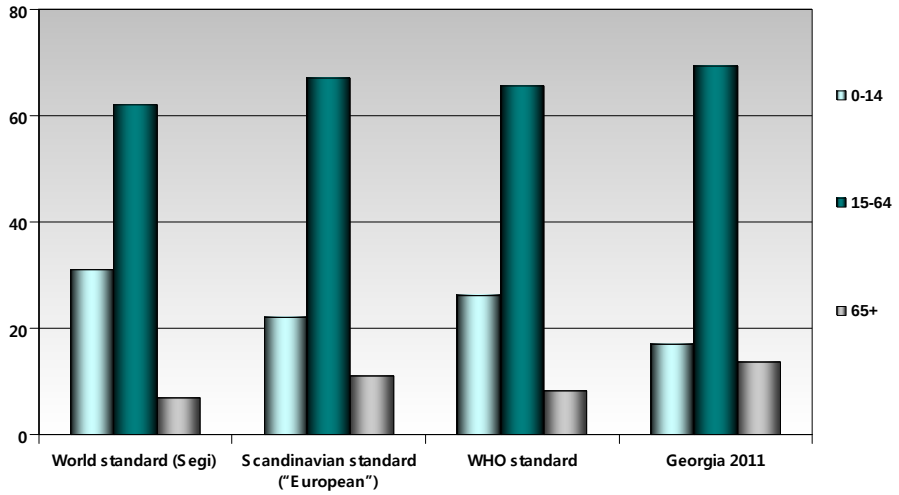
Urban population totaled to 53.1%; rural to 46.9%.

Child population aged under-15 amounted to 17.0%, which is less than the World and European standards (Figure 2.2). In 2011, the share of the population aged under-five increased by 0.3%.

Percentage of 65 year-old and older population was slightly decreased compared to the previous year (from 13.9% to 13.7%).

* *This chapter includes data of National Statistics Office of Georgia (GeoStat)*

Figure 2.2 Population by age and sex (percent)

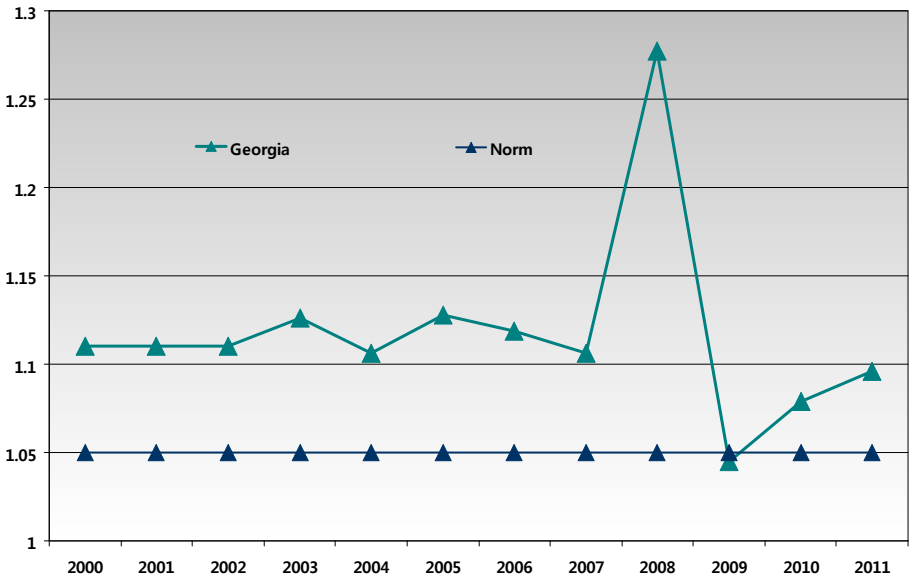


Birth rate

In 2007-2010, there was an increase of the ***registered live births***. In 2011, the number of live births reduced by 7.3%, compared to 2010, and amounted 58014. The birth rate decreased by 0.7%. From the total number 57.7% of newborns were urban, while 42.3% - rural inhabitants.

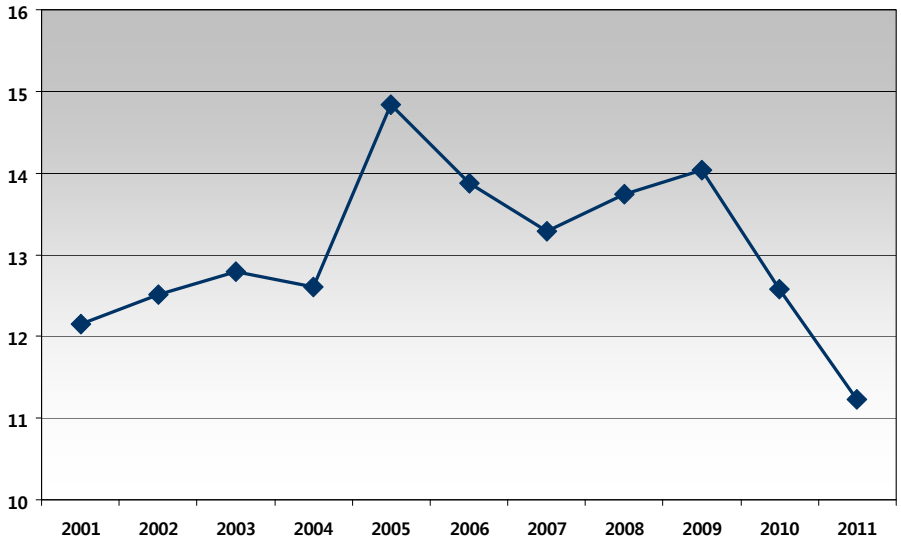
During the last decade, slight deviation of the numerical determinant of the secondary sex ratio from the norm had been noted in Georgia. This was entailed by remarkable disruption of the proportion in 2008, when it reached 1.28. Since 2009 the secondary sex ratio has approached the norm, which can be indicative of normalized statistical accounting. In 2011, according to the data, this ratio is slightly increased again (Figure 2.3).

Figure 2.3 Secondary sex ratio, Georgia



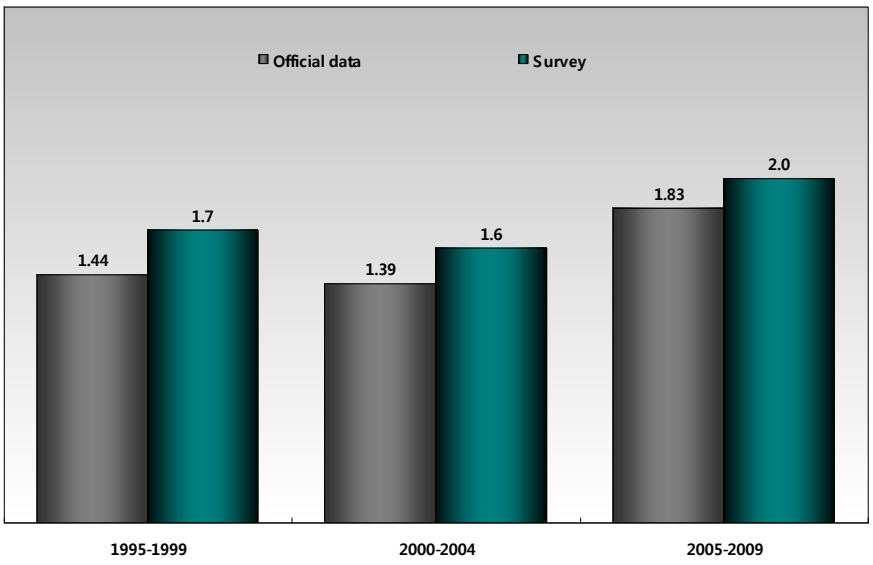
Throughout 2001-2010 the proportion of live births to mothers aged under-20 has fluctuated between 11%-15% (Figure 2.4). 80.1% of live-borns were delivered by women of 20-34 years of age.

Figure 2.4 **Share of live births to women aged under 20, Georgia (percent)**



According to official statistics, the ***total fertility rate*** amounted to 1.7 in 2011. Data of Reproductive Health Surveys conducted in Georgia somewhat differed from the official statistics, however, this difference was inclining (Figure 2.5).

Figure 2.5 **Total fertility rate according to offical statistics and Reproductive Health Surveys, Georgia**

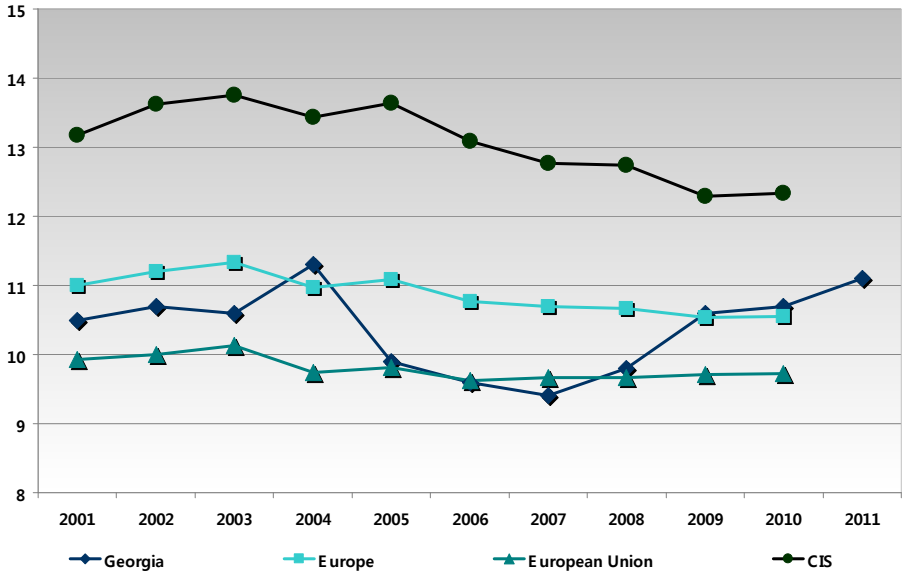


Mortality

Since April 2011 when electronic reporting of death was introduced, mortality registration practices were improved. In 2011, compared to 2010, there was 4.1% growth and ***mortality rate*** totaled to 11.1. Among the deceased, there were 51.3% men and 48.7% women; 51.7% were urban and 48.3% rural inhabitants.

Mortality rate in Georgia was less than in the CIS countries; however, it exceeded mortality rates in the European Region and the European Union (Figure 2.6).

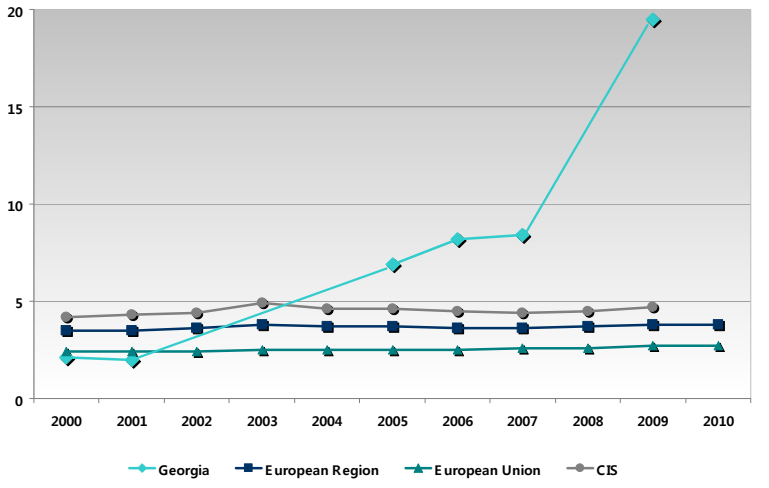
Figure 2.6 **Mortality rate per 1000 population, Georgia, European Region, European Union, CIS**



Source: WHO HFADB

According to 2011 data, the top three classes, which dominated in the death structure, were 'Symptoms, signs and abnormal clinical and laboratory findings' - 40.5%; 'Circulatory system diseases' - 35.9% and 'Neoplasms' – 9.6%. Since 2001 the increase of ill-defined causes of death was noted (Figure 2.7). In 2010 the share of such cases exceeded 50%, while in 2011 it reduced to 39.4%.

Figure 2.7 **Ill-defined causes of death (percent), Georgia, European Region, European Union, CIS**



Source: WHO HFADB

1.8% among all deceased population comprised of children under-5, among them 77.2% infants. 55.2% of infants died from certain conditions originating in the perinatal period, 23.9% by 'symptoms, signs and abnormal clinical and laboratory findings,' which includes sudden infant and unknown infant deaths, 6.5% by congenital malformations, deformations and chromosomal abnormalities, 4.3% by diseases of the respiratory system and 2.8% by certain infectious and parasitic diseases.

Natural population growth

In 2011, the natural growth in Georgia decreased, compared to 2010, and totaled 8196.

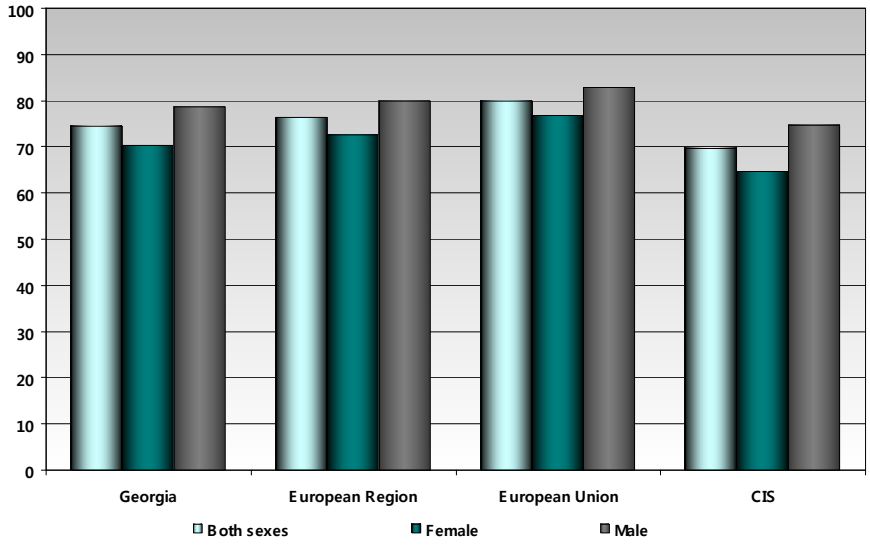
In 2011, negative natural growth was identified in most regions of Georgia: Kakheti, Imereti, Samegrelo-Zemo Svaneti, Guria, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti.

Life expectancy

In Georgia, in 2011, life expectancy at birth increased to 74.5 years (in females – 78.7; in males – 70.0).

According to the WHO data, life expectancy at birth rate exceeded that of the CIS countries and is close to the indicator of the European region. (Figure 2.8).

Figure 2.8 **Life expectancy at birth (in years), Georgia, European Region, European Union, CIS, 2010**



Source: WHO HFADB

Basic demographic indicators, Georgia

	2010		2011	
	Total	Rate	Total	Rate
Number of live births and birth rate per 1000 population	62585	14.1	58014	12.9
Natural growth and rate per 1000 populations	14721	3.3	8196	1.8
Number of deaths and mortality rate per 1000 population	47864	10.7	49 818	11.1
Including: Infant deaths and infant mortality rate per 1000 live births	701	11.2	703	12.1
Stillbirths and rate per 1000 newborn	653	10.3	563	9.6
Marriages and rate per 1000 population	34675	7.8	30863	6.9
Divorces and rate per 1000 population	4726	1.1	5850	1.3
Migration dynamics and rate per 1000 populations	18100	4.1	20200	4.5

TABLE 2.1 Mid-year population by regions (in thousand), Georgia, 2010 – 2011

	2010			2011		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	388.7	170.6	218.1	392.1	172.2	219.9
Tbilisi	1157.5	1127.2	30.3	1167.6	1137.1	30.5
Kakheti	405.3	83.2	322.1	406.6	83.8	322.8
Imereti	702.4	334.0	368.4	706.0	336.9	369.1
Samegrelo	475.6	191.6	284.0	478.3	192.8	285.5
Shida Kartli	311.8	120.4	191.4	313.8	121.3	192.5
Kvemo Kartli	502.8	195.5	307.3	508.5	198.1	310.4
Guria	140.1	36.9	103.2	140.3	37.0	103.3
Samtskhe-Javakheti	212.0	65.8	146.2	213.5	66.3	147.2
Mtskheta-Mtianeti	109.1	26.6	82.5	109.5	26.9	82.6
Racha-Lechkhumi and Kvemo Svaneti	47.5	9.1	38.4	47.2	9.1	38.1
Georgia	**4452.8**	**2360.9**	**2091.9**	**4483.4**	**2381.5**	**2101.9**

TABLE 2.2 Mid-year population by age and sex groups (in thousand), Georgia, 2010 – 2011

	2010			2011		
Age	Both sexes	Males	Females	Both sexes	Males	Females
-1	62.2	32.0	30.2	59.7	31.1	28.6
1-4	205.2	109.6	95.6	221.1	117.1	104.0
5-9	229.2	120.9	108.3	230.8	121.8	109.0
10-14	261.4	137.0	124.4	248.7	130.8	117.9
15-19	331.8	169.6	162.2	312.9	160.8	152.1
20-24	366.0	185.3	180.7	370.1	187.6	182.5
25-29	347.4	174.8	172.6	355.7	179.3	176.4
30-34	320.5	158.2	162.3	326.1	161.7	164.4
35-39	308.8	150.5	158.3	312.4	152.7	159.7
40-44	295.8	140.4	155.4	299.0	142.9	156.1
45-49	332.8	154.3	178.5	323.6	150.0	173.6
50-54	308.3	142.5	165.8	320.1	148.1	172.0
55-59	261.0	118.5	142.5	267.0	121.2	145.8
60-64	203.1	90.4	112.7	219.9	97.7	122.2
65-69	142.9	58.4	84.5	128.4	53.0	75.4
70-74	203.7	81.0	122.7	204.7	80.7	124.0
75-79	127.9	49.5	78.4	131.3	50.8	80.5
80-84	94.4	33.3	61.1	95.1	34.0	61.1
85+	50.4	11.9	38.5	56.8	14.3	42.5
Total	**4452.8**	**2118.1**	**2334.7**	**4483.4**	**2135.6**	**2347.8**
-15	758.0	399.5	358.5	760.3	400.8	359.5
15-64	3075.5	1484.5	1591.0	3106.8	1502.0	1604.8
65+	619.3	234.1	385.2	616.3	232.8	383.5

TABLE 2.3 Mid-year population by main age and sex groups (thousand), Georgia, 2007 – 2011

Age	Both sexes	Males	Females
2007			
Total	**4388.4**	**2079.0**	**2309.4**
-15	767.2	400.8	366.4
15-64	2978.1	1430.9	1547.2
65+	643.1	247.3	395.8
2008			
Total	**4383.8**	**2079.6**	**2304.2**
-15	752.2	395.4	356.8
15-64	2994.8	1441.2	1553.6
65+	636.8	243.0	393.8
2009			
Total	**4410.9**	**2094.8**	**2316.1**
-15	752.9	397.0	355.9
15-64	3031.8	1460.4	1571.4
65+	626.2	237.4	388.8
2010			
Total	**4452.8**	**2118.1**	**2334.7**
-15	758.0	399.5	358.5
15-64	3075.5	1484.5	1591.0
65+	619.3	234.1	385.2
2011			
Total	**4483.4**	**2135.6**	**2347.8**
-15	760.3	400.8	359.5
15-64	3106.8	1502.0	1604.8
65+	616.3	232.8	383.5

TABLE 2.4 Population natural movements, Georgia, 1995 – 2011

Year	Live births		Deaths		Natural growth		Marriage		Divorce	
	Number	Rate per 1000 populations	Number	Rate per 1000 populations	Number	Rate per 1000 populations	Number	Rate per 1000 populations	Number	Rate per 1000 populations
1995	56341	11.9	49073	10.4	7268	1.5	21481	4.5	2685	0.6
1996	55000	11.9	47961	10.4	7039	1.5	19253	4.2	2269	0.5
1997	54000	11.9	47575	10.5	6425	1.4	17099	3.8	2267	0.5
1998	51526	11.5	47321	10.5	4205	0.9	15343	3.4	1758	0.4
1999	48695	10.9	47184	10.6	1511	0.3	13845	3.1	1622	0.4
2000	48800	11.0	47410	10.7	1390	0.3	12870	2.9	1854	0.4
2001	47589	10.9	46218	10.5	1371	0.3	13336	3.0	1987	0.5
2002	46605	10.7	46446	10.7	159	0.0	12535	2.9	1836	0.4
2003	46194	10.7	46055	10.6	139	0.0	12696	2.9	1825	0.4
2004	49572	11.5	48793	11.3	779	0.2	14866	3.4	1793	0.4
2005	46512	10.7	42984	9.9	3528	0.8	18012	4.1	1928	0.4
2006	47795	10.9	42255	9.6	5540	1.3	21845	5.0	2060	0.5
2007	49287	11.2	41178	9.4	8109	1.8	24891	5.7	2325	0.5
2008	56565	12.9	43011	9.8	13554	3.1	31414	7.2	3189	0.7
2009	63377	14.4	46625	10.6	16752	3.8	31752	7.2	4030	0.9
2010	62585	14.1	47864	10.7	14721	3.3	34675	7.8	4726	1.1
2011	**58014**	**12.9**	**49818**	**11.1**	**8196**	**1.8**	**30863**	**6.9**	**5850**	**1.3**

TABLE 2.5 Age-specific fertility and population reproduction rates, Georgia, 1995 – 2011

Year	Total (15-49)	Age group for mothers							Total Fertility rate	Reproduction rate	
		-20	20-24	25-29	30-34	35-39	40-44	45+		Gross	Net
1995	46.0	64.2	113.3	66.4	41.9	16.6	4.2	0.7	1.54	0.73	0.70
1996	45.8	59.7	112.8	69.5	44.1	18.2	4.0	0.8	1.55	0.73	0.71
1997	45.6	55.2	111.3	72.2	44.6	19.4	5.2	3.0	1.55	0.74	0.71
1998	43.8	51.4	109.1	71.6	42.3	18.9	4.6	3.0	1.50	0.71	0.69
1999	41.5	46.5	104.0	70.3	42.5	19.1	4.7	0.9	1.44	0.68	0.66
2000	41.7	39.9	110.1	74.4	43.3	19.2	4.9	0.9	1.46	0.69	0.67
2001	40.9	32.5	112.3	71.1	45.2	21.0	5.4	1.4	1.44	0.68	0.66
2002	40.2	32.8	108.6	63.5	50.2	21.2	6.4	1.5	1.42	0.67	0.65
2003	40.0	33.2	99.4	78.8	46.8	19.0	5.2	0.5	1.41	0.66	0.64
2004	42.8	35.1	109.3	83.3	47.2	21.1	5.4	1.0	1.51	0.72	0.69
2005	39.6	38.5	97.2	75.2	44.0	18.6	4.2	0.5	1.39	0.65	0.63
2006	40.2	36.7	100.7	76.0	43.3	18.9	4.6	0.7	1.40	0.66	0.65
2007	41.7	36.3	103.1	79.2	46.5	19.7	4.4	0.5	1.45	0.69	0.67
2008	50.2	42.4	115.4	90.1	55.0	24.2	5.7	0.5	1.67	0.73	0.71
2009	54.1	52.0	128.2	102.4	58.8	25.1	5.5	0.5	1.86	0.91	0.89
2010	53.5	48.5	122.4	101.1	60.9	26.3	6.3	0.5	1.83	0.88	0.87
2011	**49.8**	**42.8**	**111.5**	**95.2**	**56.7**	**25.3**	**5.8**	**0.5**	**1.7**	**0.8**	**0.8**

TABLE 2.6 Number of live births by regions, Georgia, 2010– 2011

	2010			2011		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	6293	2571	3722	5709	3143	2566
Tbilisi	16212	15833	379	16715	16256	459
Kakheti	5348	1280	4068	4678	1048	3630
Imereti	10041	5041	5000	8835	4396	4439
Samegrelo	5969	2497	3472	5063	2127	2936
Shida Kartli	4900	1948	2952	4207	1685	2522
Kvemo Kartli	7230	2976	4254	6998	3014	3984
Guria	1971	580	1391	1683	487	1196
Samtskhe-Javakheti	2706	932	1774	2329	778	1551
Mtskheta-Mtianeti	1425	348	1077	1364	432	932
Racha-Lechkhumi and Kvemo Svaneti	490	123	367	433	86	347
Georgia	**62585**	**34129**	**28456**	**58014**	**33452**	**24562**

TABLE 2.7 Number of live births by the age of the mother, Georgia, 1995 – 2011

Year	Total	Mother's age							
		- 20	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45+	Unknown
1995	56341	11893	20578	12691	7474	2928	676	101	--
1996	55000	10862	19903	12715	7591	3153	649	127	--
1997	54000	9920	19223	12743	7465	3343	857	449	--
1998	51526	9212	18609	12287	6939	3256	768	455	--
1999	48695	8313	17552	11751	6861	3281	806	131	--
2000	48800	7124	18394	12100	6868	3305	868	141	--
2001	47589	5784	18571	11379	7073	3610	955	217	--
2002	46605	5833	17945	10077	7834	3541	1150	225	--
2003	46194	5907	16463	12449	7269	3040	929	81	56
2004	49572	6246	18258	13196	7316	3278	971	159	148
2005	46512	6903	16703	12110	6896	2870	752	87	191
2006	47795	6633	17666	12409	6831	2929	791	121	415
2007	49287	6549	18216	13021	7323	3058	727	79	314
2008	56565	7775	21025	14982	8392	3487	817	86	1
2009	63377	8896	22954	17250	9409	3920	864	84	--
2010	62585	7870	22126	17458	9878	4171	974	85	23
2011	**58014**	**6513**	**20343**	**16787**	**9328**	**4038**	**899**	**94**	**12**

TABLE 2.8 Number of live births by sex and secondary sex ratio, Georgia, 1995 – 2011

Year	Both sexes	Male	Female	(Male / Female) * 100
1995	56341	29745	26596	111.8
1996	55000	28936	26064	111.0
1997	54000	28409	25591	111.0
1998	51526	27108	24418	111.0
1999	48695	25618	23077	111.0
2000	48800	25674	23126	111.0
2001	47589	25037	22552	111.0
2002	46605	24519	22086	111.0
2003	46194	24469	21725	112.6
2004	49572	26039	23533	110.6
2005	46512	24654	21858	112.8
2006	47795	25236	22559	111.9
2007	49287	25882	23405	110.6
2008	56565	31720	24845	127.7
2009	63377	32385	30992	104.5
2010	62585	32488	30097	107.9
2011	**58014**	**30330**	**27684**	**109.6**

TABLE 2.9 Number of live births by birth order, Georgia, 1995 – 2011

Year	Birth order					Total
	I	II	III	IV	V+	
1995	30012	18352	5642	1621	714	56341
1996	28380	18535	5830	1595	660	55000
1997	27432	18036	6102	1674	756	54000
1998	26227	17210	5925	1494	670	51526
1999	25225	16069	5405	1363	633	48695
2000	25327	16250	5270	1318	635	48800
2001	25460	15086	5187	1285	571	47589
2002	24952	14878	5060	1146	569	46605
2003	28875	11752	3929	1025	613	46194
2004	28100	15773	4207	1037	455	49572
2005	27356	13743	4043	942	428	46512
2006	28935	13371	4107	938	444	47795
2007	29883	14075	4077	830	422	49287
2008	31307	18147	5400	1184	527	56565
2009	33651	21093	6627	1412	594	63377
2010	31062	22305	7097	1456	665	62585
2011	**27668**	**21708**	**6701**	**1307**	**630**	**58014**

TABLE 2.10 Number of deaths and mortality rates by age and sex groups, Georgia, 2011

	Number of deaths			Mortality rates (per 1000 people)		
Age	**Both sexes**	**Males**	**Females**	**Both sexes**	**Males**	**Females**
-1	703	422	281	11.8	13.6	9.8
1-4	95	57	38	0.4	0.5	0.4
5-9	54	26	28	0.2	0.2	0.3
10-14	59	37	22	0.2	0.3	0.2
15-19	133	106	27	0.4	0.7	0.2
20-24	279	221	58	0.8	1.2	0.3
25-29	285	210	75	0.8	1.2	0.4
30-34	433	323	110	1.3	2.0	0.7
35-39	551	415	136	1.8	2.7	0.9
40-44	818	604	214	2.7	4.2	1.4
45-49	1458	1102	356	4.5	7.3	2.1
50-54	2127	1568	559	6.6	10.6	3.3
55-59	2747	1881	866	10.3	15.5	5.9
60-64	3501	2302	1199	15.9	23.6	9.8
65-69	3107	1894	1213	24.2	35.7	16.1
70-74	7653	4134	3519	37.4	51.2	28.4
75-79	8399	4033	4366	64.0	79.4	54.2
80-84	9272	3823	5449	97.5	112.4	89.2
85+	8144	2396	5748	139.2	154.5	134.1
Total	**49818**	**25554**	**24264**	**11.1**	**11.9**	**10.3**

TABLE 2.11 Infant deaths by sex and age at death, Georgia, 2010 – 2011

	2010		2011	
	Male	**Female**	**Male**	**Female**
Total	**406**	**295**	**422**	**281**
0 day	78	60	62	54
1 day	44	35	39	33
2 days	30	16	33	24
3 days	29	5	26	12
4 days	10	8	17	11
5 days	17	14	17	16
6 days	9	11	11	11
7 - 27 days	81	59	85	48
28 days – 2 months	9	5	2	3
2 months	24	23	27	13
3 months	7	12	22	12
4 months	13	11	16	9
5 months	16	5	20	6
6 months	10	7	10	7
7 months	2	6	4	2
8 months	7	7	5	8
9 months	5	4	9	7
10 months	6	3	2	1
11 months	9	4	15	4

TABLE 2.12 Mortality by underlying causes of death (rate per 100000 people), Georgia, 2009 – 2011

	2009		2010		2011	
	Number	Rate	Number	Rate	Number	Rate
Total	**46625**	**1057.0**	**47864**	**1074.9**	**49818**	**1111.2**
Certain infectious and parasitic diseases	328	7.4	207	4.6	371	8.3
Neoplasms	5039	114.2	2853	64.1	4773	106.5
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	50	1.1	54	1.2	92	2.1
Endocrine, nutritional and metabolic diseases	562	12.7	475	10.7	1021	22.8
Mental and behavioural disorders	50	1.1	29	0.7	67	1.5
Diseases of the nervous system	367	8.3	401	9.0	534	11.9
Diseases of the eye and adnexa	0	0.0	0	0.0	0	0.0
Diseases of the ear and mastoid process	0	0.0	0	0.0	0	0.0
Diseases of the circulatory system	25725	583.2	14427	324.0	17884	398.9
Diseases of the respiratory system	766	17.4	542	12.2	1149	25.6
Diseases of the digestive system	1189	27.0	776	17.4	1453	32.4
Diseases of the skin and subcutaneous tissue	0	0.0	0	0.0	8	0.2
Diseases of the musculoskeletal system and connective tissue	7	0.2	12	0.3	34	0.8
Diseases of the genitourinary system	317	7.2	152	3.4	423	9.4
Pregnancy, childbirth and the puerperium	32	0.7	13	0.3	21	0.5
Certain conditions originating in the perinatal period	787	17.8	516	11.6	388	8.7
Congenital malformations, deformations and chromosomal abnormalities	39	0.9	37	0.8	57	1.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	9746	221.0	26332	591.4	20 159	449.6
Injury, poisoning and certain other consequences of external causes	1621	36.7	1038	23.3	1 384	30.9

TABLE 2.13 Under 15 mortality by underlying causes of death (rate per 100000 children of the corresponding age and sex groups), Georgia, 2011

	Total		Male		Female	
	Number	Rate	Number	Rate	Number	Rate
Total	**911**	**119.8**	**542**	**135.2**	**369**	**102.6**
Certain infectious and parasitic diseases	25	3.3	14	3.5	11	3.1
Neoplasms	17	2.2	5	1.2	12	3.3
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	2	0.3	2	0.5	0	0
Endocrine, nutritional and metabolic diseases	0	0	0	0	0	0
Mental and behavioural disorders	0	0	0	0	0	0
Diseases of the nervous system	36	4.7	22	5.5	14	3.9
Diseases of the eye and adnexa	0	0	0	0	0	0
Diseases of the ear and mastoid process	0	0	0	0	0	0
Diseases of the circulatory system	18	2.4	10	2.5	8	2.2
Diseases of the respiratory system	39	5.1	29	7.2	10	2.8
Diseases of the digestive system	17	2.2	7	1.7	10	2.8
Diseases of the skin and subcutaneous tissue	0	0	0	0	0	0
Diseases of the musculoskeletal system and connective tissue	0	0	0	0	0	0
Diseases of the genitourinary system	6	0.8	5	1.2	1	0.3
Pregnancy, childbirth and the puerperium	0	0	0	0	0	0
Certain conditions originating in the perinatal period	388	51.0	214	53.4	174	48.4
Congenital malformations, deformations and chromosomal abnormalities	54	7.1	36	9.0	18	5.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	253	33.3	162	40.4	91	25.3
Injury, poisoning and certain other consequences of external causes	56	7.4	36	9.0	20	5.6

TABLE 2.14 Infant mortality by underlying causes of death (rate per 100000 children of the corresponding age and sex groups), Georgia, 2011

	Total		Male		Female	
	Number	Rate	Number	Rate	Number	Rate
Total	**703**	**1177.6**	**422**	**1356.9**	**281**	**982.5**
Certain infectious and parasitic diseases	20	33.5	11	35.4	9	31.5
Neoplasms	3	5.0	1	3.2	2	7.0
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	2	3.4	2	6.4	0	0.0
Endocrine, nutritional and metabolic diseases	0	0.0	0	0.0	0	0.0
Mental and behavioural disorders	0	0.0	0	0.0	0	0.0
Diseases of the nervous system	14	23.5	9	28.9	5	17.5
Diseases of the eye and adnexa	0	0.0	0	0.0	0	0.0
Diseases of the ear and mastoid process	0	0.0	0	0.0	0	0.0
Diseases of the circulatory system	15	25.1	9	28.9	6	21.0
Diseases of the respiratory system	30	50.3	23	74.0	7	24.5
Diseases of the digestive system	11	18.4	6	19.3	5	17.5
Diseases of the skin and subcutaneous tissue	0	0.0	0	0.0	0	0.0
Diseases of the musculoskeletal system and connective tissue	0	0.0	0	0.0	0	0.0
Diseases of the genitourinary system	2	3.4	2	6.4	0	0.0
Pregnancy, childbirth and the puerperium	388	649.9	214	688.1	174	608.4
Certain conditions originating in the perinatal period	46	77.1	33	106.1	13	45.5
Congenital malformations, deformations and chromosomal abnormalities	168	281.4	110	353.7	58	202.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	4	6.7	2	6.4	2	7.0

TABLE 2.15 Number of deaths by regions, Georgia, 2010 – 2011

	2010			2011		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	3217	1501	1716	3280	1629	1651
Tbilisi	11645	11363	282	12291	11920	371
Kakheti	5082	1098	3984	5339	1193	4146
Imereti	8726	3782	4944	9015	3840	5175
Samegrelo	5325	2391	2934	5476	2418	3058
Shida Kartli	3604	1399	2205	3687	1370	2317
Kvemo Kartli	4032	1715	2317	4305	1785	2520
Guria	1767	407	1360	1973	438	1535
Samtskhe-Javakheti	2184	739	1445	2167	749	1418
Mtskheta-Mtianeti	1366	341	1025	1437	316	1121
Racha-Lechkhumi and Kvemo Svaneti	916	130	786	848	113	735
Georgia	**47864**	**24866**	**22998**	**49818**	**25771**	**24047**

TABLE 2.16 Population natural growth by regions, Georgia, 2010 – 2011

	2010			2011		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	3076	1070	2006	2429	1514	915
Tbilisi	4567	4470	97	4424	4336	88
Kakheti	266	182	84	-661	-145	-516
Imereti	1315	1259	56	-180	556	-736
Samegrelo	644	106	538	-413	-291	-122
Shida Kartli	1296	549	747	520	315	205
Kvemo Kartli	3198	1261	1937	2693	1229	1464
Guria	204	173	31	-290	49	-339
Samtskhe-Javakheti	522	193	329	162	29	133
Mtskheta-Mtianeti	59	7	52	-73	116	-189
Racha-Lechkhumi and Kvemo Svaneti	-426	-7	-419	-415	-27	-388
Georgia	**14721**	**9263**	**5458**	**8196**	**7681**	**515**

TABLE 2.17 Life expectancy at birth (in years), Georgia, 2000 – 2011

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total	71.6	71.5	72.1	71.6	74.0	74.3	75.1	74.2	73.6	74.4	74.5
Male	68.1	68.0	68.7	67.9	70.0	69.8	70.5	69.3	69.2	70.0	70.2
Female	74.9	74.9	75.3	75.1	77.6	78.6	79.4	79.0	77.7	78.7	78.6

CHAPTER 3.

HEALTH CARE

Health workforce

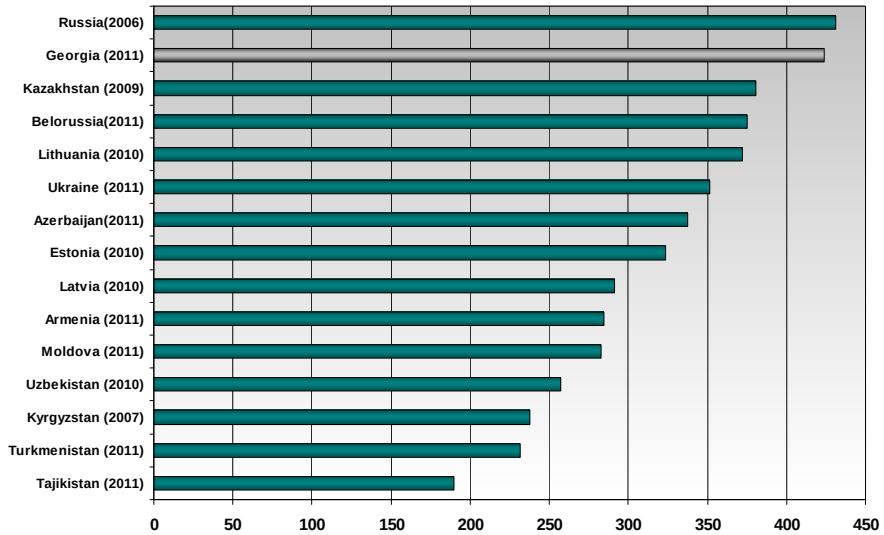
Health systems and services depend critically on the size, skills and commitment of the health workforce. It is now evident that in many low- and middle-income countries, meeting key Millennium Development Goal targets, specifically those relating to health, requires a significant increase in the numbers of health workers. In many countries, lack of personnel is one of the most important constraints to strengthening the delivery of primary and other health services, including curative, preventive and rehabilitative services.

The main task of the health care workforce policy, according to the call made by the WHO in 2006 is to "attain adequate coverage of some essential health interventions and core MDG-related health services". In order to achieve this aim the WHO established international minimum standards for coverage of the population with health professionals: a minimum of 2.3 health workers per 1000 people. According to 2011 data, this indicator in Georgia was 9.6.

The WHO also worked out guidances for assessing the density level of other health cadres, for instance active practitioners and administrative categories.

In 2011, the ratio of administration and active practitioners in Georgia was ~1:16. Number of ***physicians*** per 100000 population (435.3) remained more or less the same during the last 2 years. According to this indicator Georgia is the second among the post Soviet Union countries (Figure 3.1).

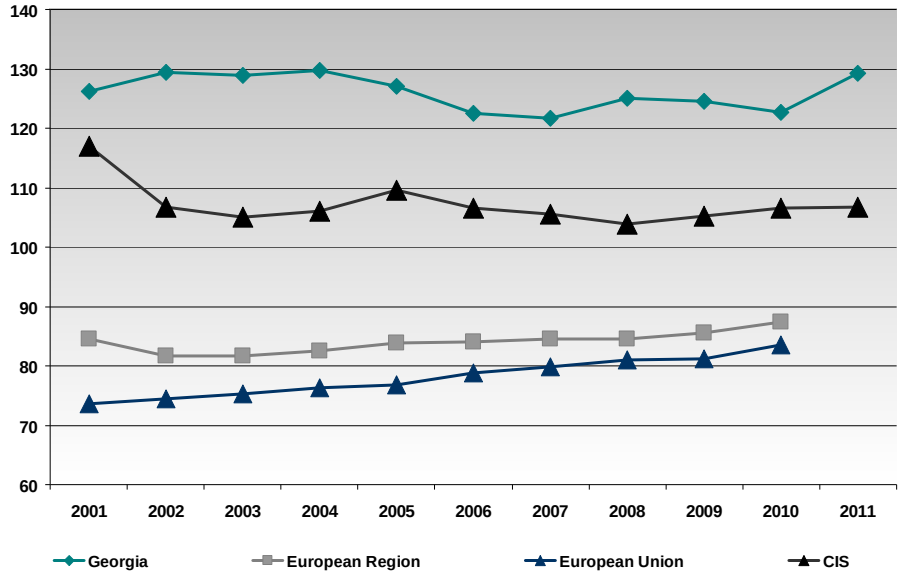
Figure 3.1 Number of physicians per 100000 population, former Soviet Union countries, last available year



Source: WHO HFADB

During 2001-2011 the number of ***general practitioners*** per 100000 population increased 6.5 times (Figure 3.2). The number of ***physician-specialists*** did not change much during the same period.

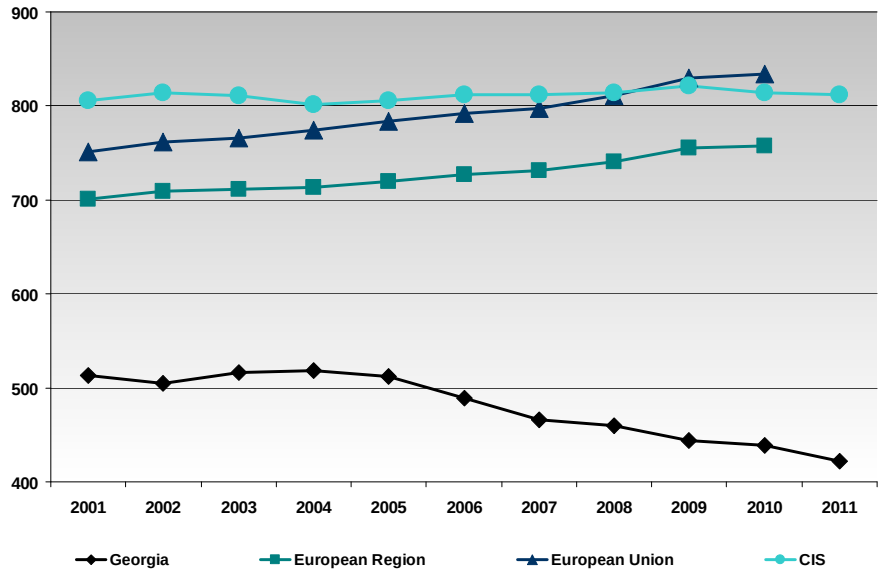
Figure 3.2 Number of physician specialits per 100000 population



Source: WHO HFADB

Since 2004 the number of ***nurses*** per 100000 population has been decreasing; in 2011, this number was 407.1. According to the WHO data, this indicator in the European Region, in the European Union and in the CIS was significantly higher than in Georgia (Figure 3.3).

Figure 3.3 Number of nurses per 100000 population



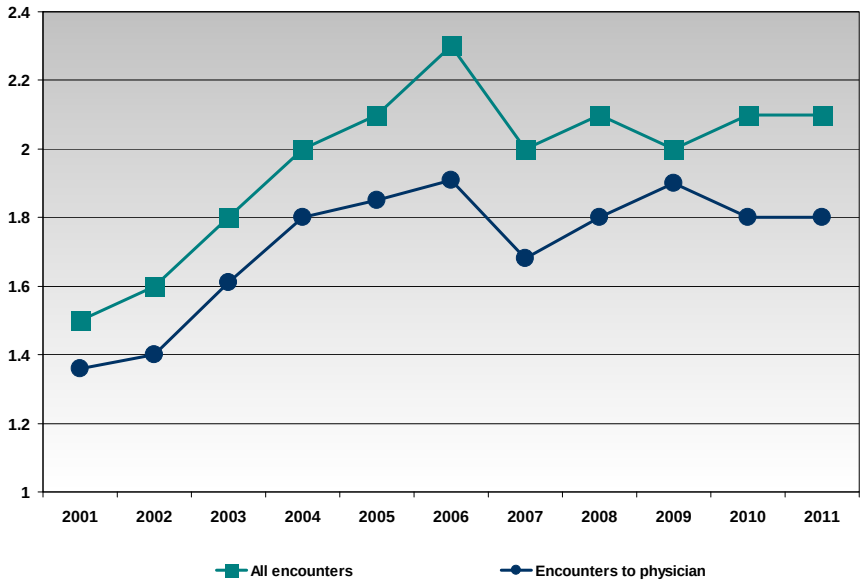
Source: WHO HFADB

Ratio of number of nurses to number of physicians is a very significant indicator for providing health care services. The World Health Organization recommends the ratio of 4:1. Last years, in Georgia, this ratio has remained almost unchangeable and fluctuated around ~1:1 (in hospital sector - 1.2:1).

Health network

In 2011, the number of ***outpatient encounters*** per capita was 2.1. During the last 7 years, this indicator fluctuated between 2.0 and 2.3 (Figure 3.4).

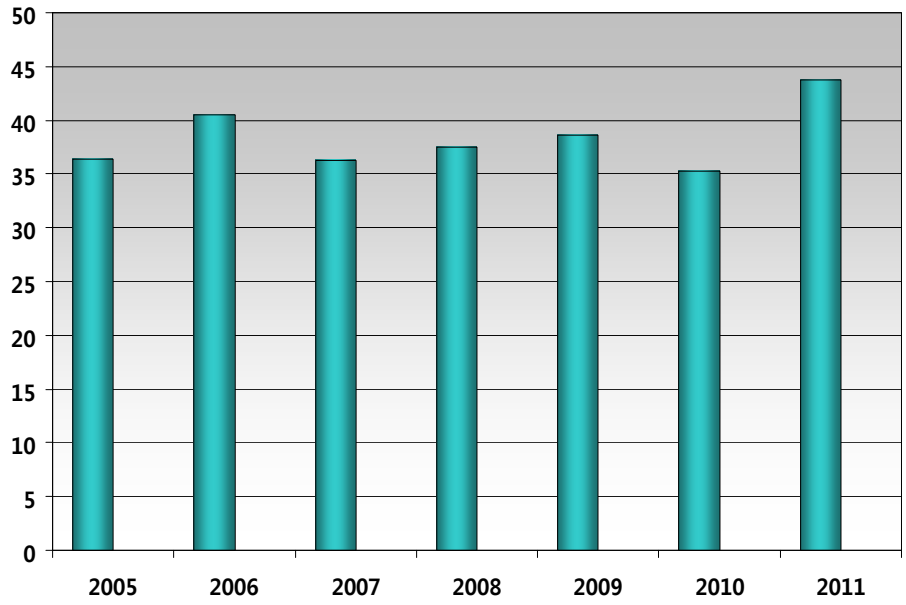
Figure 3.4 Number of outpatient encounters per capita , Georgia



This indicator is low, compared to the CIS and the European Region. In 2010, according to the WHO data, the average number of outpatient encounters per capita for the CIS countries was 8.6, for the European Region countries - 7.5.

In 2011, the occupancy rate of outpatient network has achieved its maximum of 43.8% (Figure 3.5).

Figure 3.5 Outpatient network occupancy rate of (%), Georgia

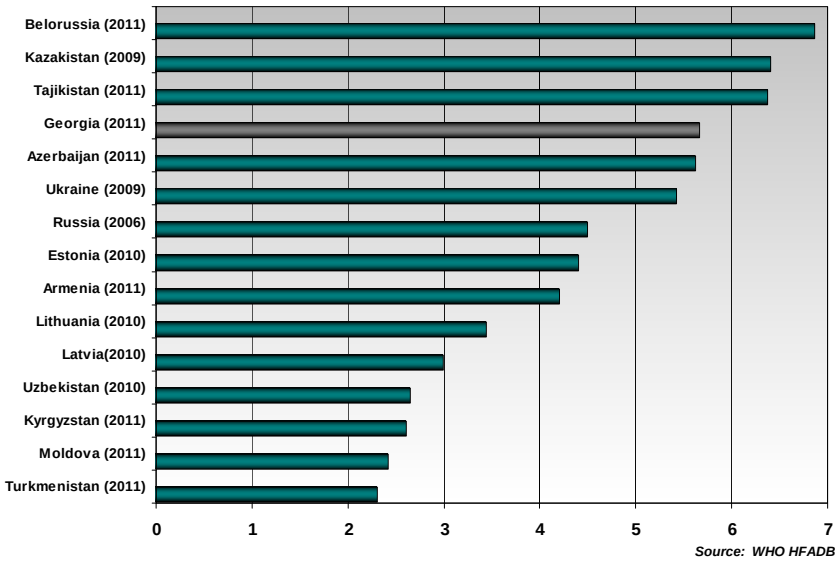


In comparison to the previous years the number of ***outpatient surgical operations*** has increased by 26.3% in 2011.

During 2005-2011, the number of ***emergency calls of an ambulance*** was increasing. Throughout 2011 the 93.9% of ambulance care provided to the population was covered by the State programs.

In 2011, statistical reports were submitted to National Center for Disease Control and Public Health by 245 ***in-patient facilities*** (coverage rate per 100000 population – 5.5) (Figure 3.6).

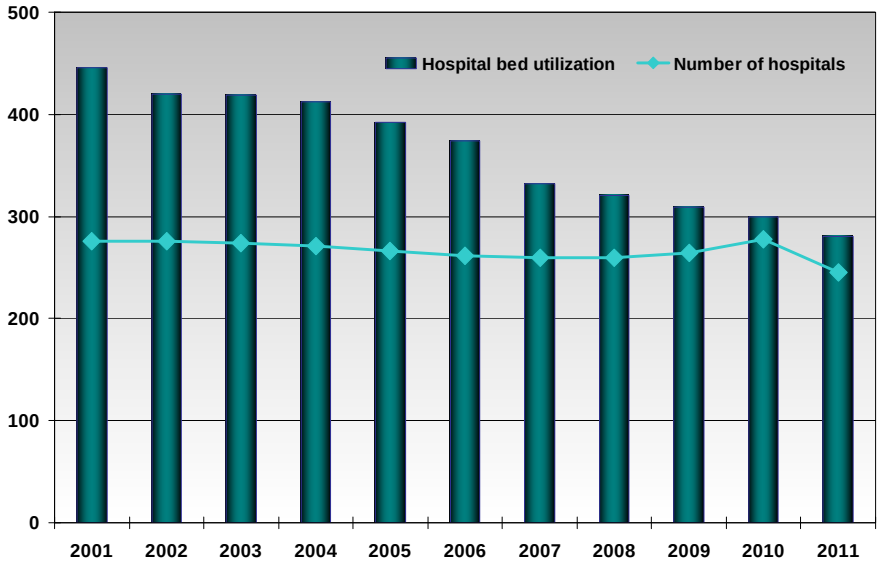
Figure 3.6 **Inpatient facilities per 100000 population, former Soviet Union countries, last available year**



In 2011, within the frame of State Plan for Hospital Sector Development, multi-profile medical centers were open in Tbilisi and other regions. These centers combined inpatient, outpatient and prehospital services.

In comparison to last years, the ***number of hospital beds*** decreased by 5.8% in Georgia (hospital bed coverage rate per 100000 population – 281.0) (Figure 3.7). ***Bed occupancy rate*** was 173.6. The majority of beds (75.3%) were used for curative purposes.

Figure 3.7 **Hospital beds utilization rate per 100000 population, Georgia**



In 2011, 333934 patients were hospitalized (***hospitalization rate*** – 7448.2). An average 42 patients were encountered to the in-patients facilities per one physician in year (3.5 in month) - 2 times lower than in developed countries.

The largest shares in all hospitalizations had pregnancy, delivery and puerperium related diseases (22.3%) and diseases of the respiratory system (19.0%). In 2011, hospital case fatality rate was 2.0% (in children under 15 – 0.9%).

In 2011, in inpatient facilities, there were 143262 surgical operations performed (rate per 1000 population – 31.9; ***postoperative case fatality rate*** – 0.4%); including 15860 operations performed in children under 15 (rate per 1000 children – 20.9; lethality rate – 0.3%).

Percentage of urgent operations among all operations performed declined by 1.6%, compared to the previous year.

The three top in the structure of inpatient operations were as follows: genitourinaryoperations – 42.5%; operations on abdominal cavity organs – 19.8%; operations on musculoskeletal system – 8.1%.

About one-third (27.9%) of all musculoskeletal system operations consisted of replacements of hip and knee joints. Number of such operations declined by 8.2%, compared to the previous year.

In 2011 number of performed heart operations was 2352 in the total population, including 275 in children. In 2011, 33% of all heart operations were open heart. Four of open heart surgeries was entailed by death (lethality – 0,5%). 18% of heart surgeries was performed due to congenital heart defects, 37.9% - endovascular balloon dilatation, 9.4% - implantation of cardiostimulator.

Health expenditures

In 2010, according to ***the National Health Accounts***, the share of total health expenditures from the Gross Domestic Product increased and totaled to 10.2%.

Compared to year 2009, in 2010 the percentage of state health expenditures from the GDP increased to become 2.4%. Percentage of the state health expenditures from the gross state expenditures increased to 6.5%, and the share of the state health expenditures in the total health expenditures increased up to 23.1%.

Private expenditures make up to 74% of the overall health care funding. In the period of 2001-2010, the total health expenditures per capita increased from 115 lari to 471 lari, the state health expenditures increased from 17 lari to 109 lari, and private expenditures increased from 88 lari to 348 lari.

Table 3.1 Active health workforce, Georgia, 2000-2011

	Physicians		Including			
			Practicing phycisians		Administration	
	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population
2000	18175	411.4	16738	378.8	1437	32.5
2001	17382	396.3	15966	364.0	1416	32.3
2002	17694	406.1	16212	372.1	1482	34.0
2003	17707	409.0	16221	374.7	1486	34.3
2004	17507	405.4	16062	372.0	1445	33.5
2005	17438	399.8	16068	368.4	1370	31.4
2006	17591	400.0	16207	368.5	1384	31.5
2007	17629	401.7	16262	370.6	1367	31.2
2008	17961	409.7	16571	378.0	1390	31.7
2009	18591	421.5	17392	394.3	1199	27.2
2010	19453	435.3	18227	409.3	1226	27.5
2011	**19514**	**435.3**	**18366**	**409.6**	**1148**	**25.6**

Table 3.2 Active nurses and auxiliary medical personnel, Georgia, 2000-2011

	Nurses		Auxiliary medical personnel	
	Total	Number per 100000 population	Total	Number per 100000 population
2000	23419	530.0	1859	42.1
2001	20949	477.6	1543	35.2
2002	20525	471.1	1455	33.4
2003	20977	484.6	1380	31.9
2004	21018	486.7	1370	31.7
2005	21037	482.3	1308	30.0
2006	20309	461.8	1181	26.9
2007	19301	439.8	1165	26.5
2008	19094	435.6	1061	24.2
2009	18618	422.1	955	21.7
2010	18684	418.1	913	20.4
2011	**17593**	**392.4**	**661**	**14.7**

Table 3.3 Physicians by specialization, Georgia, 2000–2011

	General practitioners		Paediatricians		Obstetricians-Gynecologists		Psychiatrists		Therapeutists		Surgeons	
	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population
2000	264	6.0	2542	15.4	1574	9.6	364	2.2	5893	35.8	3256	19.8
2001	332	7.6	2385	15.3	1527	9.8	334	2.1	5536	35.4	3178	20.3
2002	342	7.8	2308	14.5	1505	9.5	356	2.2	5641	35.5	3202	20.2
2003	540	12.5	2247	14.3	1493	9.5	346	2.2	5583	35.6	3180	20.3
2004	625	14.5	2209	14.3	1458	9.4	337	2.2	5603	36.3	3117	20.2
2005	677	15.5	2107	13.7	1448	9.4	300	1.9	5545	36.0	3002	19.5
2006	574	13.1	2071	13.2	1429	9.1	307	2.0	5388	34.5	3029	19.4
2007	780	17.8	1945	12.6	1414	9.1	281	1.8	5343	34.5	3113	20.1
2008	852	19.4	1858	11.8	1462	9.3	278	1.8	5482	34.9	3139	20.0
2009	1611	36.5	1579	10.0	1467	9.3	294	1.9	5490	34.8	3308	21.0
2010	1928	43.1	1560	9.6	1499	9.2	291	1.8	5483	33.6	3424	21.0
2011	**2091**	**46.6**	**1473**	**9.1**	**1434**	**8.8**	**258**	**1.6**	**5600**	**34.4**	**3511**	**21.6**

Table 3.4 Health staff working in inpatient facilities, Georgia, 2000–2011

	All hospital personnel		Physicians		Nurses and auxiliary medical personnel	
	Total	Number per 100000 population	Total	Percent from the total number	Total	Percent from the total number
2000	35470	802.8	8287	45.6	13596	53.8
2001	31933	728.0	7892	45.4	12108	53.8
2002	31119	714.2	7865	44.5	11793	53.7
2003	31990	739.0	8086	45.7	11798	52.8
2004	31796	736.3	7979	45.6	11737	52.4
2005	30978	710.3	7768	44.5	11204	50.1
2006	30403	691.3	7852	44.6	10986	51.1
2007	30350	691.6	7857	44.6	10872	53.1
2008	30164	688.1	7881	43.9	10864	53.9
2009	30765	697.5	8137	43.8	10741	54.9
2010	30994	693.5	8404	43.2	10772	55.0
2011	**28319**	**631.6**	**7942**	**40.7**	**9583**	**52.5**

Table 3.5 Independent healthcare facilities network, Georgia, 2011

Type of facility	Total number
Outpatient facilities	206
Stomatological policlinics and cabinets	230
Dispensaries	44
Including those with beds	4
Women consultancy centers	20
Ambulance stations	47
Scientific research institutes	13
Including those with beds	12
Stations	78
Including ambulance	72
blood transfusion	6
Epidemiological centers	66
Rural physician-entrepreneur	1234
Hospitals and medical centers	229
Including specialized	94
Including maternity hospitals	38

Table 3.6 Number of encounters to outpatient health facilities per capita, Georgia, 2005–2011

	2005	2006	2007	2008	2009	2010	2011
All encounters	**2.1**	**2.3**	**2.0**	**2.1**	**2.0**	**2.1**	**2.1**
Including							
Encounters to physicians	**1.8**	**1.9**	**1.7**	**1.8**	**1.9**	**1.8**	**1.8**
Encounters of children aged under 15	1.6	3.3	3.0	2.8	2.9	2.5	2.4
Ambulance calls	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
Ambulance calls to children aged under 15	0.04	0.08	0.08	0.07	0.1	0.1	0.2

Table 3.7 Number of encounters to health facilities per capita by the regions, Georgia, 2005–2011

	2005	2006	2007	2008	2009	2010	2011
Ajara	2.1	2.2	2.1	2.5	2.1	2.0	2.1
Tbilisi	2.8	2.8	2.4	2.9	2.8	3.2	3.4
Kakheti	1.7	2.1	1.7	1.7	1.8	1.6	1.3
Imereti	2.1	2.3	2.2	2.1	1.9	1.9	1.6
Samegrelo and Zemo SvaneTi	1.5	1.7	1.4	1.4	1.3	1.5	1.0
Shida Kartli	1.8	2.1	1.8	1.7	1.8	1.7	2.0
Kvemo Kartli	1.2	1.2	1.0	1.0	1.0	1.0	1.0
Guria	1.9	2.3	1.7	1.7	1.6	1.6	1.4
Samtskhe-Javakheti	1.9	2.0	1.9	1.9	1.4	2.3	1.3
Mtskheta-Mtianeti	1.1	1.6	1.5	1.2	1.5	1.5	1.4
Racha-Lechkhumi	1.4	1.5	1.2	1.3	1.3	1.3	1.0
Georgia	**2.1**	**2.3**	**2.0**	**2.1**	**2.0**	**2.1**	**2.1**

Table 3.8 Outpatient facilities performance, Georgia, 2005–2011

	2005	2006	2007	2008	2009	2010	2011
All encounters	**8718622**	**9256759**	**8016113**	**8519856**	**7889951**	**8412988**	**8638934**
Including							
Encounters to physicians	8069045	8403132	7350753	7875066	7418789	7943256	7705934
Including to rural physicians	-	-	-	-	1635260	1579193	1508171
Home visits	475390	681940	500610	470241	424169	384026	368248
To emergency departments	-	-	-	-	23871	25707	85978
Scheduled workload (potential number of patient visits per 1 shift per day)	92061	87977	84819	87385	87405	87461	75764
Actual number of visits per shift	33533	35603	30789	32769	33738	30881	33227
Occupancy rate of outpatient network (%)	36.4	40.5	36.3	37.5	38.6	35.3	43.8

Table 3.9 Vaccinations' data, Georgia, 2011

Vaccine	Number of aimed population	Number of vaccinated children according to the vaccination calendar	Percent from the total number
BCG-1	57951	55949	97.0
Viral hepatitis B–0	57951	54091	93.0
DPT-1	57328	52937	92.0
DPT-3	57328	54038	94.0
DPT-4	58531	53169	91.0
Viral hepatitis B–1	57328	52937	92.0
Viral hepatitis B-3	57328	51166	89.0
Hib-3	57328	51166	89.0
Polio-1	57328	52189	93.9
Polio-3	57328	50294	88.0
Mumps	57328	52339	91.0
Measles-1	57328	52339	91.0
Rubella	57328	52339	91.0
Measles-2	47775	36953	77.3
DT	74775	40390	84.5
TD	53546	36818	68.2

Table 3.10 Immunization coverage (percent) by regions, Georgia, 2011

	BCG-1	Polio-3	Viral hepatitis B-1	Viral hepatitis B–3	DPT-1	DPT-3	Measles-1	Measles-2
Ajara	98.4	87.5	99.5	93.5	94.0	93.5	98.1	86.9
Tbilisi	96.8	88.1	89.5	92.7	91.0	92.7	93.8	73.0
Kakheti	89.7	93.0	85.1	97.4	100.0	97.4	92.9	79.3
Imereti	95.7	89.9	96.1	90.3	96.0	90.3	89.5	82.8
Samegrelo	88.7	91.1	81.8	94.9	100.0	94.9	93.0	78.2
Shida Kartli	99.2	92	98.3	88.9	92.6	88.9	89.6	67.3
Kvemo Kartli	100.0	90.3	98.5	86.4	99.0	86.4	93.7	72.7
Guria	91.5	99.6	93.4	93.5	100.0	93.5	95.2	85.3
Samtskhe-Javakheti	95.3	95.4	93.8	96.5	100.0	96.5	98.3	94.1
Mtskheta-Mtianeti	96.3	90.0	97.5	93.0	93.8	93.0	93.4	80.7
Racha-Lechkhumi and Kvemo Svaneti	80.9	84.8	75.5	96.3	100.0	96.3	92.4	77.9
Georgia	**97.0**	**88.0**	**92.0**	**89.0**	**92.0**	**94.0**	**91.0**	**77.3**

Table 3.11 Screening of children and adolescents-students, Georgia, 2011

	Total number of screened children	Revealed during screenings				
		Hearing impairment %	Visual impairment %	Speech defect %	Scoliosis %	Fault in posture %
All children aged under 15 and adolescents - students aged 15-18	**689107**	**0.2**	**0.9**	**0.4**	**1.1**	**0.6**
Children aged under 15	561676	0.2	0.9	0.4	1.1	0.5
0-1 years old	76871	0.1	0.4	0.1	0.0	0.1
1-5 years old	176531	0.2	0.6	0.5	0.2	0.3
5-6 years old	50807	0.4	1.7	1.3	1.8	1.8
15 years old	55027	0.3	1.0	0.4	1.8	1.0
16-18 years old	72404	0.2	1.0	0.2	1.1	0.7
Including males	34121	0.2	0.8	0.1	0.5	0.4

Table 3.12 Screening of recruits, Georgia, 2007–2011

	2007	2008	2009	2010	2011
Number of recruits screened during the reporting year	19420	29040	23731	21836	27805
Are under the follow-up by the end of the reporting year	3091	4020	3673	4111	9641

Table 3.13 Number of outpatient surgeries, Georgia, 2006–2011

	2006	2007	2008	2009	2010	2011
Total number of surgical operations	**25058**	**37456**	**27426**	**34398**	**37734**	**47645**
Including						
On eye	2831	3949	5214	6751	7365	6961
Among them microsurgery	1455	2431	2212	3162	5123	1459
Due to: glaucoma	329	415	450	730	318	748
cataract	1725	2624	3297	4123	4370	4351
On throat-ear-nose	524	576	973	1240	1684	2629
Among them on ear	12	5	27	20	60	321
On blood vessels	37	9	79	46	121	59
On organs of abdominal cavity	30	38	317	431	415	1426
Among them dissection of nonstrangulated hernia	22	20	139	120	130	133
Obstetrical & gynecological	6405	7439	7219	9098	10580	14941
On breast (mammary glands)	164	296	317	1058	214	137
On skin and subcutaneous tissues	10647	6250	8960	9070	11979	11724

Table 3.14 Ambulance stations, Georgia, 2005–2011

	2005	2006	2007	2008	2009	2010	2011
Total number of ambulance stations	**81**	**90**	**78**	**77**	**81**	**78**	**75**
Independent	72	72	75	73	77	75	72
Aligned	9	18	3	4	4	3	3
Total number of visits	**453422**	**683003**	**750156**	**774192**	**907343**	**956550**	**966493**
Number of persons who received assistance according to the State Programs	427264	669764	713373	754818	864502	933741	908000

Table 3.15 Number of physical persons who received ambulance assistance, Georgia, 2000–2011

	Total number of persons served	Including					
		Due to accidents		Due to unexpected illness		Due to childbirth and pregnancy pathologies	
		Total	%	Total	%	Total	%
2000	150645	7982	5.3	138383	91.9	1366	0.9
2001	135539	7618	5.6	124233	91.7	1126	0.8
2002	162376	8421	5.2	147701	91.0	1243	0.8
2003	192641	10166	5.3	172589	89.6	2104	1.1
2004	218188	19560	8.9	191379	87.7	3137	1.4
2005	453422	38594	8.5	393183	86.7	5246	1.2
2006	683003	49068	6.4	599335	87.8	6584	1.0
2007	726779	15930	2.2	644912	88.7	3319	0.5
2008	768167	10912	1.4	751945	97.9	5310	0.7
2009	883129	14579	1.6	863589	97.8	4961	0.6
2010	933877	13286	1,4	915319	98,0	5272	0,6
2011	**936614**	**12286**	**1.3**	**919953**	**98.2**	**4338**	**0.5**

Table 3.16 Number of physical persons who received ambulance assistance by regions, Georgia, 2007-2011

	2007	2008	2009	2010	2011
Ajara	69033	67924	80974	80762	75660
Tbilisi	277818	320354	351836	377066	442363
Kakheti	58960	59469	65206	70184	56317
Imereti	93190	94154	108081	111606	101023
Samegrelo and Zemo SvaneTi	50470	49342	76625	82059	60625
Shida Kartli	38138	40851	45177	47313	43370
Kvemo Kartli	56755	59314	65481	66413	69968
Guria	22636	24182	27515	26869	23924
Samtskhe-Javakheti	29191	25657	28717	29992	30887
Mtskheta-Mtianeti	17395	17282	21735	25982	19565
Racha-Lechkhumi and Kvemo Svaneti	13193	9638	11782	15631	12922
Georgia	**726779**	**768167**	**883129**	**933877**	**936614**

Table 3.17 Number of disabled and impaired persons registered in the network of outpatient facilities, Georgia, 2010-2011

	2010	2011
Number of all registered persons at the beginning of the reporting year	**74145**	**59589**
Including: children aged 0-15 years	5582	4117
Disabled war veterans	2680	1947
Number of new cases	8346	6331
Number of persons taken from the register during the reporting year	7311	4256
Including due to death	2015	1453
Number of persons registered by the end of the reporting year	**75180**	**61664**
According to groups of disability		
I - severe	8229	7074
II - significant	35185	28911
III - moderate	7066	6252

Table 3.18 Day care departments, Georgia, 2010–2011

	2010		2011	
	In inpatient facilities	In outpatient facilities	In inpatient facilities	In outpatient facilities
Day care hospital departments	14	8	14	5
Number of beds	146	75	119	84
Number of patients treated in day care hospitals	6939	1852	8716	1732

Table 3.19 Inpatient health network, Georgia, 2000–2011

	Number of facilities		Including general hospitals	
	Number	Number of beds per 100000 populations	Number	% from total
2000	271	6.1	139	51.3
2001	276	6.3	139	50.4
2002	276	6.3	138	50.0
2003	274	6.3	130	47.4
2004	271	6.3	132	48.7
2005	266	6.1	129	48.5
2006	261	5.9	126	48.3
2007	260	5.9	125	48.1
2008	260	5.9	122	46.9
2009	264	6.0	129	48.9
2010	278	6.2	136	48.9
2011	**245***	**5.5**	**110**	**44.9**

Table 3.20 Hospital beds utilization, Georgia, 2000–2011

	Hospital beds		Including					
			Health centers (except long- term treatments)		Psychiatric		For long-term treatments (except psychiatric beds)	
	Number	Number of beds per 100000 populations	Total	% from Total	Total	% from Total	Total	% from Total
2000	21241	480.8	19069	89.8	1199	5.6	805	3.8
2001	19530	445.2	17452	89.4	1193	6.1	740	3.8
2002	18290	419.8	16280	89.0	1252	6.8	614	3.4
2003	18151	419.3	16244	89.5	1240	6.8	557	3.1
2004	17806	412.3	15905	89.3	1236	6.9	549	3.1
2005	17095	392.0	15155	88.7	1271	7.4	547	3.2
2006	16455	374.1	14262	86.7	1540	9.4	562	3.4
2007	14565	331.9	12679	87.1	1235	8.5	538	3.7
2008	14069	320.9	12028	85.5	1341	9.5	580	4.1
2009	13633	309.1	11658	85.5	1335	9.8	528	3.9
2010	13378	299.3	11400	85.2	1361	10.2	536	4.0
2011	**12599**	**281.0**	**9928**	**78.8**	**1408**	**11.2**	**1029****	**8.2**

* *Total number of inpatient facilities (hospitals, medical centers, dispensaries with beds, in-patients facilities consisting of scientific - research institutes).*
** *From 2011 information of the Ministry of Corrections and Legal Assistance was added to the data.*

Table 3.21 Hospital beds utilization by regions, Georgia, 2011

	Number of beds	Number of bed per 100000 populations	Bed occupancy rate	Average length of stay	Bed turnover
Ajara	1025	261.4	182.3	5.8	31.6
Tbilisi	5454	467.1	167.8	5.7	29.3
Tbilisi	388	95.4	91.8	3.9	23.3
Kakheti	2085	295.3	179.2	7.8	23.0
Samegrelo and Zemo SvaneTi	738	154.3	140.3	5.0	27.8
Shida Kartli	433	138.0	185.8	5.7	32.7
Kvemo Kartli	724	142.4	102.4	5.6	18.3
Guria	191	136.1	56.6	4.1	13.8
Samtskhe-Javakheti	477	223.4	106.4	5.3	20.1
Mtskheta-Mtianeti	78	71.2	30.9	3.7	8.4
Racha-Lechkhumi	110	233.1	49.7	5.6	8.9
Other Facilities *	896	-	472.5	52.7	9.0
Georgia	**12599**	**281.0**	**173.6**	**7.0**	**24.8**

Table 3.22 Hospitalization by regions, Georgia, 2010–2011

	2010		2011	
	Number of hospital admitions	Hospitalization rates per 100000 populations	Number of hospital admitions	Hospitalization rates per 100000 populations
Ajara	31073	8013.1	32514	8292.3
Tbilisi	152293	13145.7	154855	13262.7
Tbilisi	17713	4353.6	14168	3484.5
Kakheti	54662	7815.5	51832	7341.6
Samegrelo and Zemo SvaneTi	22471	4733.0	21388	4471.7
Shida Kartli	14804	4747.6	15068	4801.8
Kvemo Kartli	17829	3529.0	18611	3660.0
Guria	5318	3808.0	4991	3557.4
Samtskhe-Javakheti	10338	4897.6	9735	4559.7
Mtskheta-Mtianeti	3040	2794.7	1284	1172.6
Racha-Lechkhumi	2243	4745.3	1444	3059.3
Other Facilities	3589	-	4635	-
Georgia	**335373**	**7534.1**	**333934**	**7448.2**

Table 3.23 Hospitalization according to the ICD10 chapters, Georgia, 2011

	Number of hospital discharges	Including hospital deaths	Fatality %
Total	**334753**	**6664**	**2.0**
Certain infectious and parasitic diseases	20695	247	1.2
Neoplasms	15864	356	2.2
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	1033	21	2.0
Endocrine, nutritional and metabolic diseases	3163	60	1.9
Mental and behavioural disorders	6431	51	0.8
Diseases of the nervous system	6545	229	3.5
Diseases of the eye and adnexa	6105	0	0.0
Diseases of the ear and mastoid process	2315	0	0.0
Diseases of the circulatory system	44731	2715	6.1
Diseases of the respiratory system	63515	764	1.2
Diseases of the digestive system	34100	711	2.1
Diseases of the skin and subcutaneous tissue	3642	8	0.2
Diseases of the musculoskeletal system and connective tissue	5971	12	0.2
Diseases of the genitourinary system	15628	97	0.6
Pregnancy, childbirth and the puerperium	74695	6	0.0
Certain conditions originating in the perinatal period	6666	450	6.8
Congenital malformations, deformations and chromosomal abnormalities	2103	59	2.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	2860	400	14.0
Injury, poisoning and certain other consequences of external causes	18691	478	2.6

Table 3.24 Hospitalization of children under 15 according to the ICD10 chapters, Georgia, 2011

	Number of hospital Discharges	Including hospital deaths	Fatality %
Total	**73389**	**693**	**0.9**
Certain infectious and parasitic diseases	10986	35	0.3
Neoplasms	979	11	1.1
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	293	5	1.7
Endocrine, nutritional and metabolic diseases	248	0	0.0
Mental and behavioural disorders	342	1	0.3
Diseases of the nervous system	1351	16	1.2
Diseases of the eye and adnexa	268	0	0.0
Diseases of the ear and mastoid process	782	0	0.0
Diseases of the circulatory system	374	2	0.5
Diseases of the respiratory system	40277	76	0.2
Diseases of the digestive system	3804	8	0.2
Diseases of the skin and subcutaneous tissue	583	1	0.2
Diseases of the musculoskeletal system and connective tissue	337	0	0.0
Diseases of the genitourinary system	1017	4	0.4
Pregnancy, childbirth and the puerperium	43	0	0.0
Certain conditions originating in the perinatal period	6665	450	6.8
Congenital malformations, deformations and chromosomal abnormalities	1691	50	3.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	971	20	2.1
Injury, poisoning and certain other consequences of external causes	2378	14	0.6

Table 3.25 Hospitalization of infants according to the ICD10 chapters, Georgia, 2011

	Number of hospital Discharges	Including hospital deaths	Fatality %
Total	**22376**	**607**	**2.7**
Certain infectious and parasitic diseases	3057	32	1.0
Neoplasms	238	2	0.8
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	62	4	6.5
Endocrine, nutritional and metabolic diseases	8	0	0.0
Mental and behavioural disorders	5	1	20.0
Diseases of the nervous system	538	8	1.5
Diseases of the eye and adnexa	13	0	0.0
Diseases of the ear and mastoid process	13	0	0.0
Diseases of the circulatory system	17	1	5.9
Diseases of the respiratory system	10160	48	0.5
Diseases of the digestive system	342	6	1.6
Diseases of the skin and subcutaneous tissue	66	0	0.0
Diseases of the musculoskeletal system and connective tissue	20	0	0.0
Diseases of the genitourinary system	104	1	1.0
Certain conditions originating in the perinatal period	6665	450	6.8
Congenital malformations, deformations and chromosomal abnormalities	647	40	6.2
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	212	13	6.1
Injury, poisoning and certain other consequences of external causes	179	1	0.6

Table 3.26 Autopsies, Georgia, 2010–2011

	2010		2011	
	Number of autopsies performed	% from the number of hospital deaths	Number of autopsies performed	% from the number of hospital deaths
Total	**37**	**0.6**	**65**	**1.0**
		Including		
Children under 15	24	3.0	37	5.3
Newborns aged 0-6 days	5	1.2	11	3.2
Stillborns	305	44,7	217	39.2

Table 3.27 Surgical operations, Georgia, 2001 – 2011

	Total number of operations			Among them in children		
	Total	Rate per 1000 population	Fatality %	Total	Rate per 1000 population	Fatality %
2001	75905	17.2	0.7	10415	11.3	0.6
2002	77657	17.8	0.7	10463	11.7	0.3
2003	82626	19.1	0.7	10970	13.0	0.5
2004	90790	20.8	0.7	10945	11.9	0.4
2005	98695	22.6	0.7	11655	12.7	0.5
2006	100303	22.8	0.6	11194	14.1	0.4
2007	100438	22.9	0.5	11722	15.3	0.2
2008	121189	27.6	0.5	13943	18.5	0.6
2009	123900	28.1	0.5	11361	15.1	0.5
2010	134941	30.3	0.4	14539	19.2	0.4
2011	**143262**	**31.9**	**0.4**	**15860**	**20.9**	**0.3**

Table 3.28 Surgical operations performed under general anesthesia and mortality rate, Georgia, 2001–2011

	Total number of surgical operations under general anesthesia	Percentage from the total number	Case fatality rate due to general anesthesia (%)
2001	34173	45.0	0.02
2002	35261	45.4	0.03
2003	39386	47.7	0.03
2004	43030	47.4	0.03
2005	54499	55.2	0.01
2006	54771	54.6	0.01
2007	57004	56.7	0.01
2008	71725	59.2	0.01
2009	73376	59.2	0.02
2010	82334	61.0	0.004
2011	**75709**	**52.8**	**0.003**

Table 3.29 Surgical operations, inpatients network, Georgia, 2010–2011

	2010		2011	
	Number of inpatient operations	Case fatality rate (%)	Number of inpatient operations	Case fatality rate (%)
All operations	**134941**	**0.4**	**143262**	**0.4**
Operations on organs of the nervous system	3387	2.5	3609	1.5
Operations on organs of the endocrine system	1212	0.0	1388	0.0
Operations on the eye	5723	0.0	6017	0.0
Operations on the ear and nose	5454	0.0	6913	0.0
Operations on the oral cavity	8438	0.01	7974	0.0
Operations on heart	1382	4.3	2352	1.4
Operations on blood vessels	4649	0.3	5040	0.7
Operations on the respiratory organs	1162	1.4	989	1.0
Operations on organs of the digestive tract and abdominal cavity	27503	1.2	28356	1.2
Operations on genitourinary system	56677	0.05	60820	0.04
Operations on the musculoskeletal system	10648	0.4	11653	0.4
Operations on mammary glands (breast)	1918	0.0	2140	0.0
Operations on the skin and subcutaneous tissue	6083	0.1	5187	1.2
Operations on organs of the immune system	1	0.0	25	0.0

Table 3.30 Surgical operations, inpatients network, Georgia, 2011

	All ages	Including in children	Number of post operation deaths	Case fatality rate %
All operations	**143262**	**15860**	**558**	**0.4**
Operations on organs of nervous system	**3609**	**188**	**53**	**1.5**
Including on brain	1126	144	18	1.6
spinal cord	244	17	1	0.4
brain tunics	36	4	4	11.1
peripherous nervous system	103	0	0	0.0
Intervertebral discs	1979	1	2	0.1
Operations on organs of endocrine system	**1388**	**9**	**0**	**0.0**
Including on hypophysis	22	0	0	0.0
thyroid gland	967	0	0	0.0
parathyroidectomia	23	0	0	0.0
adrenalectomia	19	9	0	0.0
Operations on eye	**6017**	**373**	**0**	**0.0**
Including due to glaucoma	614	40	0	0.0
enucleation	135	2	0	0.0
due to cataract	3680	33	0	0.0
Operations on ear, nose	**6913**	**3167**	**0**	**0.0**
Including on ear	1938	744	0	0.0
adenoidectomia	2303	1631	0	0.0
Operations on the oral cavity	**7974**	**5369**	**0**	**0.0**
Including on tongue	38	18	0	0.0
on tonsils	7099	4782	0	0.0
Operations on respiratory organs	**989**	**108**	**10**	**1.0**
Including pulmonectomia	74	0	0	0.0
pulmonary lobe resection	116	17	0	0.0
segmental resection of lung	82	0	1	1.2
on larynx	268	13	1	0.4
resection of trachea	90	4	1	1.1
bronchial resection	1	0	0	0.0
pleural resection	3	0	0	0.0
Heart operations	**2352**	**275**	**33**	**1.4**
Including open heart	776	5	4	0.5
due to congenital heart defects	423	270	26	6.1
endovascular balloon dilatation	892	0	0	0.0
cardiostimulator implantation	220	0	0	0.0
pericardectomia	4	0	0	0.0
Operations on blood vessels	**5040**	**44**	**35**	**0.7**
Operations on organs of the digestive tract and abdominal cavity	**28356**	**3617**	**340**	**1.2**
Operations on genitourinary system	**60820**	**770**	**24**	**0.04**
Including on kidneys and ureters	2718	101	9	0.3
kidney transplantation	15	0	0	0.0
on the prostate gland	1352	4	6	0.4
on female pelvic organs	11202	19	4	0.04
obstetrical and gynecological operations	40346	1	0	0.0
Including due to ectopic pregnancy	815	0	0	0.0
Operations on the musculoskeletal system	**11653**	**1019**	**52**	**0.4**
Including bone transplantation	234	0	0	0.0
replacement of hip joint	2717	186	2	0.1
replacement of knee joint	532	12	0	0.0
amputation of extremity or its part	1040	9	22	2.1
Including amputation of extremity or its part due to diabetes	507	1	7	1.4
Operations on skin and subcutaneous tissue	**2140**	**1**	**0**	**0.0**
Operations on skin and subcutaneous tissue	**5187**	**757**	**9**	**0.2**
Operations on organs of the immune system	**25**	**0**	**0**	**0.0**
Plastic surgery	**146**	**2**	**0**	**0.0**

Table 3.31 Surgical operations in children, Georgia, 2011

	Number of inpatient operations	Number of post operation deaths	Case fatality rate %
All operations	**15860**	**46**	**0.3**
	Including		
Operations on organs of the nervous system	188	4	2.1
Operations on respiratory organs	108	1	0.9
Operations on heart	275	25	9.1
Operations on organs of the digestive tract and abdominal cavity	3617	16	0.4
Operations on the musculoskeletal system	1019	0	0.0

Table 3.32 Surgical operations and post operation case fatality rate by regions, Georgia, 2010–2011

	2010		2011	
	Number of operations	Case fatality rate %	Number of operations	Case fatality rate %
Ajara	13745	0.4	15429	0.4
Tbilisi	67932	0.5	71049	0.5
Kakheti	5600	0.1	5102	0.3
Imereti	21461	0.3	21314	0.4
Samegrelo	6847	0.6	6495	0.4
Shida Kartli	5037	0.1	7428	0.1
Kvemo Kartli	6729	0.2	7271	0.2
Guria	1828	0.3	2500	0.4
Samtskhe-Javakheti	2561	0.1	3022	0.1
Mtskheta-Mtianeti	1022	0.4	799	0.0
Racha-Lechkhumi	226	1.8	125	0.8
Other facilities	1953	0.2	2728	0.2
Georgia	**134941**	**0.4**	**143262**	**0.4**

Table 3.33 Urgent surgical operations, Georgia, 2001–2011

	Number of urgent operations	Percentage from the total number	Case fatality rate, %
2001	13372	17.6	1.1
2002	13610	17.5	1.4
2003	16498	20.0	1.3
2004	17541	19.3	1.4
2005	18414	18.6	1.4
2006	20146	20.1	1.2
2007	20369	20.3	1.4
2008	23022	19.0	1.1
2009	21818	17.6	1.3
2010	20385	15.1	1.1
2011	**19384**	**13.5**	**1.5**

Table 3.34 Urgent surgical operations, Georgia, 2011

	Total number of deaths	Number of post operation deaths	Case fatality rate, %
Urgent surgical aid	**19384**	**283**	**1.4**
Including			
Due to acute ileus	1386	91	6.6
Due to acute appendicitis	7085	2	0.03
Due to gastric and duodenal perforation	563	21	3.7
Due to bleeding in the digestive tract	286	27	9.4
Due to strangulated hernia	3568	14	0.4
Due to acute cholecystitis	1981	21	1.1
Due to acute pancreatitis	150	13	8.7
Due to ectopic pregnancy	815	0	0.0
Splenectomia	103	1	1.0
Other operations on abdominal cavity organs	1519	74	4.9
Lung resection	10	1	10.0
Nephrectomia	72	0	0.0
Orchiectomy	140	0	0.0
Ovaryectomy	260	0	0.0
Other operations on the genitourinary system	618	5	0.8
Amputation of extremity or its part	828	13	1.6

Table 3.35 Structure of urgent surgical operations, Georgia, 2010–2011

	2010		2011	
	Total	%	Total	%
Urgent surgical aid	**20385**	**100**	**19384**	**100**
Including				
Due to acute appendicitis	7890	38.7	7085	36.6
Due to gastric and duodenal perforation	477	2.3	563	2.9
Due to acute cholecystitis	1788	8.8	1981	10.2
Due to acute ileus	1290	6.3	1386	7.2
Due to bleeding in the digestive tract	164	0.8	286	1.5
Due to strangulated hernia	3732	18.3	3568	18.4
Due to acute pancreatitis	118	0.6	150	0.8
Due to ectopic pregnancy	1082	5.3	815	4.2
Splenectomia	129	0.6	103	0.5
Other operations on organs of abdominal cavity	1579	7.7	1519	7.8
Lung resection	7	0.03	10	0.1
Nephrectomia	210	1.0	72	0.4
Orchiectomy	131	0.6	140	0.7
Ovaryectomy	272	1.3	260	1.3
Other operations on the genitourinary system	748	3.7	618	3.2
Amputation of extremity or its part	768	3.8	828	4.3

Table 3.36 Number of urgent surgical operations and interval between the symptom onset and hospital admission, Georgia, 2011

	Hospital admissions			Including			
	Total number	Including delays (more than 24 hours)		Without operation	Case fatality rate (%)	Operated	Case fatality rate (%)
		Number	Number				
Acute ileus	1651	385	23.3	265	2.6	1386	6.6
Acute appendicitis	7311	933	12.8	226	0.0	7085	0.03
Gastric and duodenal ulcer perforation	630	63	10.0	67	0.0	563	3.7
Bleeding in the digestive tract	1337	299	22.4	1051	1.8	286	9.4
Strangulated hernia	3617	288	8.0	49	2.0	3568	0.4
Acute cholecystitis	2165	427	19.7	184	1.1	1981	1.1
Acute pancreatitis	395	115	29.1	245	0.8	150	8.7
Ectopic pregnancy	815	27	3.3	0	0.0	815	0.0
Splenectomia	105	4	3.8	2	0.0	103	1.0
Other operations on organs of abdominal cavity	1629	120	7.4	110	1.8	1519	4.9
Lung resection	10	1	10.0	0	0.0	10	10.0
Nephrectomia	72	4	5.6	0	0.0	72	0.0
Orchiectomy	141	18	12.8	1	0.0	140	0.0
Ovaryectomy	260	14	5.4	0	0.0	260	0.0
Other operations on genitourinary system	623	35	5.6	5	0.0	618	0.8
Amputation of extremity or its part	829	113	13.6	1	0.0	828	1.6

Table 3.37 Operations on organs of the digestive tract and abdominal cavity, Georgia, 1997–2011

	Total number	Case fatality rate, %	Including			
			Urgent operations		Other operations	
			Number	Case fatality rate, %	Number	Case fatality rate, %
1997	16967	1.9	11982	1.8	4985	2.1
1998	18266	1.9	12755	1.6	5511	2.6
1999	18948	1.8	13478	1.4	5470	2.6
2000	18055	1.7	12991	1.5	5064	2.3
2001	18367	1.6	12385	1.1	5982	2.4
2002	19979	1.4	12711	1.4	7268	1.4
2003	19647	1.4	13346	1.1	6301	1.9
2004	24419	1.4	14029	1.2	10390	1.6
2005	23434	1.4	14680	1.1	8754	2.0
2006	24617	1.2	17873	1.2	6744	1.2
2007	24592	1.1	18038	1.2	6554	1.0
2008	28614	0.9	19559	1.2	9055	0.5
2009	26334	1.2	17888	1.4	8446	0.8
2010	27503	1.2	17167	1.1	10336	1.3
2011	**28356**	**1.2**	**16641**	**1.6**	**11715**	**0.6**

Table 3.38 Surgical beds, utilization rates, Georgia, 1997–2011

	Number of beds	Bed occupancy rate (days)	Average length of stay	Bed turnover
1997	5509	84.2	9.7	8.8
1998	5387	95.3	10.0	9.6
1999	5395	89.8	9.2	9.9
2000	5022	74.7	8.2	9.1
2001	4787	75.8	7.6	10.0
2002	4518	82.0	7.6	10.9
2003	4516	79.4	7.1	11.3
2004	4441	83.2	6.8	12.4
2005	4256	83.5	6.2	13.7
2006	3990	90.1	5.7	15.9
2007	3584	113.9	5.9	19.3
2008	3453	125.1	5.5	23.1
2009	3475	108.8	4.9	22.2
2010	3254	104.5	4.4	23.7
2011	**2957**	**118.8**	**4.3**	**28.1**

Table 3.39 Hemotransfusion stations' performance, Georgia, 2006 – 2011

	2006	2007	2008	2009	2010	2011
Total number of donors	32787	28983	30366	33991	33514	25982
including unselfish donors	*12360*	*7444*	*7575*	11102	10273	2254
% unselfish donors	37.7	25.7	24.9	32.7	30.7	8.7
Total number of personnel	443	371	317	358	350	290

Table 3.40 Blood collection, testing of donations, unfit donations, Georgia, 2011

	Number of donations	%
Total	**31793**	**100**
including tested on		
HIV/AIDS	31713	99.7
Hepatitis B	31713	99.7
Hepatitis C	31713	99.7
Syphilis	31686	99.7
Blood group serology (BGS)	31677	99.6
Unfit blood / packed red blood cells	**1319**	**4.1**

Table 3.41 Antirabial vaccination, Georgia, 2009 – 2011*

	2009	2010	2011
Number of patients applied for antirabial care	33697	37205	50366
Number of patients preventively vaccinated with gamma globulin	28055	30381	41605
Including			
Conditional course of vaccinations	21189	23400	32714
Full course of vaccinations	6866	6981	8891

* *Matched data of medical statistics and epidsurveillance*

Table 3.42 X-ray examinations (including prophylactic examinations), Georgia, 2011

	All	Among them		
		Chest organs	Digestive organs	Bone & joint system
X-ray examinations	**798418**	**333753**	**147944**	**303988**
Including				
Rentgenoscopy	113912	75774	13005	25026
Rentgenography	681252	253766	135199	279661
Electrorentgenography	620	420	200	-
Diagnostic fluorography	8068	8068	-	-
Special examinations	74800	1704	921	520
Special examinations include:				
Angiography	2379			
Cholecystography	921			
Urography	3082			
Computer tomography	38467			
Tomography	6825			
Examination of female pelvic organs	1302			
Salpingography	504			
Mammography	8602			

Table 3.43 Number of ultrasonic examinations, Georgia, 2010–2011

	2010	2011
Circulatory system	89360	108588
Abdominal cavity organs	294601	358654
Female pelvic organs	310943	335383
Among them: during pregnancy	165800	153085
Newborns and young children	12307	11852
Mammary glands	17947	25620
Thyroid gland	60740	76862
Bone and joint system	26246	31000
Doppler examination of peripheral blood vessels	20677	18036
Ultrasonoscopy of the brain	16193	15260
Punch biopsy and drainage by ultrasonic ray	468	2386
Intraoperational ultrasonic examination	5459	995

Table 3.44 Work of endoscopy departments (units), Georgia, 2011

	Total	*Including*		
		Esophagogastroduodenoscopy	Colonoscopy	Bronchoscopy
Endoscopic examinations	**39622**	**27325**	**3992**	**5617**
Including				
Curative procedures	6041	2613	292	2793
Examination with collecting of cytomorphological specimens	2620	815	329	662

Table 3.45 Work of ancillary medical services, Georgia, 2011

	Number
Work of physiotherapy departments	
Number of patients completed the treatment	84062
Including outpatient	29901
Children aged under 15 among all patients completed the treatment	27527
Including outpatient	11105
Number of procedures	480876
Including outpatient	350697
at home	11630
Work of therapeutic exercises units	
Number of patients who completed the treatment	17562
Including outpatient and at home	11893
Children aged under 15 among all patients who completed the treatment	10470
Including outpatient and at home	8433
Number of performed procedures	176587
Including outpatient	112344
at home	1988
Work of rephlexotherapy units	
Number of patients completed the treatment	448
Number of performed procedures	4018
Work of hemodialysis departments	
Number of dialysis beds	339
Number of performed procedures	148677
Work of departments of hyperbaric oxygenation	
Number of performed seances	83
Logopedic assisstance	
Number of patients completed speech therapy	845
Including children under 15	842

Table 3.46 Work of laboratories, Georgia, 2011

	Number of performed tests					
	Total	*Including*				
		Hematological	Cytological	Biochemical	Microbiological	Immunological
Total number of patients	**6602359**	**2406344**	**127720**	**2086620**	**326768**	**838060**
			Including			
Ambulatory patients	**3751632**	**1486488**	**84493**	**989949**	**192061**	**550440**
The total number of tests includes analysis of:						
Hormones						207782
Enzymes						204162
Coagulation and anticoagulation system indices						365391
Water-salt metabolism						125803
Bacteriological examinations of tuberculosis						
		Bacterioscopy				125941
		Inoculation				72352
Examinations for diphtheria						315
		Inoculation				68
Examinations for meningococcs:		Microscopy				634
		Inoculation				930
Examinations for malaria		Microscopy				87
Complex of serological reactions						134861
Special reaction for sero- and liquor diagnosis of syphilis						79483

Table 3.47 Work of functional diagnostics, Georgia, 2010–2011

	2010	2011
Number of examined patients	**396268**	**444442**
Including outpatient	237560	201598
Children under 15 in all examined patients	24535	28036
Number of examinations	**436723**	**534713**

Table 3.48 Number of departments in medical facilities, Georgia, 2010–2011

	2010	2011
Departments		
Physiotherapy	188	184
Therapeutic exercises (for adults and children)	124	121
Rephlexotherapy	10	7
Hemodialysis	9	12
Hyperbaric oxygenation	1	2
Surdological	4	3
X-ray (Rentgenological)	309	329
Endoscopic	78	88
Antirabial	79	77
Computer tomography	21	30
Vaccination units	165	140
Autopsy	19	22
Electrocardiography and functional diagnostics	329	294
Blood transfusion	117	78
Laboratories		
Radioisotopical diagnostic	3	13
Clinical-diagnostical	556	525
Bacteriological	110	105
Serological	132	122
Biochemical	387	351
Cytological	87	88

Table 3.49 Infant nurseries, Georgia, 2008–2011

	2008	2009	2010	2011
Number of infant's homes	2	2	2	2
Number of places for infants	185	200	180	175
Number of staff	153	153	143	180
Including				
Physician	9	9	8	8
Nurses and auxiliaty	9	13	7	8
Teachers	75	77	87	122
Number of infants in nurseries by the end of reporting year:				
Total	160	188	180	164
Including				
Aged 0-1 year	60	38	58	49
Aged 1-3 years	59	73	74	69
Aged 3 years and more	41	77	48	46
Among the number of infants who left nurseries during the year:				
Taken by the parents	30	26	47	30
Adopted	11	4	22	36
Transferred to the facilities of public education and social security due to the age	11	32	10	5
Deceased	24	33	12	10

Table 3.50 Health Care Funding, Georgia, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Share of total healthcare expenditures from GDP, %	7.8	8.7	8.5	8.5	8.6	8.4	8.2	8.7	10.1	10.2
Share of state healthcare expenditures from GDP, %	1.1	1.2	1.3	1.3	1.7	1.8	1.5	1.8	2.3	2.4
Share of state healthcare expenditures from the gross state expenditures, %	6.1	6.3	6.7	5.4	6.0	5.7	4.2	4.9	6.1	6.5
Share of state healthcare expenditures from the total health expenditures, %	14.4	13.5	15.0	15.5	19.6	21.9	18.4	20.6	23.0	23.1
Share of private healthcare expenditures from the total health expenditures, %	76.7	74.3	77.6	78.4	77.7	73.0	72.4	68.9	71.2	74.0
Share of international healthcare funding from total health expenditures, %	8.9	12.1	7.4	6.1	2.7	5.1	9.2	10.5	5.8	2.9
Total health expenditures, million lari	521.5	650.7	724.8	835.9	998.3	1159.6	1386.6	1660.7	1818.5	2096.5
State healthcare expenditures, million lari	75.3	88.1	108.5	129.9	195.7	254.5	255.5	342.7	418.6	484.1
Local government health expenditures, million lari	23.5	21.2	20.0	26.7	41.4	17.7	15.6	14.5	18.7	14.9
Private health expenditures, million lari	399.9	483.6	562.5	655.3	775.2	846.3	1003.4	1144.1	1294.8	1551.7
Among them paid by trial (advanced) schemes, million lari	2.4	2.6	2.8	6.7	7.5	9.8	20.8	24.5	47.5	55.7
International healthcare funding, million lari	46.3	78.9	53.8	50.7	27.4	58.8	127.7	173.6	105.1	60.7
Total health expenditures per capita, lari	115.0	149.0	168.0	194.0	229.0	264.0	316.0	379.0	412.0	471.0
State health expenditures per capita, lari	17.0	20.0	25.0	30.0	45.0	58.0	58.0	78.0	95.0	109.0
Private health expenditures per capita, lari	88.0	111.0	130.0	152.0	178.0	192.0	229.0	261.0	294.0	348.0
International healthcare funding per capita, lari	10.0	18.0	12.0	12.0	6.0	13.0	29.0	40.0	24.0	14.0

CHAPTER 4.

POPULATION HEALTH STATUS

In 2011, prevalence and incidence rates were increased in general population and in children. Compared to 2010, the general incidence rate increased by 8.3%, while in children by 4.5%.

New cases according to the ICD-10 chapters, Georgia, 2011

	2010		2011	
	New cases	Incidence per 100000 population	New cases	Incidence per 100000 population
Total	**1161137**	**26076.6**	**1276437**	**28470.3**
Certain infectious and parasitic diseases	71642	1608.9	64378	1435.9
Neoplasms	11685	262.4	10362	231.1
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	17378	390.3	15292	341.1
Endocrine, nutritional and metabolic diseases	43545	977.9	41141	917.6
Mental and behavioral disorders	3984	89.5	5554	123.9
Diseases of the nervous system	47742	1072.2	46095	1028.1
Diseases of the eye and adnexa	49531	1112.4	51745	1154.1
Diseases of the ear and mastoid process	27902	626.6	29862	666.1
Diseases of the circulatory system	98193	2205.2	103466	2307.8
Diseases of the respiratory system	439289	9865.5	470741	10499.6
Diseases of the digestive system	151848	3410.2	224583	5009.2
Diseases of the skin and subcutaneous tissue	38305	860.2	42965	958.3
Diseases of the musculoskeletal system and connective tissue	30935	694.7	33416	745.3
Diseases of the genitourinary system	71952	1615.9	77139	1720.5
Pregnancy, childbirth and the puerperium	7166	612.5	12091	1038.0
Certain conditions originating in the perinatal period*	2198	3533.8	1724	2887.8
Congenital malformations, deformations and chromosomal abnormalities	2443	54.9	1664	37.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	7097	159.4	8305	185.2
Injury, poisoning and certain other consequences of external causes	38302	658.1	35914	801.0

Top 10 incident diseases, incidence rate per 100000 population, Georgia, 2011

		Incidence
1	Acute upper respiratory infections	7168.1
2	Certain conditions originating in the perinatal period	2887.8
3	Inflammatory diseases of female pelvic organs	1717.6
4	Infectious and parasitic diseases	1435.9
5	Hypertensive diseases	1267.3
6	Bronchitis, bronchiolitis and lower respiratory tract acute and unspecified infections	1134.8
7	Injury, poisoning and other certain consequences of external causes	801.0
8	Ischaemic heart diseases	613.8
9	Pneumonia	611.5
10	Upper respiratory tract chronic infections	549.3

* *the denominator for the indicator is the number of chidren under1year*

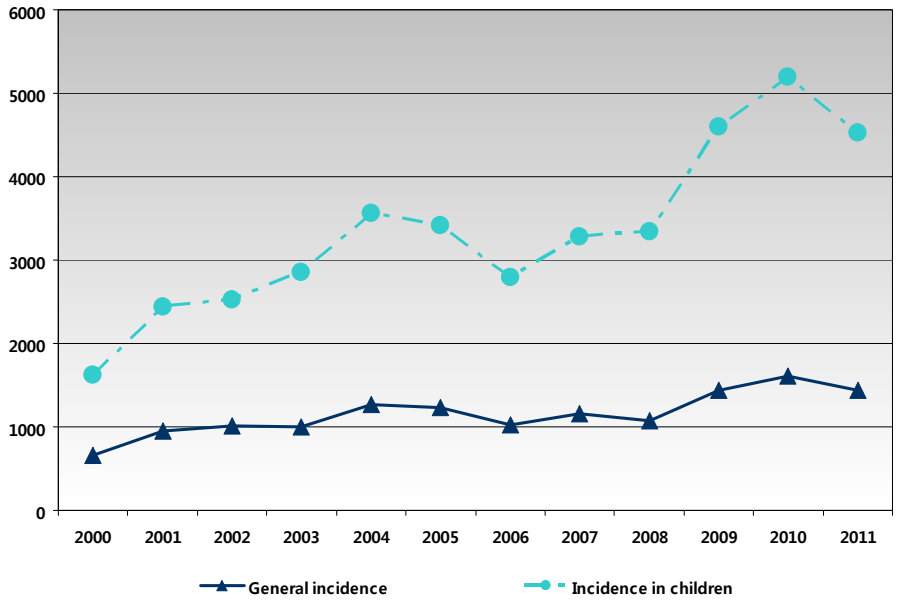
Top 10 prevalent diseases, prevalence rate per 100000 population, Georgia, 2011

		Prevalence
1	Acute upper respiratory infections	7600.2
2	Hypertensive diseases	5710.9
3	Certain conditions originating in the perinatal period	3428.8
4	Inflammatory diseases of female pelvic organs	2846.0
5	Ischaemic heart diseases	2569.7
6	Diabetes mellitus	1898.6
7	Neoplasms	1281.5
8	Bronchitis, bronchiolitis and lower respiratory tract acute and unspecified infections	1245.8
9	Cholelithiasis, cholecystitis	1166.1
10	Nerve, nerve root and plexus disorders	1039.3

Infectious diseases

In 2011, the number of new cases of infectious and parasitic diseases decreased: incidence rate in the whole population decreased by 10.6%, while in children by 12.9% children (Figure 4.1).

Figure 4.1 Infectious and parasitic diseases, incidence per 100000 population, Georgia



In 2011, the incidence rates of acute upper respiratory infections, influenza and diarrhoea of presumed infectious origin in general population and in children were traditionally high.

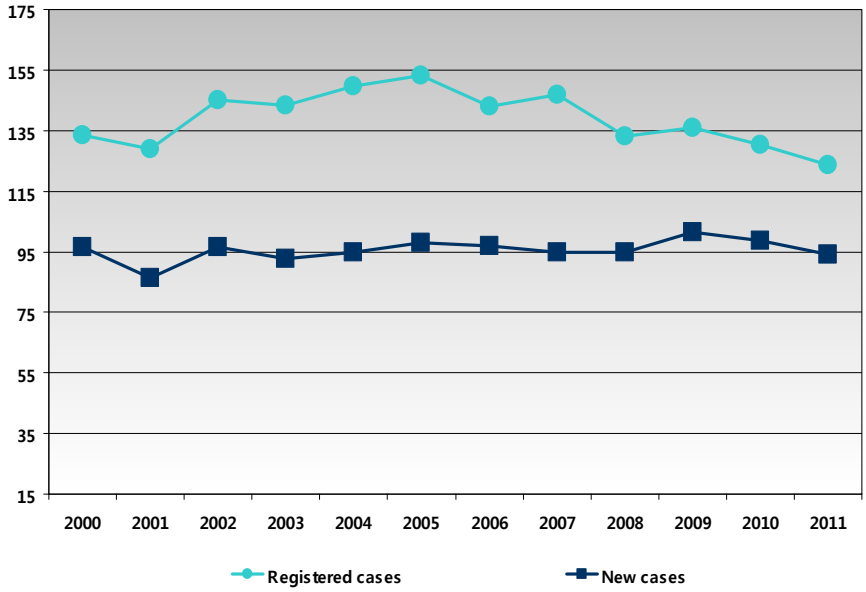
During the reporting year, hospitalization rate due to certain infectious and parasitic diseases increased slightly among the whole population and decreased by 15.6% in children aged 0-15.

Intestinal infections constituted the main reason of hospitalization of children aged 0-15 and infants: 76.4% in children aged 0-15 and 82.8% in infants.

Pulmonary and extrapulmonary tuberculosis *

In 2011, there were registered 123.5 cases of all types of tuberculosis including 94.2 new cases per 100000 population. The decrease of TB morbidity has been registered since 2009: registered numbers per 100000 population decreased by 9.1%, new cases per 100000 population - by 5.4% (Figure 4.2).

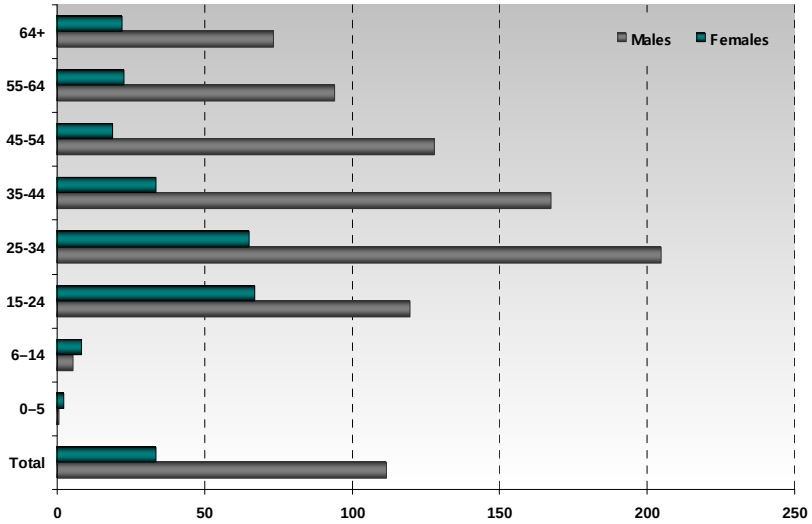
Figure 4.2 TB morbidity per 100000 population, Georgia



New pulmonary tuberculosis comprised 75% among new cases of all types of tuberculosis.

77.5% of new pulmonary TB cases were registered in males; incidence rate in males was 3.3 times higher than in females. This tendency is revealed in almost all age groups, except children. In the age group 25–34 pulmonary TB incidence reached the maximum values for both sexes (Figure 4.3).

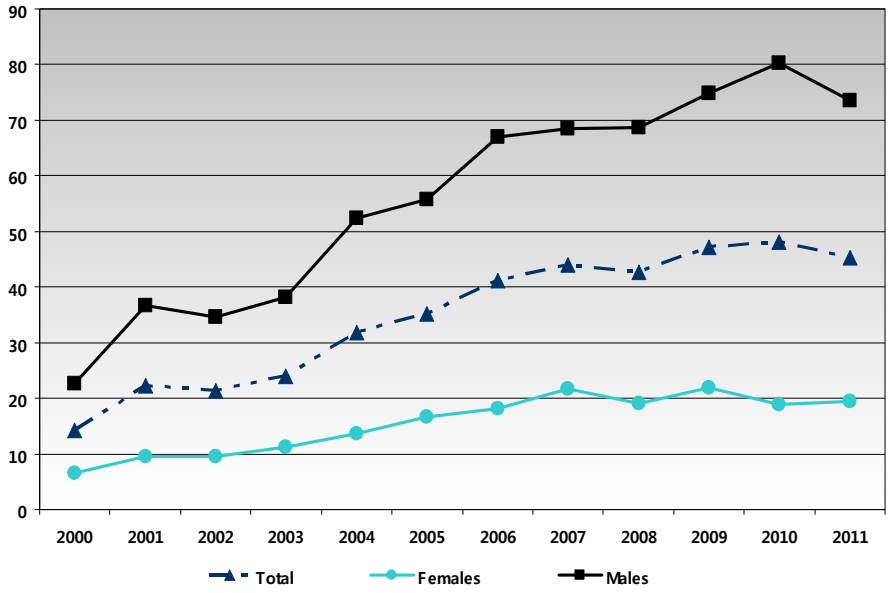
Figure 4.3 Incidence rate of pulmonary tuberculosis by sex and age groups per 100000 population of the corresponding age and sex, Georgia, 2011



* *See additional information in the chapter "Health-related Millennium Development Goals".*

The share of smear positive cases of TB has been increasing since 2008 (from 61% in 2008 to 68% in 2011). In males the incidence of smear positive tuberculosis was 3.8 times higher than in females (Figure 4.4).

Figure 4.4 **Incidence of smear positive pulmonary tuberculosis per 100000 population, Georgia 2000-2011**



Treatment success (number of new smear-positive pulmonary TB cases registered in a specified period that were cured plus the number that completed treatment) rate is one of the key global indicators recommended by the World Health Assembly for measuring national TB control program (NTP) success. By 2005 it was recommended to achieve a treatment success rate of 85%.

In Georgia the treatment success rate of smear positive pulmonary TB in 2005 was 64.1%, in 2011 it increased to 76.5%.

Results of treatment of new cases of smear positive pulmonary tuberculosis registered 12 months ago, Georgia, 2007 – 2011

	2007	2008	2009	2010	2011
Number of registered cases	**1580**	**1860**	**1868**	**2055**	**2143**
% ***from the total number***					
Recovered	63.9	63.2	60.3	63.7	67.0
Completed treatment	11.6	13.9	13.2	11.6	9.5
Treatment failure	6.1	6.2	4.4	3.5	1.9
Died	3.0	2.5	2.8	3.1	2.9
Interrupted treatment	8.9	8.8	8.8	7.3	6.7
Transferred to other institutions	5.5	3.1	2.4	1.4	0.8
Unevaluated cases	1.0	2.4	1.6	1.3	1.4
Assigned category IV (chronic)	0	0	6.6	8.1	9.8

Tuberculosis pleurisy has the largest share (44.2%) in the structure of the registered intrapulmonary TB cases.

Extrapulmonary tuberculosis, Georgia, 2011

	Registered cases		Including new cases	
	Total number	%	Total number	%
Extrapulmonary TB	**1164**	**100**	**1061**	**100**
Including				
TB meningitis	39	3.4	38	3.6
Bone and joint tuberculosis	131	11.3	109	10.3
Urogenital TB	130	11.2	105	9.9
Tuberculous pleurisy	515	44.2	488	46.2
Lymph node tuberculosis	242	20.8	223	21.1

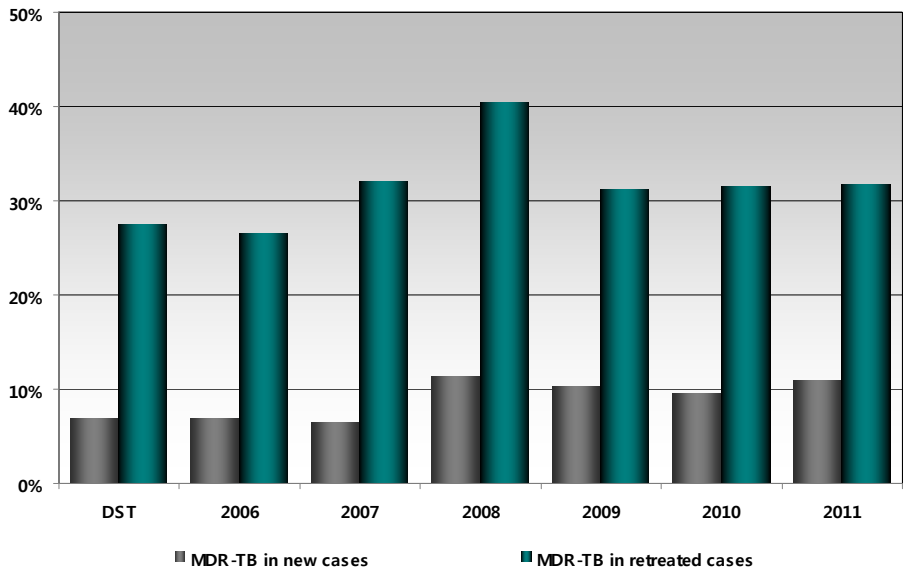
Out of 39 cases of tuberculous meningitis, 7.7% of cases were recorded in children.

According to the WHO recent estimates, 3.7% of new cases and 20% of retreated cases were multidrug-resistant (MDR-TB) cases.

According to the WHO, the number of patients to be treated for MDR-TB should reach around 270 000 in 2015. The total number of people to be treated in the five years 2011–2015 is approximately 1 million. The treatment success rate among patients with confirmed MDR-TB should increase from the 2009 baseline of 60% to 75% by 2015.

In 2004-2006, the first-line anti-tuberculosis drug resistance survey of (MDR Survey/DST) was conducted in Georgia under the WHO support. According to the results of the survey, a multidrug-resistant tuberculosis was revealed in 6.8% of smear-positive new cases and in 27.4% of retreated cases. In 2011, 3.7% of new cases and 20% of retreated cases were connected to multidrug-resistant form of tuberculosis (Figure 4.5).

Figure 4.5 Multi-drug resistant form of tuberculosis (MDR-TB) (%)



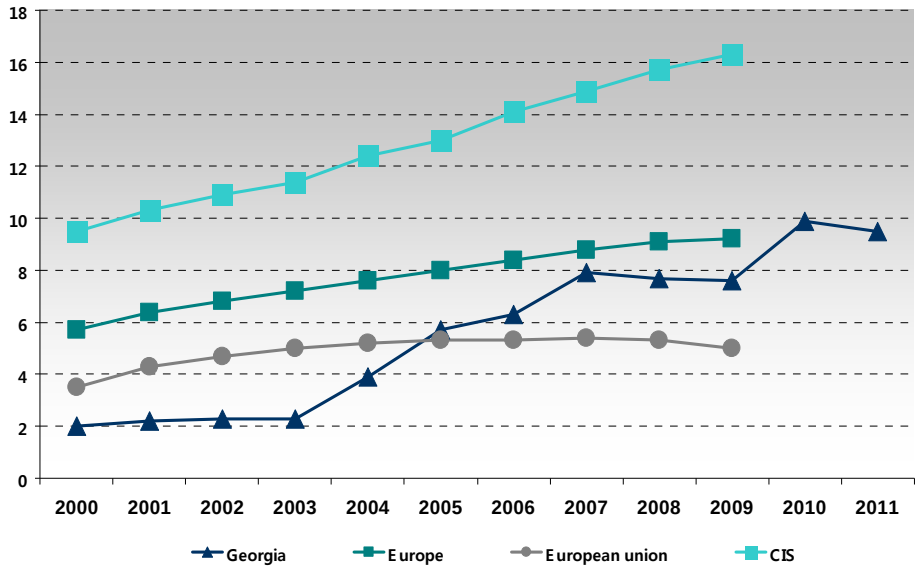
HIV-AIDS*

The increasing tendency in HIV infection incidence discontinued in 2011. There were 424 newly detected HIV cases (incidence rate - 9.5).

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Registered cases (cumulative)	281	377	475	635	874	1152	1497	1835	2170	2609	3033
New cases	95	96	98	160	239	278	345	338	335	439	424
Number of deaths (cumulative)	41	52	69	108	161	204	261	300	366	456	572
Number of deaths during the reporting year	14	11	17	39	53	43	57	39	66	90	116

In Georgia, the incidence rate of HIV infection exceeded 1.7 times the same indicator for the European Union, and was 3 times lower compared to the CIS countries (Figure 4.6).

Figure 4.6 **Incidence of HIV (per 100000 populations), Georgia, Europe, European Union, CIS**



Source: WHO HFADB, NCDC

During the reporting year, 70.8% of cases were registered in men. According to the modes of transmission of new cases, injecting drug use (44.6%) and sexual contacts (53.3%) constituted a significant share; heterosexual contacts made up 47.4% from all sexually transmitted cases. There were registered 6 cases of vertical transmission (from mother to child).

In 2011, 49.1% of late detected cases were transmitted through injecting drug use and 48.2% through sexual contacts.

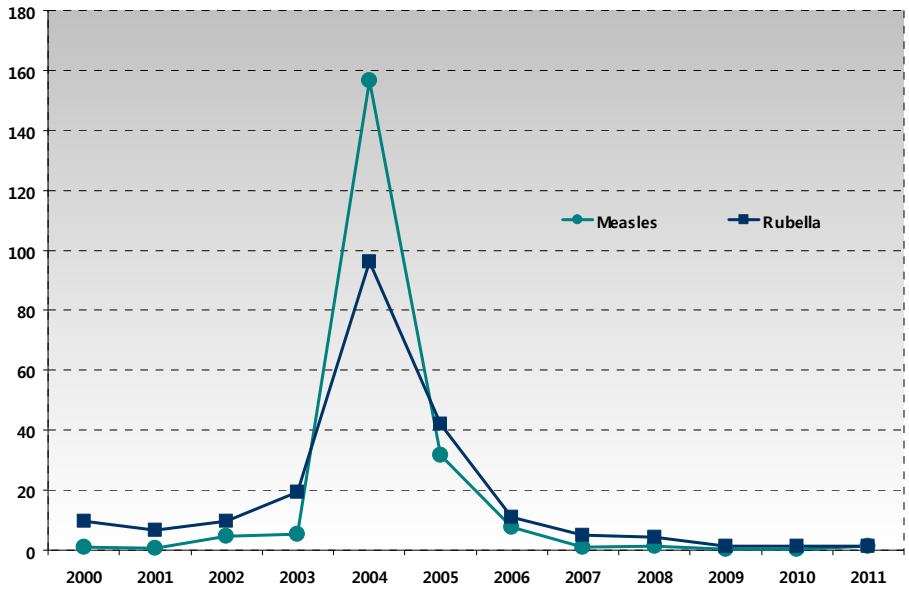
62.1% of case fatality rate among AIDS patients was HIV-AIDS caused. In 2011, there were registered 116 death cases.

* *See additional information in the chapter "Health-related Millennium Development Goals".*

Measles* and Rubella

In 2011, in Georgia there were no significant changes in general incidence of measles and rubella (Figure 4.7). Incidence of measles in children decreased by 17.4%, incidence of rubella dropped by 73.4%.

Figure 4.7 Measles, rubella incidence per 100000 populations, Georgia

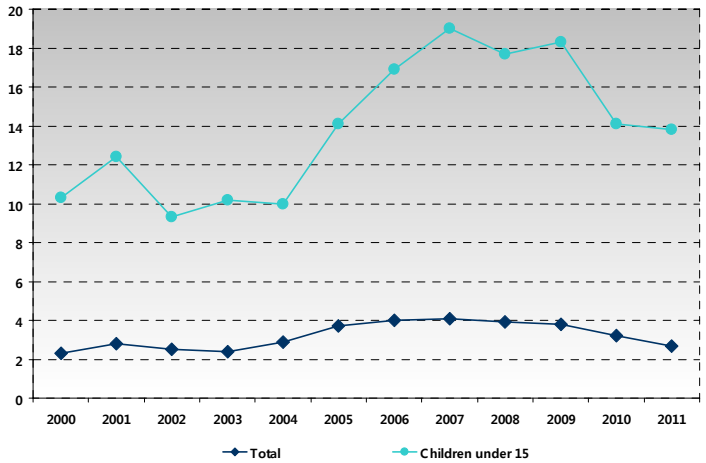


In 2010, incidence of measles in Georgia was 12.2 times lower compared to the same indicator in the European Union.

Visceral leishmaniasis

In 2011, number of cases of leishmaniasis decreased in Georgia; compared to 2007, this rate decreased by 27.4%. Incidence rate in children declined slightly (Figure 4.8).

Figure 4.8 Leishmaniasis, incidence rate per 100000 population, Georgia

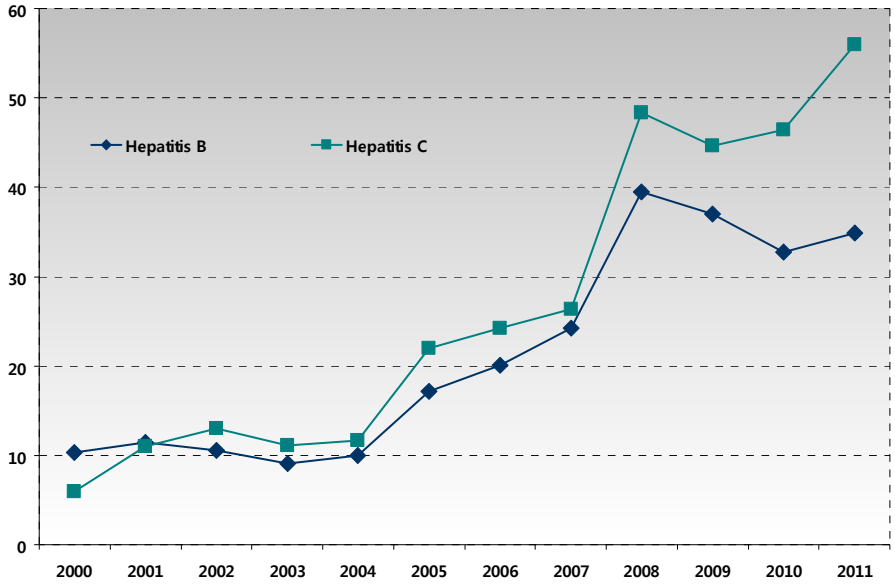


* *See additional information in the chapter "Health-related Millennium Development Goals".*

Viral hepatitis B and C

In 2011, in Georgia incidence rate of viral hepatitis B increased by about 6% and almost equalled to average rate for the European region. Incidence rate of viral hepatitis C increased by 20.7% (Figure 4.9).

Figure 4.9 **Viral Hepatitis, incidence rates per 100000 population, Georgia**



Incidence rate of viral hepatitis B in children decreased by 42%, while the rate of viral hepatitis C remained unchanged.

In registered cases of hepatitis B, acute hepatitis made up 7.5%. Incidence rate reached the maximum in 20-29 years age group.

In new cases of hepatitis C 1.8% was acute and 98.2% - chronic cases.

Table 4.1 Registered disease cases, prevalence and structure by classes, Georgia, 2011

	Number of registered cases	Prevalence	%
Total	**2549198**	**56858.6**	**100**
Certain infectious and parasitic diseases	82906	1849.2	3.3
Neoplasms	57455	1281.5	2.3
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	21878	488.0	0.9
Endocrine, nutritionsl and metabolic diseases	177330	3955.3	7.0
Mental and behavioral disorders	84985	1895.5	3.3
Diseases of the nervous system	143717	3205.5	5.6
Diseases of the eye and adnexa	138351	3085.9	5.4
Diseases of the ear and mastoid process	45463	1014.0	1.8
Diseases of the circulatory system	446524	9959.5	17.5
Diseases of the respiratory system	558241	12451.3	21.9
Diseases of the digestive system	422928	9433.2	16.6
Diseases of the skin and subcutaneous tissue	59347	1323.7	2.3
Diseases of the musculoskeletal system and connective tissue	91699	2045.3	3.6
Diseases of the genitourinary system	138016	3078.4	5.4
Pregnancy, childbirth and puerperal period*	16150	1386.5	0.6
Certain conditions originating in the perinatal period**	2047	3428.8	0.1
Congenital malformations, deformations and chromosomal abnormalities	9198	205.2	0.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	9579	213.7	0.4
Injury, poisoning and certain other consequesnces of external causes	43384	967.7	1.7

Table 4.2 New cases of diseases, incidence and structure by classes, Georgia, 2011

	Number of new cases	Incidence	%
Total	**1276437**	**28470.3**	**100**
Certain infectious and parasitic diseases	64378	1435.9	5.0
Neoplasms	10362	231.1	0.8
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	15292	341.1	1.2
Endocrine, nutritionsl and metabolic diseases	41141	917.6	3.2
Mental and behavioral disorders	5554	123.9	0.4
Diseases of the nervous system	46095	1028.1	3.6
Diseases of the eye and adnexa	51745	1154.1	4.1
Diseases of the ear and mastoid process	29862	666.1	2.3
Diseases of the circulatory system	103466	2307.8	8.1
Diseases of the respiratory system	470741	10499.6	36.9
Diseases of the digestive system	224583	5009.2	17.6
Diseases of the skin and subcutaneous tissue	42965	958.3	3.4
Diseases of the musculoskeletal system and connective tissue	33416	745.3	2.6
Diseases of the genitourinary system	77139	1720.5	6.0
Pregnancy, childbirth and puerperal period*	12091	1038.0	0.9
Certain conditions originating in the perinatal period**	1724	2887.8	0.1
Congenital malformations, deformations and chromosomal abnormalities	1664	37.1	0.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	8305	185.2	0.7
Injury, poisoning and certain other consequesnces of external causes	35914	801.0	2.8

* *Indicators are calculated for women of the reproductive age*

** *Indicators are calculated for infants (0-1 year)*

Table 4.3 Registered disease cases in children aged 0-15 years, prevalence and structure by classes, Georgia, 2011

	Number of registered cases	Prevalence	%
Total	**503674**	**66246.7**	**100.0**
Certain infectious and parasitic diseases	39532	5199.5	7.8
Neoplasms	443	58.3	0.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	11290	1484.9	2.2
Endocrine, nutritionsl and metabolic diseases	13331	1753.4	2.6
Mental and behavioral disorders	1511	198.7	0.3
Diseases of the nervous system	28079	3693.1	5.6
Diseases of the eye and adnexa	18423	2423.1	3.7
Diseases of the ear and mastoid process	14797	1946.2	2.9
Diseases of the circulatory system	5030	661.6	1.0
Diseases of the respiratory system	283497	37287.5	56.3
Diseases of the digestive system	35827	4712.2	7.1
Diseases of the skin and subcutaneous tissue	18972	2495.3	3.8
Diseases of the musculoskeletal system and connective tissue	5369	706.2	1.1
Diseases of the genitourinary system	6889	906.1	1.4
Pregnancy, childbirth and puerperal period*	2	-	0.0
Certain conditions originating in the perinatal period**	2047	-	0.4
Congenital malformations, deformations and chromosomal abnormalities	7677	1009.7	1.5
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3307	435.0	0.7
Injury, poisoning and certain other consequesnces of external causes	7651	1006.3	1.5

Table 4.4 New cases of diseases in children aged 0-15 years, incidence and structure by classes, Georgia, 2011

	Number of new cases	Incidence	%
Total	**406709**	**53493.2**	**100**
Certain infectious and parasitic diseases	34362	4519.5	8.4
Neoplasms	216	28.4	0.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	8996	1183.2	2.2
Endocrine, nutritionsl and metabolic diseases	6494	854.1	1.6
Mental and behavioral disorders	335	44.1	0.1
Diseases of the nervous system	10340	1360.0	2.5
Diseases of the eye and adnexa	10296	1354.2	2.5
Diseases of the ear and mastoid process	12269	1613.7	3.0
Diseases of the circulatory system	749	98.5	0.2
Diseases of the respiratory system	259815	34172.7	63.9
Diseases of the digestive system	26372	3468.6	6.5
Diseases of the skin and subcutaneous tissue	16131	2121.7	4.0
Diseases of the musculoskeletal system and connective tissue	1859	244.5	0.5
Diseases of the genitourinary system	5215	685.9	1.3
Pregnancy, childbirth and puerperal period *	2	-	0.0
Certain conditions originating in the perinatal period **	1724	-	0.4
Congenital malformations, deformations and chromosomal abnormalities	1415	186.1	0.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3032	398.8	0.7
Injury, poisoning and certain other consequesnces of external causes	7087	932.1	1.7

* *Indicators are calculated for women of the reproductive age*

** *Indicators are calculated for infants (0-1 year)*

Table 4.5 Morbidity rates by regions, Georgia, 2011

	Number of registered cases	Prevalence per 100000 populations	Number of new cases	Incidence per 100000 populations
Abkhazia	80869	-	32900	-
Ajara	288785	73650.9	126281	32206.3
Tbilisi	876637	75080.3	436514	37385.6
Kakheti	184714	45428.9	90755	22320.5
Imereti	364941	51691.4	195904	27748.4
Samegrelo	157007	32826.1	72143	15083.2
Shida Kartli	158263	50434.4	95715	30501.9
Kvemo Kartli	161411	31742.6	95434	18767.7
Guria	53842	38376.3	34484	24578.8
Samtskhe-Javakheti	64146	30045.0	37887	17745.7
Mtskheta-Mtianeti	54140	49442.9	33794	30862.1
Racha-Lechkhumi and Kvemo Svaneti	22589	47858.1	11238	23809.3
Other departments	64339	-	1696	-
Georgia	**2549198**	**56858.6**	**1276437**	**28470.3**

Table 4.6 Certain infectious and parasitic diseases, incidence per 100000 population, Georgia, 1988 – 2011

	Total		In children aged 0-15	
	Number of cases	Incidence	Number of cases	Incidence
1988	58290	1080.0	22656	1771.7
1990	69497	1281.2	28196	2203.5
1995	18770	391.5	8386	842.7
1996	34275	733.2	18799	1982.4
2000	29353	664.4	15320	1640.1
2001	41887	955.1	22595	2456.0
2002	44173	1013.8	23156	2571.2
2003	43410	1002.8	19267	2855.5
2004	55577	1271.3	32580	3557.0
2005	53999	1235.2	31311	3418.4
2006	44882	1020.5	22194	2793.5
2007	50829	1158.3	25121	3274.4
2008	47124	1075.0	25120	3339.5
2009	63510	1439.8	34583	4593.3
2010	71642	1608.9	39265	5190.4
2011	**64378**	**1435.9**	**34362**	**4519.5**

Table 4.7 Certain infectious and parasitic diseases, incidence per 100000 population by regions, Georgia, 2010 – 2011

	2010				2011			
	Total		In children		Total		In children	
	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence
Abkhazia	1226	--	638	--	1255	--	611	--
Ajara	7223	1858.2	4157	6298.5	6866	1751.1	2574	338.6
Tbilisi	17161	1482.6	5812	2954.8	18249	1562.9	7169	942.9
Kakheti	4170	1028.9	2771	4021.8	3487	857.6	2529	332.6
Imereti	16396	2334.3	10365	8688.2	11259	1594.8	6192	814.4
Samegrelo and Zemo Svaneti	4286	901.2	2501	3095.3	4278	894.4	2752	362.0
Shida Kartli	5387	1727.7	3744	7064.2	4977	1586.0	3316	436.1
Kvemo Kartli	6210	1235.1	3779	4425.1	6220	1223.2	4223	555.4
Guria	3112	2221.3	2269	9533.6	2822	2011.4	2085	274.2
Samtskhe-Javakheti	2491	1175.0	1813	5036.1	2032	951.8	1408	185.2
Mtskheta-Mtianeti	2134	1956.0	1145	6189.2	1926	1758.9	1176	154.7
Racha-Lechkhumi and Kvemo Svaneti	299	629.5	201	2481.5	518	1097.5	244	32.1
Other departments	1547	--	70	--	489	--	83	--
Georgia	**71642**	**1608.9**	**39265**	**5190.4**	**64378**	**1435.9**	**34362**	**4519.5**

Table 4.8 Notifiable diseases, incidence per 100000 population by regions, Georgia, 2010 - 2011

	2010				2011			
	Total		In children		Total		In children	
	Number of cases	Incidence	Number of cases	Incidence per 100000 children	Number of cases	Incidence	Number of cases	Incidence per 100000 children
Diphtheria	0	0.0	0	0.0	1	0.02	0	0
Whooping cough	49	1.1	46	6.1	33	0.7	30	3.9
Measles	22	0.5	14	1.9	64	1.4	29	3.8
Rubella	59	1.3	56	7.4	64	1.42	57	7.5
Mumps	101	2.3	77	10.2	44	1.0	39	5.1
All viral hepatitis	4091	91.9	161	21.3	4407	98.3	62	8.2
Viral hepatitis A	103	2.3	37	4.9	90	2.0	30	3.9
Viral hepatitis B	1459	32.8	14	1.9	1566	34.9	8	1.1
Viral hepatitis C	2067	46.4	2	0.3	2511	56.0	2	0.3
Other viral hepatitis	462	10.4	108	14.3	240	5.4	22	2.9
Other salmonella infections	77	1.7	38	5.0	118	2.6	39	5.1
Shigellosis	159	3.6	124	16.4	390	8.7	329	43.3
Other bacterial intestinal infections	911	20.5	638	84.3	848	18.9	573	75.4
Including: escherichiosis	773	17.4	533	70.5	632	14.1	446	58.7
Other bacterial foodborne intoxications	2649	59.5	1049	138.7	2603	58.1	1092	143.6
Including: botulism	20	0.4	3	0.4	12	0.3	0	0
Amoebiasis	7	0.2	3	0.4	9	0.2	5	0.7
Diarrhoea and gastroenteritis of presmed infectious origin	19868	446.1	13185	1742.9	19576	436.6	12993	1708.9
Brucellosis	199	4.5	21	2.8	166	3.7	8	1.1
Meningococcaemia	15	0.3	12	1.6	24	0.5	20	2.6
All meningitis	300	6.7	210	27.8	169	3.7	99	13.0
Malaria	0	0.0	0	0.0	2	0.04	0	0
Leishmaniasis	141	3.2	107	14.1	119	2.7	105	13.81
Acute upper respiratory infections	262618	5897.8	183817	24298.3	346887	7737.1	229005	30120.3
Influenza	19984	448.8	7335	969.6	39528	881.7	13619	1791.3
Cases of hospitalization due to influenza-like diseases	18722	420.5	14701	1943.3	19374	432.1	14431	1898.1
Acute flaccid paralysis / acute poliomyelitis	7	0.2	7	0.9	5	0.1	5	0.7
Tetanus	7	0.2	0	0.0	5	0.1	1	0.1
Tularaemia	3	0.1	0	0.0	0	0	0	0
Anthrax	28	0.6	1	0.1	81	1.8	3	0.4
Leptospirosis	72	1.6	1	0.1	80	1.8	5	0.7
Scarlet fever	377	8.5	348	46.0	519	11.6	491	64.6
Lyme disease (Borreliosis)	17	0.4	2	0.3	37	0.8	4	0.5
Q fever	2	0.0	1	0.1	0	0	0	0
Rabies	5	0.1	1	0.1	3	0.1	3	0.4
Unspecified viral infections of CNS	26	0.6	23	3.0	3	0.1	1	0.1
Arthropod-borne viral fevers and viral haemorrhagic fevers	0	0.0	0	0.0	3	0.1	0	0
Varicella	4704	105.6	3927	519.1	5810	129.6	4710	619.5
Cytomegaloviral disease	930	20.9	0	0.0	896	20.0	1	0.1
Infectious mononucleosis	110	2.5	78	10.3	159	3.5	103	13.5
Echinococcosis	80	1.8	24	3.2	64	1.4	16	2.1
Trichinellosis	12	0.3	3	0.4	9	0.2	1	0.1
Ascariasis	6241	140.2	5425	717.1	5897	131.5	4866	640.0
Trichuriasis	611	13.7	476	62.9	684	15.3	570	75.0
Enterobiasis	16470	369.9	14909	1970.8	16343	364.5	14286	1879.0

Table 4.9 Notifiable diseases by age groups, Georgia, 2011

	Total	Including in age groups						
		<1	1-4	5-14	15-19	20-29	30-59	60 +
Diphtheria	1	0	0	0	0	1	0	0
Whooping cough	33	17	9	4	1	1	1	0
Measles	64	9	10	10	14	16	5	0
Rubella	64	8	25	24	0	4	3	0
Mumps	44	0	10	29	3	2	0	0
All viral hepatitis	4407	0	8	54	156	1057	2657	475
Viral hepatitis A	90	0	5	25	26	20	14	0
Viral hepatitis B	1566	0	1	7	80	658	711	109
Viral hepatitis C	2511	0	0	2	21	317	1837	334
Other viral hepatitis	240	0	2	20	29	62	95	32
Other salmonella infections	118	6	19	14	5	20	38	16
Shigellosis	390	29	198	102	15	13	21	12
Other bacterial intestinal infections	848	189	327	57	32	42	119	82
Including: escherichiosis	632	141	256	49	19	33	81	53
Other bacterial foodborne intoxications	2603	141	570	381	155	350	673	333
Including: botulism	12	0	0	0	3	2	4	3
Amoebiasis	9	0	1	4	1	0	2	1
Diarrhoea and gastroenteritis of presmed infectious origin	19576	2910	7206	2877	800	1783	2760	1240
Brucellosis	166	0	1	7	18	39	88	13
Meningococcaemia	24	5	12	3	1	2	0	1
All meningitis	169	15	38	46	8	14	29	19
Malaria	2	0	0	0	0	0	2	0
Leishmaniasis	119	25	71	9	0	1	10	3
Acute upper respiratory infections	346887	47869	98400	82736	19804	28483	40025	29570
Influenza	39528	1178	3815	8626	3862	6887	8834	6326
Cases of hospitalization due to influenza-like diseases	19374	4665	6898	2868	422	830	1534	2157
Acute flaccid paralysis / acute poliomyelitis	5	0	2	3	0	0	0	0
Tetanus	5	0	0	1	0	1	1	2
Tularaemia	0	0	0		0	0	0	0
Anthrax	81	0	0	3	6	10	53	9
Leptospirosis	80	0	0	5	8	13	40	14
Scarlet fever	519	17	260	214	19	8	0	1
Lyme disease (Borreliosis)	37	0	1	3	2	5	20	6
Q fever	0	0	0	0	0	0	0	0
Rabies	3	0	0	1	0	0	1	1
Unspecified viral infections of CNS	3	0	0	1	0	2	0	0
Arthropod-borne viral fevers and viral haemorrhagic fevers	3	0	0	0	0	1	2	0
Varicella	5810	218	1454	3038	582	380	132	6
Cytomegaloviral disease	896	0	0	1	124	490	281	0
Infectious mononucleosis	159	2	61	40	15	32	7	2
Echinococcosis	64	0	6	10	2	7	33	6
Trichinellosis	9	0	1	0	0	4	3	1
Ascariasis	5897	44	1974	2848	381	273	248	129
Trichuriasis	684	5	250	315	33	31	35	15
Enterobiasis	16343	186	5767	8333	938	465	466	188

Table 4.10 Certain infectious and parasitic diseases, hospital discharges, Georgia, 2010 – 2011

	2010			2011		
	Number of hospital discharges	Including deaths	Case fatality rate (%)	Number of hospital discharges	Includng deaths	Case fatality rate (%)
Certain infectious and parasitic diseases	**20467**	**201**	**1.0**	**20695**	**247**	**1.2**
Including						
Intestinal infections	11455	18	0.2	11187	14	0.1
Respiratory tuberculosis	1957	25	1.3	3761	32	0.9
Septicaemia	278	54	19.4	235	60	25.5
Viral hepatitis	1212	47	3.9	1174	53	4.5

Table 4.11 Certain infectious and parasitic diseases, hospital discharges in children (0 – 15), Georgia, 2010 – 2011

	2010				2011			
	Number of hospital discharges		Including infants 0-1 year		Number of hospital discharges		Including infants 0-1 year	
	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)
Certain infectious and parasitic diseases	**12904**	**0.4**	**3912**	**1.1**	**10986**	**0.3**	**3057**	**1.0**
Including								
Intestinal infections	9063	0.1	2936	0.1	8392	0.1	2531	0.2
Respiratory tuberculosis	177	0.0	10	0.0	125	0.0	2	0.0
Septicaemia	85	36.5	58	50.0	71	32.4	61	36.1
Viral hepatitis	79	0.0	1	0.0	39	5.1	3	66.7

Table 4.12 Certain infectious and parasitic diseases, hospital discharges by regions, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of hospital discharges	Case fatality rate %	Number of hospital discharges	Case fatality rate %	Number of hospital discharges	Case fatality rate %
Ajara	1213	1.2	1354	1.5	1367	0.9
Tbilisi	8610	1.4	10076	1.1	10243	1.4
Kakheti	411	0.2	394	0.0	253	0.4
Imereti	2645	0.8	3950	1.2	2740	1.1
Samegrelo and Zemo Svaneti	817	0.7	735	2.0	626	1.1
Shida Kartli	689	0.3	844	0.1	1145	0.3
Kvemo Kartli	1061	0.1	1227	0.1	1047	0.1
Guria	279	0.0	320	0.0	0	0.0
Samtskhe-Javakheti	777	0.4	1073	0.6	647	1.2
Mtskheta-Mtianeti	0	0.0	3	0.0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	47	0.0	130	0.0	0	0.0
Other departments	313	0.0	160	0.0	2390	0.0
Georgia	**16862**	**1.0**	**20266**	**1.0**	**20695**	**1.2**

Table 4.13 Tuberculosis morbidity rates per 100000 populations, Georgia, 2000 – 2011

	All forms of tuberculosis				Pulmonary tuberculosis			
	Number of registered cases	Prevalence	Number of new cases	Incidence	Number of registered cases	Prevalence	Number of new cases	Incidence
2000	5941	133.4	4279	96.5	4587	103.0	2989	67.1
2001	5707	128.8	3801	86.4	4603	103.9	2756	62.2
2002	6346	145.2	4220	96.5	5111	116.9	3093	70.8
2003	6208	143.4	4018	92.8	5012	115.8	2929	67.7
2004	6543	149.7	4145	94.8	5318	121.7	3026	69.2
2005	6696	153.2	4290	98.1	5373	122.9	3057	70.3
2006	6294	143.1	4261	96.9	4934	112.2	3030	68.9
2007	6450	147.0	4170	95.0	5104	116.3	2952	67.3
2008	5831	133.0	4153	94.7	4471	102.0	2931	66.9
2009	5993	135.9	4471	101.4	4587	104.0	3175	72.0
2010	5806	130.4	4392	98.6	4524	101.6	3228	72.5
2011	**5533**	**123.4**	**4223**	**94.2**	**4369**	**97.4**	**3167**	**70.6**

Table 4.14 Tuberculosis morbidity rates per 100000 populations by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence	New cases	Incidence	Number of registered cases	Prevalence	New cases	Incidence
Ajara	631	162.3	466	119.9	554	141.3	447	114.0
Tbilisi	1427	123.3	1162	100.4	1477	126.5	1219	104.7
Kakheti	288	71.1	237	58.5	289	71.1	228	56.1
Imereti	502	71.5	383	54.5	468	66.3	350	49.6
Samegrelo and Zemo Svaneti	556	116.9	413	86.8	529	110.6	387	80.9
Shida Kartli	278	89.2	207	66.4	261	83.2	205	65.3
Kvemo Kartli	444	88.3	342	68.0	438	86.1	342	67.3
Guria	140	99.9	113	80.7	102	72.7	82	58.4
Samtskhe-Javakheti	114	53.8	64	30.2	102	47.8	58	27.2
Mtskheta-Mtianeti	126	115.5	96	88.0	111	101.4	84	76.7
Racha-Lechkhumi and Kvemo Svaneti	18	37.9	13	27.4	30	63.6	21	44.5
Other departments	1282	-	896	-	1172	-	800	-
Georgia	**5806**	**130.4**	**4392**	**98.6**	**5533**	**123.4**	**4223**	**94.2**

Table 4.15 Pulmonary tuberculosis morbidity by regions, Georgia, 2010– 2011

	2010				2011			
	Number of registered cases	Prevalence	New cases	Incidence	Number of registered cases	Prevalence	New cases	Incidence
Ajara	487	125.3	329	84.6	410	104.6	309	78.8
Tbilisi	1095	94.6	860	74.3	1138	97.5	912	78.1
Kakheti	217	53.5	173	42.7	223	54.8	165	40.6
Imereti	402	52.7	291	41.4	371	52.5	269	38.1
Samegrelo and Zemo Svaneti	425	89.4	294	61.8	422	88.2	285	59.6
Shida Kartli	217	69.6	150	48.1	205	65.3	153	48.8
Kvemo Kartli	321	63.8	230	45.7	321	63.1	238	46.8
Guria	112	79.9	85	60.7	87	62.0	69	49.2
Samtskhe-Javakheti	85	40.1	42	19.8	81	37.9	40	18.7
Mtskheta-Mtianeti	89	81.6	62	56.8	88	80.4	63	57.5
Racha-Lechkhumi and Kvemo Svaneti	13	27.4	8	16.8	26	55.1	17	36.0
Other departments	1061	-	704	-	997	-	647	-
Georgia	**4524**	**101.6**	**3228**	**72.5**	**4369**	**97.4**	**3167**	**70.6**

Table 4.16 New cases of pulmonary tuberculosis (by smear microscopy results), Georgia, 2010 – 2011

	2010			2011		
	Number of smear positive cases	Number of smear negative cases	Numberof cases without microscopy	Number of smear positive cases	Number of smear negative cases	Numberof cases without microscopy
Ajara	190	126	13	185	110	14
Tbilisi	524	326	10	521	373	18
Kakheti	117	54	2	114	50	1
Imereti	201	84	6	180	85	4
Samegrelo and Zemo Svaneti	206	83	5	194	88	3
Shida Kartli	92	56	2	85	68	0
Kvemo Kartli	158	65	7	150	87	1
Guria	44	41	0	45	23	1
Samtskhe-Javakheti	17	22	3	22	16	2
Mtskheta-Mtianeti	45	16	1	44	17	2
Racha-Lechkhumi and Kvemo Svaneti	5	2	1	9	8	0
Other departments	541	158	5	477	169	1
Georgia	**2140**	**1033**	**55**	**2026**	**1094**	**47**

Table 4.17 Results of treatment of new cases of smear positive pulmonary tuberculosis, registered 12 months ago (according to the WHO indicators), Georgia, 2007 – 2011

	2007	2008	2009	2010	2011
Number of registered cases	**1580**	**1860**	**1868**	**2055**	**2143**
	% from the total number				
Recovered	63.9	63.2	60.3	63.7	67.0
Completed treatment	11.6	13.9	13.2	11.6	9.5
Unsuccessful treatment	6.1	6.2	4.4	3.5	1.9
Died	3.0	2.5	2.8	3.1	2.9
Interrupted treatment	8.9	8.8	8.8	7.3	6.7
Transferred to other institutions	5.5	3.1	2.4	1.4	0.8
Unevaluated cases	1.0	2.4	1.6	1.3	1.4
Assigned category IV (chronic)	0	0	6.6	8.1	9.8

Table 4.18 **Results of treatment of new cases of smear positive pulmonary tuberculosis, registered 12 months ago (according to the WHO indicators), by regions, Georgia, 2011**

	Number of registered cases	Structure (%)							
		Number of unevaluated cases	Recovered	Completed treatment	Unsuccessful treatment	Died	Interrupted treatment	Transferred to other institutions	Assigned category IV
Ajara	191	1.0	60.2	17.3	0.5	3.1	11.0	0.5	1.0
Tbilisi	528	1.1	58.3	12.9	1.9	2.3	7.8	1.1	1.1
Kakheti	118	1.7	58.5	22.9	0.8	2.5	5.1	0.8	1.7
Imereti	204	0.0	70.1	3.9	2.9	4.9	8.3	1.0	0.0
Samegrelo and Zemo Svaneti	206	1.5	65.5	8.7	2.4	2.9	6.8	1.5	1.5
Shida Kartli	92	0.0	66.3	9.8	2.2	3.3	6.5	2.2	0.0
Kvemo Kartli	161	1.9	58.4	10.6	3.1	5.0	13.0	1.9	1.9
Guria	44	0.0	86.4	0.0	2.3	2.3	2.3	0.0	0.0
Samtskhe-Javakheti	18	0.0	66.7	5.6	0.0	11.1	11.1	0.0	0.0
Mtskheta-Mtianeti	47	0.0	74.5	4.3	2.1	2.1	8.5	0.0	0.0
Racha-Lechkhumi and Kvemo Svaneti	5	0.0	80.0	0.0	0.0	0.0	20.0	0.0	0.0
Other departments	529	2.5	79.8	3.8	1.7	2.1	1.7	0.0	2.5
Georgia	**2143**	**1.4**	**67.0**	**9.5**	**1.9**	**2.9**	**6.7**	**0.8**	**1.4**

Table 4.19 **Incidence of extra pulmonary tuberculosis by regions, Georgia, 2010– 2011**

	2010			2011		
	Number of new cases	Incidence per 100000 population	% from the total number of new cases of tuberculosis	Number of new cases	Incidence per 100000 population	% from the total number of new cases of tuberculosis
Ajara	137	35.2	29.4	138	35.2	30.9
Tbilisi	302	26.1	26.0	307	26.3	25.5
Kakheti	64	15.8	27.0	63	15.5	27.3
Imereti	92	13.1	24.0	81	11.5	23.1
Samegrelo and Zemo Svaneti	119	25.0	28.8	102	21.3	26.4
Shida Kartli	57	18.3	27.5	53	16.6	25.4
Kvemo Kartli	112	22.3	32.7	104	20.5	30.4
Guria	28	20.0	24.8	13	9.3	15.9
Samtskhe-Javakheti	22	10.4	34.4	18	8.4	31.0
Mtskheta-Mtianeti	34	31.2	35.4	21	19.2	25.0
Racha-Lechkhumi and Kvemo Svaneti	5	10.5	38.5	4	8.5	19.0
Other departments	192	--	21.4	153	--	19.1
Georgia	**1164**	**26.1**	**26.5**	**1061**	**23.6**	**25.0**

Table 4.20 Number of registered cases of extra pulmonary tuberculosis by localization, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of cases	Prevalence per 100000 population	Number of cases	Prevalence per 100000 population	Number of cases	Prevalence per 100000 population
Cases of extra pulmonary tuberculosis	**1406**	**31.9**	**1282**	**28.8**	**1164**	**26.0**
Including						
Tuberculous meningitis	32	0.7	36	0.8	39	0.9
Bone and joint tuberculosis	122	2.8	137	3.1	131	2.9
Urogenital tuberculosis	97	2.2	107	2.4	130	2.9
Tuberculous pleuritis	688	15.6	610	13.7	515	11.5
Tuberculosis of lymph nodes	346	7.8	297	6.7	242	5.4
Tuberculosis of other organs	121	2.7	95	2.1	113	2.5

Table 4.21 Tuberculous meningitis, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
All registered cases	32	0.7	36	0.8	39	0.9
Among them in children	*2*	0.3	*3*	0.4	*3*	0.4

Table 4.22 New cases of HIV infection by modes of transmission, Georgia, 2007 – 2011

	2009		2010		2011	
	Number	%	Number	%	Number	%
Injecting drug use	194	57.9	207	47.2	189	44.6
Heterosexual contacts	123	36.7	191	43.6	201	47.4
Homosexual contacts	5	1.5	21	4.8	25	5.9
Blood or blood products transfusion	3	0.9	0	0	2	0.5
Vertical transmission	4	1.2	12	2.7	6	1.4
Unidentified	6	1.8	8	1.8	1	0.2
Total	**335**	**100**	**439**	**100**	**424**	**100**

Table 4.23 New cases of HIV infection, incidence by regions, Georgia 2009 – 2011

	2009		2010		2011	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Abkhazia	26	-	27	-	45	-
Ajara	37	9.7	35	9.1	37	9.4
Tbilisi	133	11.7	163	14.1	148	12.7
Kakheti	24	6.0	21	5.2	16	3.9
Imereti	36	5.2	73	10.4	48	6.8
Samegrelo and Zemo Svaneti	46	9.8	64	13.5	54	11.3
Shida Kartli	12	3.8	16	5.2	13	4.1
Kvemo Kartli	12	2.5	20	4.0	34	6.7
Guria	6	4.3	11	7.9	7	5.0
Samtskhe-Javakheti	3	1.4	4	1.9	6	2.8
Mtskheta-Mtianeti	0	0.0	4	3.7	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	1	2.1	1	2.1
Foreign	0	0.0	0	0.0	10	-
Georgia	**335**	**7.6**	**439**	**9.9**	**424**	**9.5**

Table 4.24 **New cases of HIV infection, incidence by sex and age groups, Georgia, 2009 – 2011**

	2009		2010		2011	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Male - total	**233**	**11.2**	**312**	**14.8**	**300**	**14.1**
Including 0-14	2	0.5	8	2.0	4	0.9
15-24	3	0.8	17	4.7	27	7.7
25+	228	17.2	287	21.2	269	19.6
Female - total	**102**	**4.9**	**127**	**6.0**	**124**	**5.3**
Including 0-14	2	0.5	4	1.0	2	0.6
15-24	15	4.1	14	3.9	8	2.4
25+	85	6.4	109	8.1	114	6.9
Both sexes - total	**335**	**7.6**	**439**	**9.9**	**424**	**9.5**
Including 0-14	4	0.5	12	1.6	6	0.8
15-24	18	2.6	31	4.4	35	5.1
25+	313	10.6	396	13.2	383	12.7

Table 4.25 **Mortality of HIV-infected patients by causes of death, Georgia, 2009 – 2011**

	2009		2010		2011	
	Number of deaths	Case fatality rate %	Number of deaths	Case fatality rate %	Number of deaths	Case fatality rate %
HIV-related	46	69.7	78	86.7	72	62.1
HIV-unrelated	16	24.2	9	10.0	25	21.5
Unknown	4	6.1	3	3.3	19	16.4
Total	**66**	**100.0**	**90**	**100.0**	**116**	**100.0**

Table 4.26 **Hepatitis A, incidence by regions, Georgia, 2010 – 2011**

	2010				2011			
	Total		Including in children		Total		Including in children	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Ajara	2	0.5	1	1.5	1	0.3	0	0.0
Tbilisi	32	2.8	11	5.6	19	1.6	10	5.1
Kakheti	11	2.7	2	2.9	2	0.5	0	0.0
Imereti	6	0.9	0	0.0	1	0.1	1	0.8
Samegrelo and Zemo Svaneti	23	4.8	10	12.4	5	1.0	2	2.5
Shida Kartli	3	1.0	0	0.0	2	0.6	0	0.0
Kvemo Kartli	16	3.2	9	10.5	5	0.98	3	3.5
Guria	6	4.3	3	12.6	52	37.1	14	58.3
Samtskhe-Javakheti	2	0.9	0	0.0	1	0.5	0	0.0
Mtskheta-Mtianeti	1	0.9	1	5.4	1	0.9	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	1	2.1	0	0.0	0	0.0	0	0.0
Other departments	**0**	--	0	-	1	--	0	--
Georgia	**103**	**2.3**	**37**	**4.9**	**90**	**2.0**	**30**	**0.4**

Table 4.27 Hepatitis B, incidence by regions, Georgia, 2011

	Number of cases of acute viral hepatitis B	Incidence per 100000 population	Number of new cases of chronic viral hepatitis B	Incidence per 100000 population
Ajara	26	6.6	295	75.2
Tbilisi	24	2.1	235	20.1
Kakheti	25	6.2	43	10.6
Imereti	22	3.1	471	66.7
Samegrelo and Zemo Svaneti	8	1.7	212	44.3
Shida Kartli	4	1.3	51	16.3
Kvemo Kartli	4	0.8	68	13.4
Guria	1	0.7	44	31.4
Samtskhe-Javakheti	3	1.4	16	7.5
Mtskheta-Mtianeti	0	0	3	2.7
Racha-Lechkhumi and Kvemo Svaneti	0	0	1	2.1
Other departments	1	-	9	-
Georgia	**118**	**2.6**	**1448**	**32.3**

Table 4.28 Acute and chronic hepatitis C, incidence by regions, Georgia, 2011

	Number of cases of acute viral hepatitis C	Incidence per 100000 population	Number of new cases of chronic viral hepatitis C	Incidence per 100000 population
Ajara	0	0.0	299	76.3
Tbilisi	8	0.7	704	60.3
Kakheti	7	1.7	35	8.6
Imereti	12	1.7	668	94.6
Samegrelo and Zemo Svaneti	9	1.9	558	116.7
Shida Kartli	1	0.3	30	9.6
Kvemo Kartli	5	0.98	88	17.3
Guria	2	1.4	38	27.1
Samtskhe-Javakheti	0	0.0	14	6.6
Mtskheta-Mtianeti	0	0.0	5	4.6
Racha-Lechkhumi and Kvemo Svaneti	2	4.2	12	25.4
Other departments	0	-	19	-
Georgia	**46**	**1.03**	**2465**	**54.98**

Table 4.29 Structure of intestinal infections (%), Georgia, 2010 – 2011

	2010		2011	
	Number of cases	%	Number of cases	%
Total	**23669**	**100**	**23544**	**100**
	Including			
Other salmonella infections	77	0.3	118	0.5
Shigellosis	159	0.7	390	1.7
Other intestinal bacterial infections	911	3.8	848	3.6
Bacterial foodborne intoxications	2649	11.2	2603	11.1
Amebiasis	7	0.0	9	0.03
Diarrhoea of presumed infectious origin	19866	83.9	19576	83.1

Table 4.30 Diarrhoea of presumed infectious origin by regions, Georgia, 2010 – 2011

	2010				2011			
	Total		Including in children		Total		Including in children	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Ajara	9747	14768.2	6183	9368.2	6348	1619.0	3618	5440.6
Tbilisi	2287	1162.7	1714	871.4	2621	224.5	1935	977.3
Kakheti	387	561.7	198	287.4	401	98.6	218	315.9
Imereti	2301	1928.8	1685	1412.4	4856	687.8	3733	3118.6
Samegrelo and Zemo Svaneti	716	886.1	341	422.0	810	169.3	515	635.0
Shida Kartli	1327	2503.8	866	1634.0	1645	524.2	1023	1922.9
Kvemo Kartli	1339	1567.9	1131	1324.4	1489	292.8	1223	1418.8
Guria	230	966.4	125	525.2	143	101.9	71	298.3
Samtskhe-Javakheti	447	1241.7	392	1088.9	165	77.3	122	337.0
Mtskheta-Mtianeti	133	718.9	74	400.0	126	115.1	70	376.3
Racha-Lechkhumi and Kvemo Svaneti	312	3851.9	103	1271.6	217	459.7	35	437.5
Other departments	642	-	373	-	755	--	430	--
Georgia	**19868**	**2626.3**	**13185**	**1742.9**	**19576**	**436.6**	**12993**	**1708.9**

Table 4.31 Sexually transmitted diseases, incidence by regions, Georgia, 2011

	Syphilis		Gonococcal infection	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Ajara	82	20.9	134	34.2
Tbilisi	267	22.9	230	19.7
Kakheti	3	0.7	91	22.4
Imereti	61	8.6	21	2.97
Samegrelo and Zemo Svaneti	37	7.7	57	11.9
Shida Kartli	19	6.1	7	2.2
Kvemo Kartli	19	3.7	70	13.8
Guria	1	0.7	0	0
Samtskhe-Javakheti	2	0.9	8	3.7
Mtskheta-Mtianeti	0	0	0	0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0
Other departments	0	--	44	--
Georgia	**491**	**11.0**	**662**	**14.8**

Table 4.32 Sexually transmitted diseases, incidence of new cases, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Syphilis	503	11.4	599	13.5	491	11.0
Gonococcal infection	670	15.2	741	16.6	662	14.8
Chlamydial infection	1276	28.9	1646	37.0	1700	37.9
Trichomoniasis	3925	89.0	4340	97.5	6419	143.2

Table 4.33 Sexually transmitted diseases, distribution of new cases according to age and sex, Georgia, 2011

	Sex	Age groups											
		Total		0 - 14		15 - 19		20 - 29		30 - 39		40+	
		Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence
Syphilis, all forms of the disease	M	257	12.0	5	1.2	18	11.2	158	43.1	69	21.9	7	0.2
	F	234	10.0	6	1.7	6	3.9	132	36.8	79	24.4	11	0.3
Gonococcal infection	M	511	24.0	7	1.7	89	55.3	377	102.8	33	10.5	5	0.2
	F	151	6.4	3	0.8	22	14.5	104	29.0	20	6.2	2	0.1
Other venereal diseases	M	460	21.6	12	3.0	140	87.1	271	73.9	33	10.5	4	0.1
	F	419	17.8	8	2.2	34	22.4	334	93.1	39	12.0	4	0.1
Chlamydial infection	M	631	29.5	17	4.2	140	87.1	360	98.1	111	35.3	3	0.1
	F	1069	45.5	24	6.7	118	77.6	584	162.7	318	98.1	25	0.7
Trichomoniasis	M	1886	88.3	72	18.0	226	140.5	1287	350.8	229	72.8	72	2.4
	F	4533	193.1	84	23.4	297	195.2	2794	778.5	1206	372.1	152	4.3

Table 4.34 Mycoses, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
All mycoses	**9770**	**221.5**	**10127**	**227.4**	**13318**	**297.1**
			Including			
Trichophytia	549	12.4	599	13.5	664	14.8
Microsporia	163	3.7	208	4.7	261	5.8
Candidiasis	7133	161.7	7665	172.1	9667	215.6
Other mycoses	1925	43.6	1655	37.2	33	0.7

Table 4.35 Scabies, Georgia, 2003 – 2011

	Number of cases	Incidence per 100000 population
2003	1705	39.5
2004	2139	48.9
2005	2399	54.9
2006	2056	46.7
2007	1842	42.0
2008	1957	44.6
2009	1832	41.5
2010	1863	41.8
2011	**1774**	**39.6**

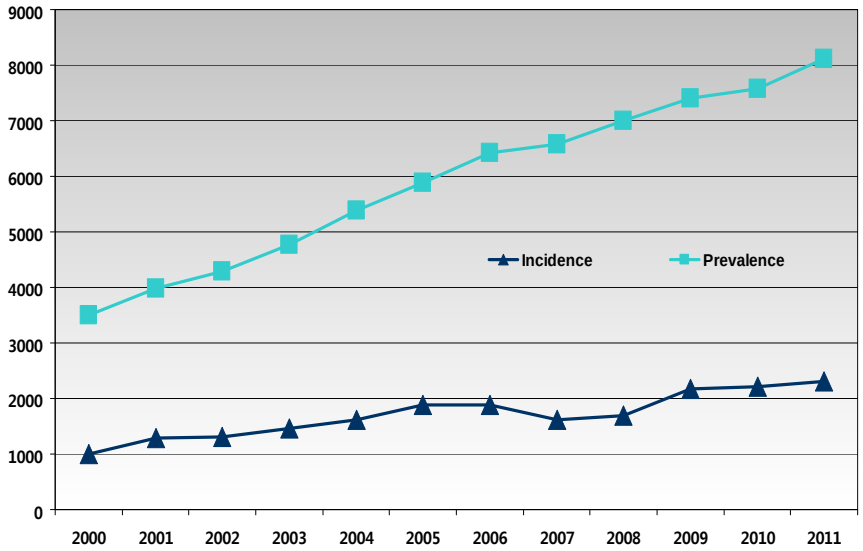
Non-communicable diseases

Non-communicable diseases place an increasingly heavy burden on people's health, from the viewpoint of morbidity and mortality, this is true for developed and developing countries. Deaths from non-communicable diseases accounted for 63% of the total mortality rate. In September 2011, the UN High-Level Meeting was dedicated to non-communicable diseases (NCDs), ways to fight and prevent their development.

Diseases of the circulatory system

In Georgia, in 2000 – 2010, there was an increase of the prevalence of diseases of the circulatory system (Figure 4.10).

Figure 4.10 **Diseases of the circulatory system, morbidity rates per 100000 population, Georgia**

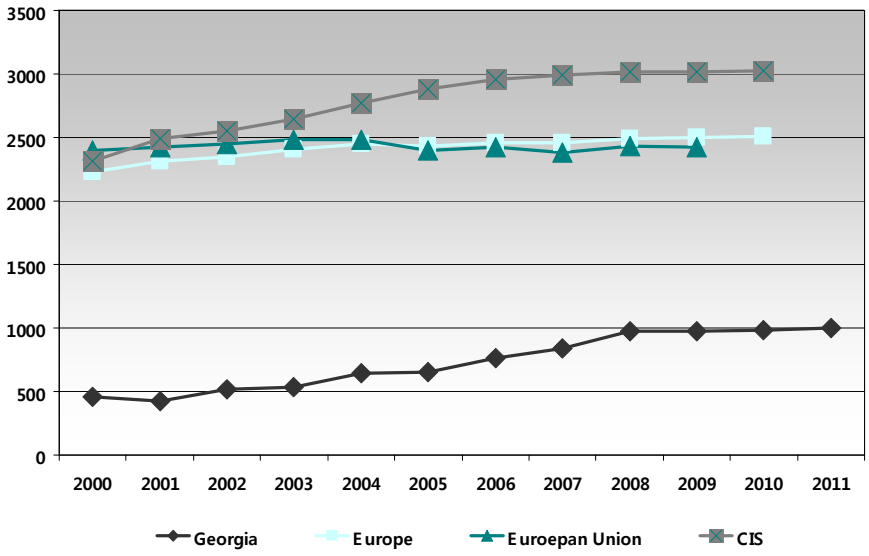


In the structure of the circulatory system diseases a share of hypertensive diseases is 58.4% (prevalence – 4733.2, incidence – 1267.3), ischemic heart diseases – 25.7% (prevalence – 2080.3, incidence – 614.0) and cerebrovascular diseases – 4.3% (prevalence – 346.0, incidence – 106.3).

Compared to the last year, the number of hospitalizations due to the circulatory system diseases have increased by 1.2%, while the case fatality have not changed significantly. The largest proportion of the case fatality due to circulatory system diseases is related to the cases of pulmonary heart disease and diseases of pulmonary circulation (19.1%) and cerebrovascular diseases (15.4%).

The hospitalization rate accounted to 997.7 per 100000 population, according to the available data, this is three times less than in the CIS countries and 2.5 times less than in the European Union countries (Figure 4.11).

Figure 4.11 **Diseases of the circulatory system, hospital discharges per 100000 population, Georgia, Europe, European Union, CIS**

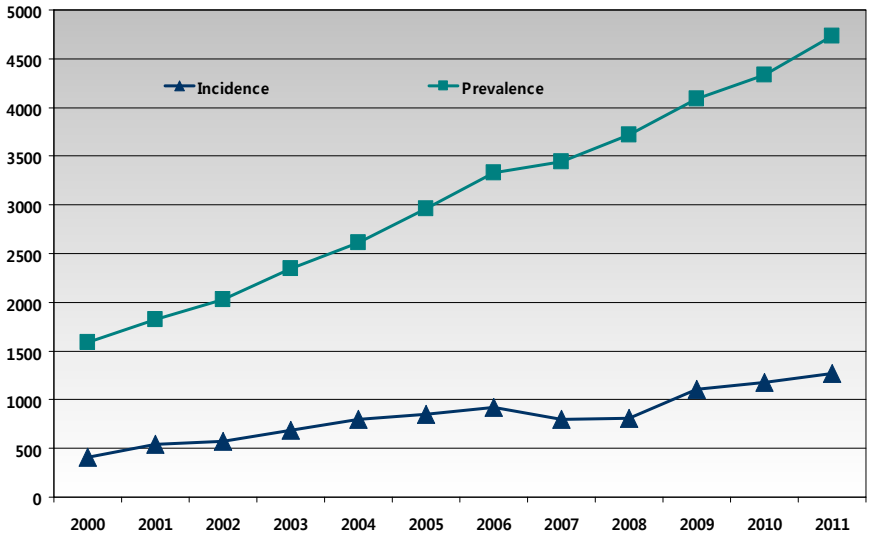


Source: WHO HFADB & NCDC

Hypertensive diseases

In 2011, in Georgia, prevalence and incidence rates of hypertensive diseases continued to grow. Compared to 2010, the prevalence rate increased by 9.2%; incidence - by 7.2% (Figure 4.12).

Figure 4.12 **Hypertensive diseases, morbidity rates per 100000 population, Georgia**



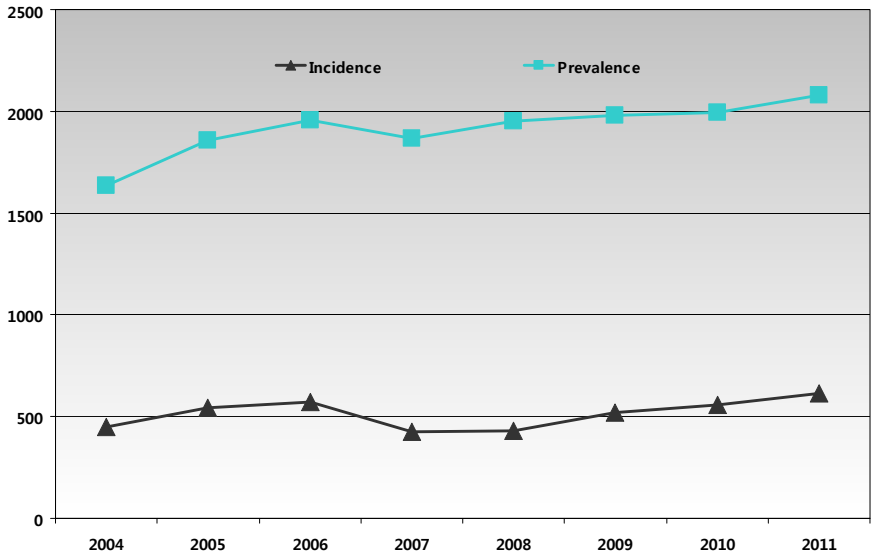
Among the circulatory system diseases the share of hypertensive diseases accounts for more than a half.

Ischaemic heart diseases

Ischaemic heart diseases represent the second major group within the circulatory system diseases and their number of cases accounts to 1/4 of all cases.

The morbidity rates tendency of ischaemic heart diseases, which was characterized by insignificant growth, remained unchanged in 2011 as well. By the end of the year, the prevalence rate of ischaemic heart diseases stood at 2080.3; incidence – at 614.0 (Figure 4.13).

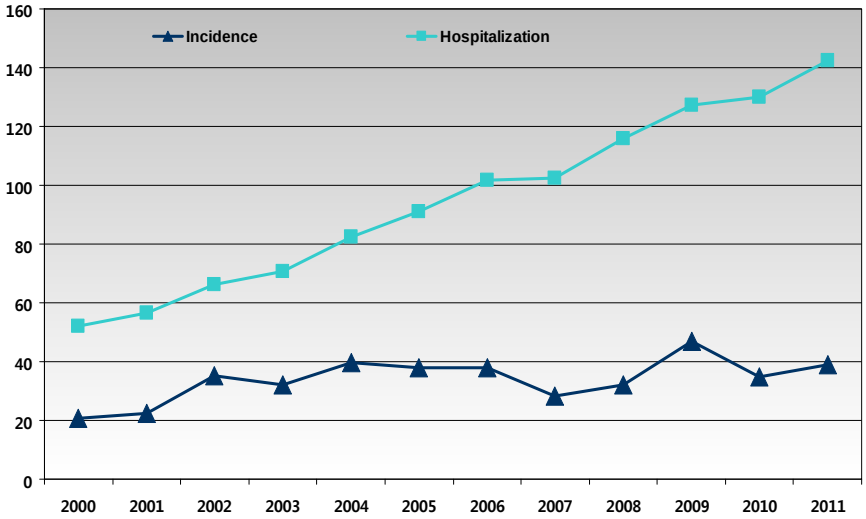
Figure 4.13 **Ischaemic heart diseases, morbidity rates per 10000 population, Georgia**



In the group of ischaemic heart diseases the number of cases of stenocardia accounts to 33.7% of all registered and 39.0% of new cases.

In 2011, the incidence rate of acute myocardial infarction stood at 38.9, more than 12% compared to the previous year. The hospitalization rate grew by 9.5%, while the case fatality rate decreased by 9.4% (Figure 4.14).

Figure 4.14 **Acute myocardial infarction, incidence and hospitalisation rates per 100000 population, Georgia**

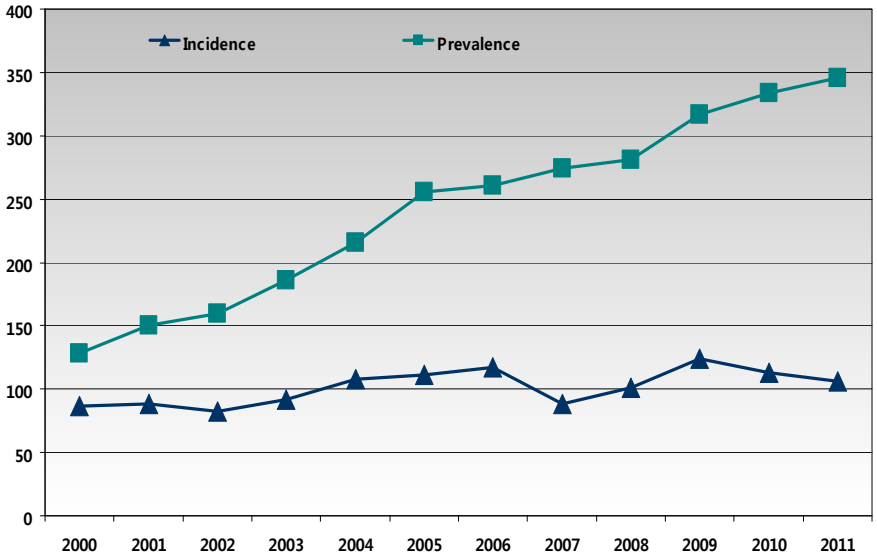


43.1% of the total number of the patients, hospitalized with acute infarction, was hospitalized within the first 24 hours after the onset of the disease (2.9% less than in 2010).

Stroke

The trend of the prevalence rate of cerebrovascular diseases was characterized by an increase during last years. In 2011, the prevalence increased by 3.7%, compared to 2010. The incidence rate decreased during the last 2 years by 9% and 5.7% (Figure 4.15).

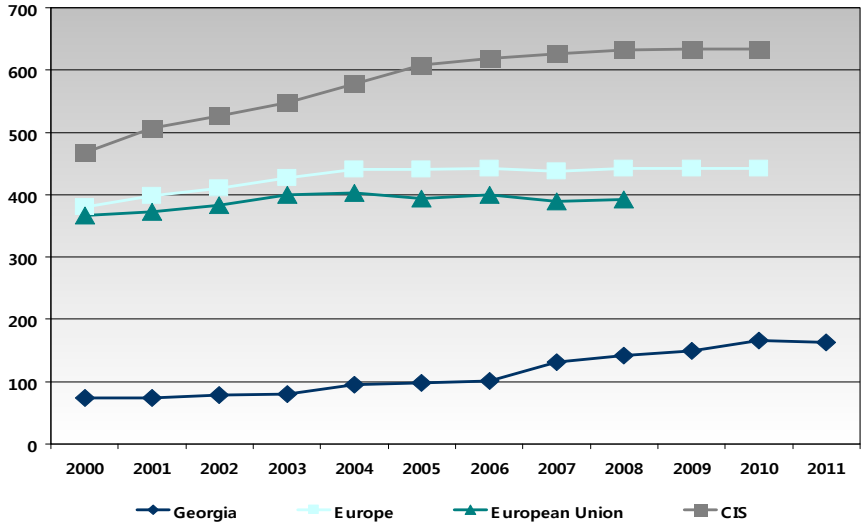
Figure 4.15 **Cerebrovascular diseases, incidence and prevalence rates per 100000 population, Georgia**



In 2011, hospitalization rate due to stroke was 163.6, slightly less than in the previous year.

Last years the rate of hospitalizations due to cerebrovascular diseases in Georgia remained stablely lower than in the European and CIS countries (Figure 4.16).

Figure 4.16 **Cerebrovascular diseases, hospitalization rate per 100000 population**

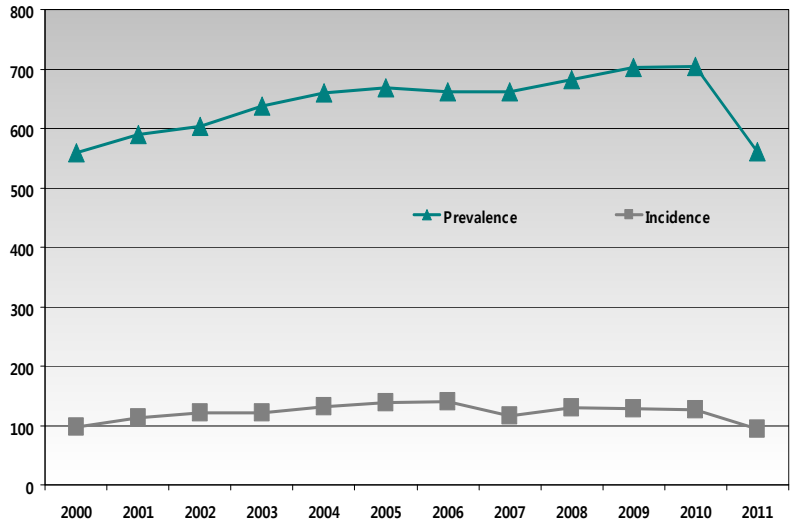


Source: WHO HFADB

Malignant neoplasms

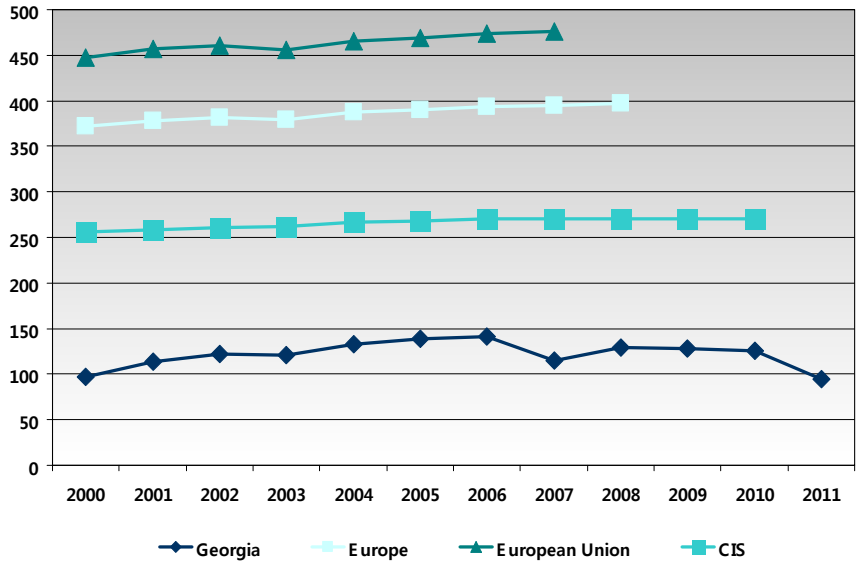
In 2011, prevalence and incidence rates decreased respectively by 20.4% and 25% compared to the last year (Figure 4.17). The number of new cases registered in males and females are almost equal (49.8% and 50.2% respectively).

Figure 4.17 **Malignant neoplasms, morbidiy rates per 100000 population, Georgia**



According to the WHO data, malignant neoplasms incidence rate in Georgia was twice lower than in the European and CIS countries (Figure 4.18).

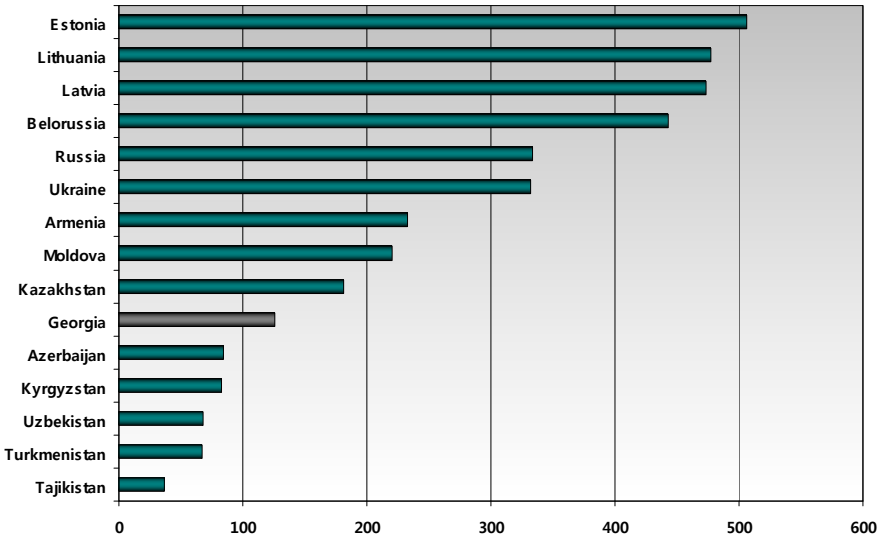
Figure 4.18 Malignant neoplasms, incidence rate per 100000 population



Source: WHO HFADB

According to the last available data for former Soviet Rebublics, this rate in Baltic countries exceeded that of Georgia by 4,5 times (Figure 4.19).

Figure 4.19 Malignant neoplasms, incidence rate per 100000 population, former Soviet Union countries, 2009



Source: WHO HFADB

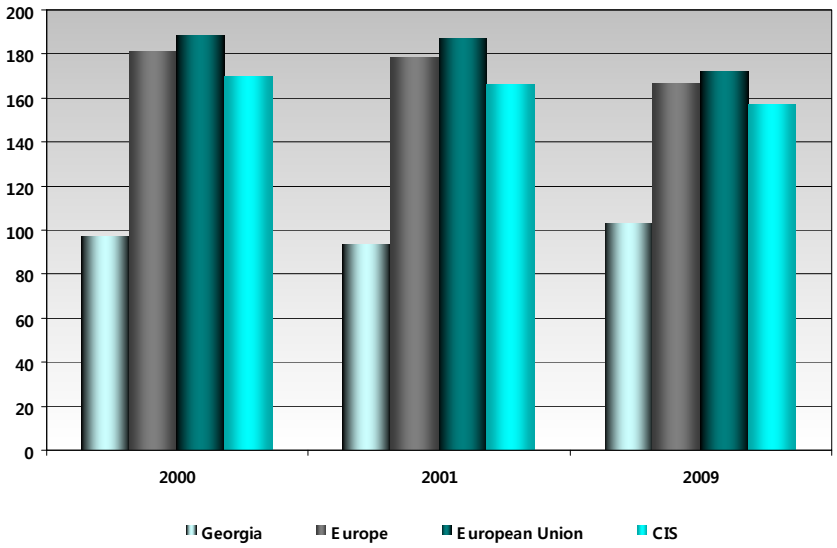
In 2011, in Georgia, there were hospitalized 15864 patients diagnosed with neoplasms, including 979 children. The hospitalization rate accounted to 353.8 per 100 000 population; the rate is 2.8 times lower than in the CIS countries and 3.8 times lower than in the European Union. The general case fatality rate was 2.2, in children - 0.8.

Malignant neoplasms, hospitalization rate per 100 000 population

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Georgia	197.3	200.5	198.5	217.7	214.5	235.5	254.7	297.3	337.2	323.3
Europe	1214.3	1256.9	1292.9	1313.6	1310.1	1329.5	1337.6	1355.5	1356.5	1351.4
European union	1584.2	1610.9	1650.8	1657.5	1641.6	1649.9	1640.1	1661.0	N/A	N/A
CIS	786.3	852.8	880.9	918.8	941.8	973.5	983.1	995.1	998.1	988.5

According to the WHO data, standardized mortality rate from malignant neoplasms in Georgia was considerably lower than the relevant rates in the European and CIS countries (Figure 4.20).

Figure 4.20 Malignant neoplasms, standardized death rate

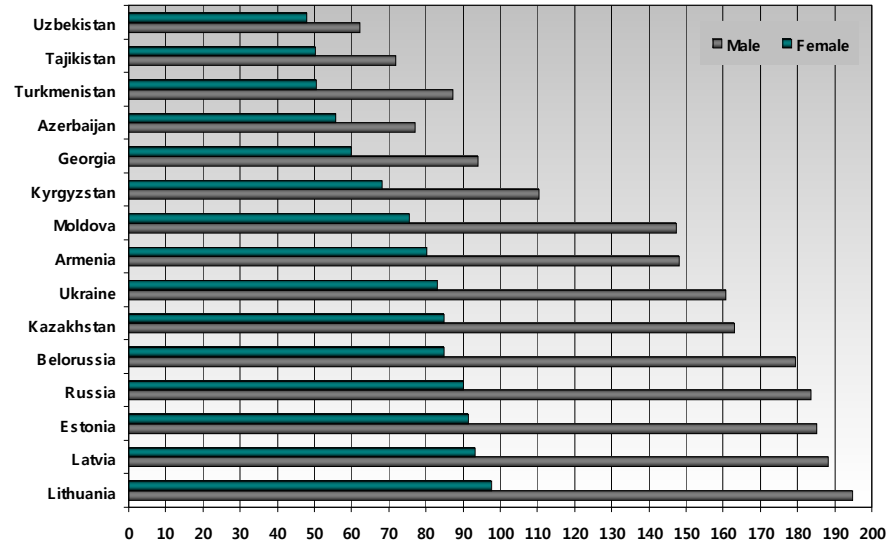


Source: WHO, cancer mortality data base

Georgia is the fifth among former Soviet Union republics with its standardized death rate from malignant neoplasms. In Russia, the standardized death rate from malignant neoplasms is twice higher among males and 1.6 times higher in females than in Georgia; the same indicator in Ukraine was 1.7 times higher among men and 1.4 times higher among women compared to those of Georgia.

In 2009, in Georgia, standardized death rate from malignant neoplasms was twice lower than in the European region, the European Union and the CIS (Figure 4.21).

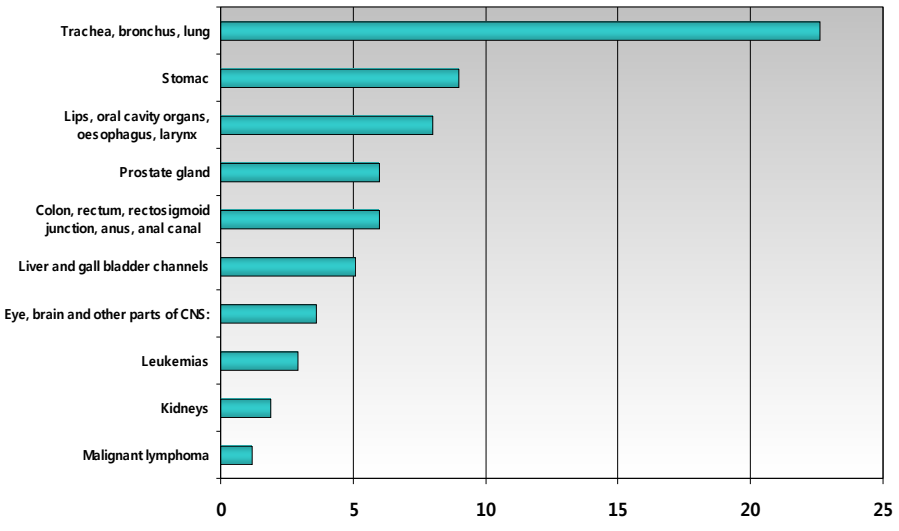
Figure 4.21 **Malignant neoplasms, standardized death rate by sex, former Soviet Union countries, 2009**



Source:WHO IARC

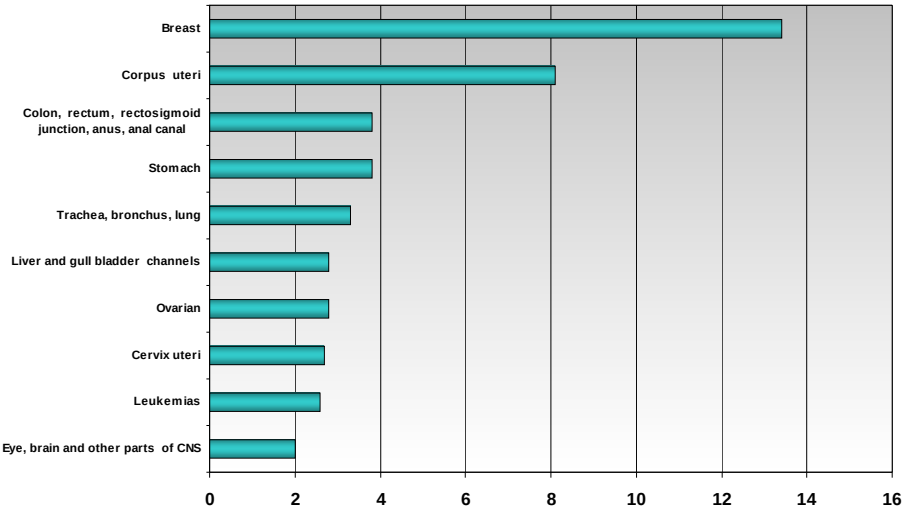
In 2009, in Georgia, according to the WHO cancer mortality database, the trachea, bronchus and lung, and stomach malignant neoplasms were leading causes among malignant neoplasms related deaths in males (Figure 4.22); whereas breast and uterine neoplasms were leading in females (Figure 4.23).

Figure 4.22 **Ten leading causes in malignant neoplasms related deaths, males, age adjusted rate, Georgia, 2009**



Source: WHO, cancer mortality data base

Figure 4.23 **Ten leading causes in malignant neoplasms related deaths related deaths, females, age adjusted rate, Georgia, 2009**



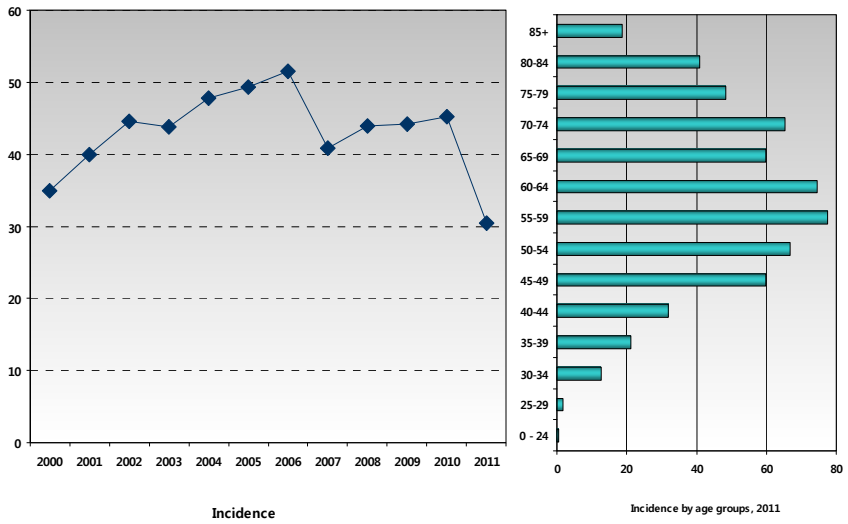
Source: WHO, cancer mortality data base

During the reporting year, 11.7% of cancer diagnosed patients died. This rate did not change much compared to the last year. 42.7% of patients died within the first year after being diagnosed.

Breast cancer

By the end of the reporting year, 7211 patients diagnosed with breast cancer were registered (prevalence - 309.9); 1055 new cases were registered (incidence – 31.1). In 2011, the share of breast cancer in the total number of new cases of malignant neoplasms in females was 34.3%. Incidence rate of breast cancer reduced by 32.7% compared with 2010 (Figure 4.24).

Figure 4.24 **Breast cancer in females, incidence per 100000 females, Georgia**

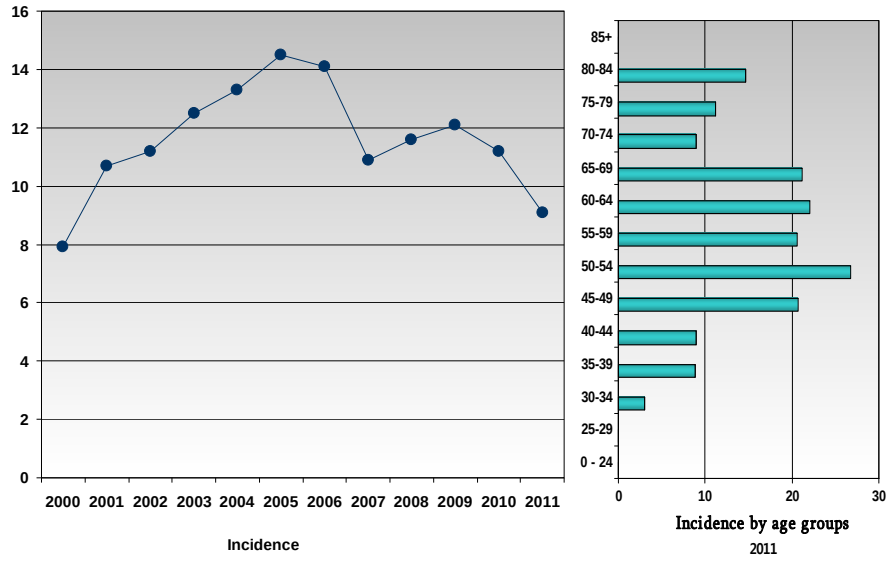


In 2011, new cases of breast cancer were distributed according to the stages as follows: I stage – 5.7%, II stage – 34.8%, III stage - 26.3%, IV stage - 26.8%, unknown stage – 6.4%. 22.9% of patients died within the first year after being diagnosed.

Cervical cancer

By the end of reporting year, 1991patients diagnosed with cervical cancer were registered (prevalence – 84.8), including 217 new cases; the incidence rate during last two years decreased by 24.8% (Figure 4.25).

Figure 4.25 **Cervical cancer, incidence per 100000 females, Georgia, 2000 - 2011**

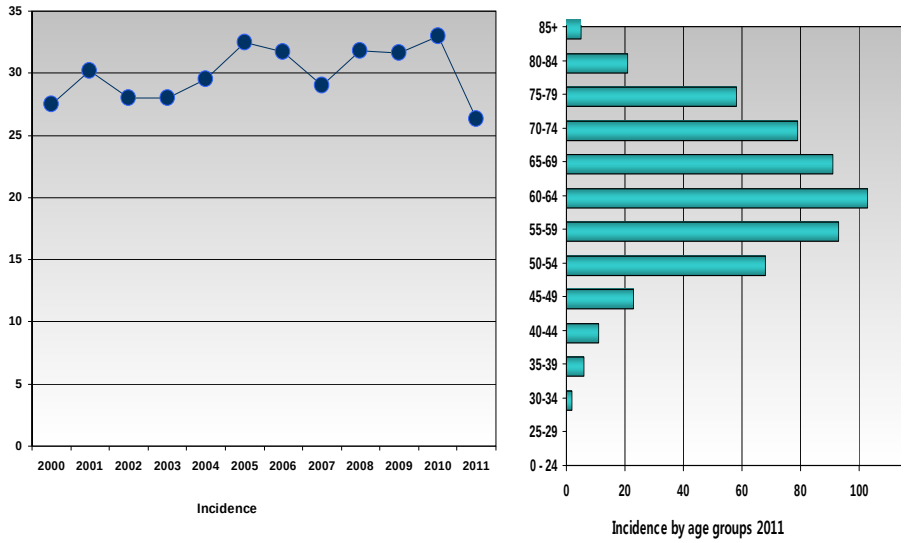


In 2011, new cases of cervical cancer were distributed by stages as follows: I stage – 13.3%, II stage – 22.1%, III stage - 31.3%, IV stage - 21.7%, unknown stage – 11.5%. 21.7% of patients died within the first year after being diagnosed.

Trachea, bronchus and lung cancers

In 2011, 2028 cases of trachea, bronchus and lung cancers were registered (prevalence – 45.2). In the total number of new cases, 86.1% were males (incidence – 26.7). The incidence rate decreased by 20.3% compared to the last year (Figure 4.26). Trachea, bronchus and lung tumors comprised the largest share (26.3%) among the new cases of cancers in males.

Figure 4.26 **Trachea, bronchus and lung cancer in males, incidence per males, Georgia, 2011**



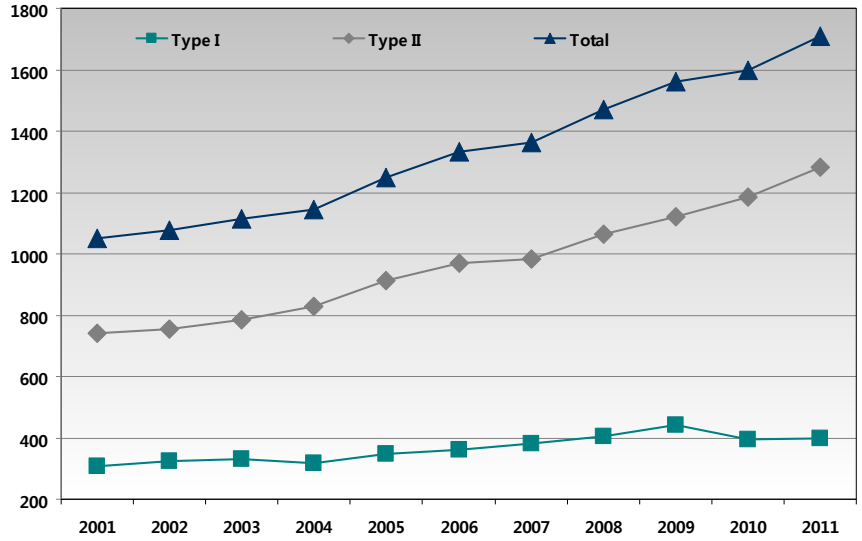
In 2011, new cases of trachea, bronchus and lung malignant tumors were distributed by stages as follows: I stage – 0.6%, II stage – 7.2%, III stage - 13.8%, IV stage - 69.8%, unknown stage – 8.6%. 50.8% of patients died within the first year after being diagnosed with the cancer.

Endocrine system diseases

Diabetes

In the last years, the number of cases of diabetes increased. The rates of prevalence and incidence grew by 6.3% and 13.6% respectively, compared to 2010 (Figure 4.27). 1.5% of new cases of insulin-dependent diabetes mellitus (IDDM) (Type 1) and 0.2% of non-insulin-dependent diabetes mellitus (Type II) were registered in children.

Figure 4.27 **Diabetes mellitus according to the types, prevalence per 100000 population, Georgia**



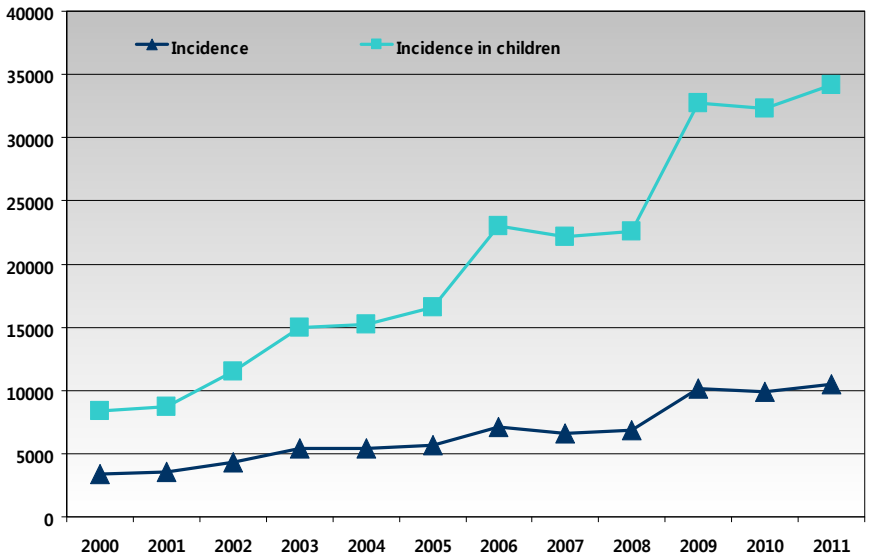
In 2011, 1738 patients with diabetes mellitus were discharged from in-patient facilities of Georgia (hospitalization rate -38.8); case fatality rate – 2.6%.

Diseases of the respiratory system

Incidence rate of respiratory system disease traditionally is high, especially in children; in 2011, respiratory system diseases accounted for 63.7% of new cases in children under 15.

55.2% of the new cases of the respiratory system diseases were registered in children. After a slight decrease of the incidence rate in 2010, in 2011 there was an increase of the incindence by 6.4% (Figure 4.28).

Figure 4.28 **Respiratory system diseases, incidence per 100000, Georgia**



In 2011, 63.4% discharges of patients diagnozed with the respiratory system diseases were registered in children. The general case fatality rate was 1.2%, in children - 0.2%. The case fatality rate in children significantly dicreased compared to 2010.

Chronic Respiratory Diseases (CRD)

Chronic respiratory diseases (CRD), which include asthma, allergic diseases of the respiratory system, chronic obstructive pulmonary diseases (COPD), occupational lung diseases and pulmonary hypertension, represent the main group within the class of the respiratory system diseases.

Chronic Obstructive Pulmonary Diseases (COPD)

During the reporting year, the share of chronic obstructive pulmonary diseases accounted to 44.9% (55.1% - in children) of chronic lower respiratory diseases registered in the population of Georgia.

In the group of chronic obstructive pulmonary diseases chronic and unspecified bronchitis comprised 95.4% in general population, in children it equaled to 99.4%. Compared to 2010, these rates significantly increased.

Asthma

In 2011, 16359 cases of asthma and status asthmaticus were registered in Georgia (prevalence rate – 364.9), including 2789 new cases (incidence rate – 62.2). Compared to 2010, prevalence rate of asthma and status asthmaticus remained relatively unchanged in the total population; at the same time, the number of new cases and incidence rate was reduced by 18.5% (Figure 4.29). The incidence rate in children was reduced by 14.6%.

The share of asthma comprises 2.9% of the class of the respiratory system diseases; although, in the group of lower respiratory diseases - 35.9%.

Figure 4.29 **Asthma and status asthmaticus, morbidity rates per 100000 population, Georgia**

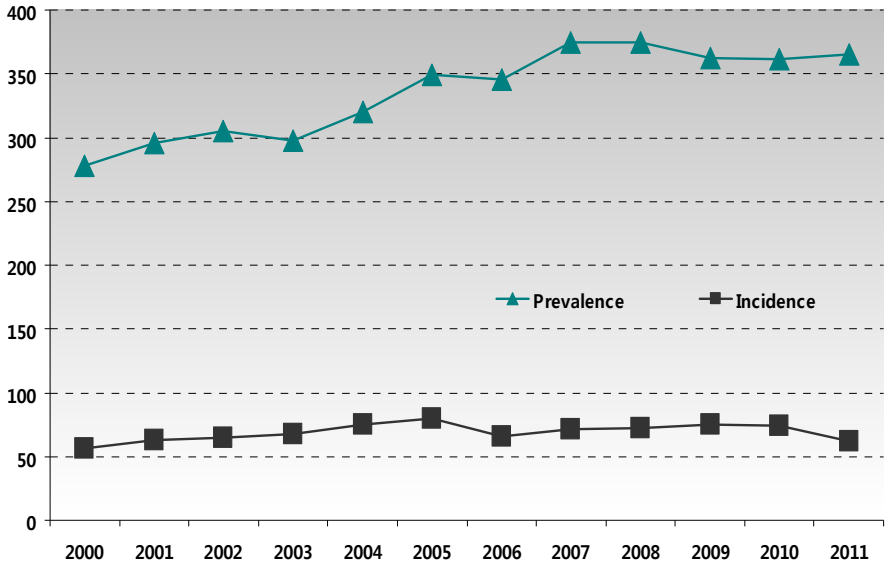


Table 4.36 Neoplasms, morbidity rates, Georgia, 2000 – 2011

	Total				Children aged 0-15			
	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
2000	26415	597.9	5658	128.1	194	16.5	68	7.4
2001	29590	674.7	6927	157.4	222	21.0	93	10.2
2002	31225	716.6	7092	162.2	267	23.5	110	12.0
2003	32109	741.7	7117	164.4	269	24.3	123	13.4
2004	34858	807.2	8347	190.9	340	31.6	147	16.0
2005	36165	829.2	8364	191.3	405	40.9	166	21.0
2006	39063	888.2	9186	208.9	442	63.6	132	16.9
2007	40219	917.4	7445	169.7	433	68.2	111	14.5
2008	41748	952.3	7886	179.9	387	66.6	148	19.7
2009	44465	1008.1	13001	294.7	315	54.7	156	20.7
2010	45210	1015.3	11685	262.4	236	40.9	124	16.4
2011	**57455**	**1281.5**	**10362**	**231.1**	**443**	**58.3**	**216**	**28.4**

Table 4.37 Malignant neoplasms, morbidity, Georgia, 2000 – 2011

	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
2000	24816	561.7	4292	97.1
2001	25991	592.6	4974	113.4
2002	26374	605.3	5332	122.4
2003	27610	637.8	5251	121.3
2004	28853	668.2	5726	132.6
2005	29241	670.4	6045	138.6
2006	29104	661.8	6200	141.0
2007	29065	663.0	5059	115.4
2008	29875	681.5	5658	129.1
2009	30954	701.8	5656	128.2
2010	31370	704.5	5628	126.4
2011	**25143**	**560.8**	**4252**	**94.8**

Table 4.38 Malignant neoplasms, morbidity according to the regions, Georgia, 2011

	Number of cases registered by the end of the year	Prevalence per 100000 population *	Number of new cases	Incidence per 100000 population
Abkhazia	255	-	62	-
Ajara	2873	732.7	551	140.5
Tbilisi	4579	392.2	783	67.1
Kakheti	3561	875.8	321	78.9
Imereti	3616	512.2	724	102.5
Samegrelo and Zemo Svaneti	1673	349.8	481	100.6
Shida Kartli	4285	1365.5	383	122.1
Kvemo Kartli	1236	243.1	347	68.2
Guria	888	632.9	178	126.9
Samtskhe-Javakheti	1061	497.0	255	119.4
Mtskheta-Mtianeti	895	817.4	100	91.3
Racha-Lechkhumi and Kvemo Svaneti	221	468.2	67	141.9
Georgia	**25143**	**560.8**	**4252**	**94.8**

* *Prevalence* - number of patients registered by the end of the reporting year per 100000 population

Table 4.39 Malignant neoplasms, registered cases according to localizations, Georgia, 2011

Localization / neoplasm	Number of registered by the end of the year		Number of deaths by the end of the year		Number of registered within 5 and more years after first diagnoses		% of deaths from total registered cases according to localization
	Total number	% from the total	Total number	% from the total	Total number	% from the total	
All neoplasms	**25143**	**100.0**	**3518**	**100.0**	**8873**	**100.0**	**11.2**
Oral cavity organs and pharynx	492	2.0	78	2.2	162	1.8	11.6
Lips	399	1.6	19	0.5	194	2.2	4.1
Esophagus	102	0.4	18	0.5	14	0.2	14.1
Stomach	933	3.7	256	7.3	194	2.2	19.9
Rectum	1330	5.3	265	7.5	315	3.6	15.4
Liver and gull bladder channels	240	1.0	145	4.1	71	0.8	36.1
Pancreases	190	0.8	91	2.6	26	0.3	30.5
Other digestive organs	68	0.3	19	0.5	38	0.4	19.8
Nasal cavity, middle ear and accessory sinuses	51	0.2	13	0.4	6	0.1	20.0
Larynx	1058	4.2	137	3.9	331	3.7	10.4
Trachea, bronchus and lung	1302	5.2	590	16.8	288	3.2	29.1
Other respiratory and intrathoracic organs	44	0.2	0	0.0	16	0.2	0.0
Bone and articular cartilage	333	1.3	38	1.1	102	1.1	9.8
Malignant melanoma of skin	308	1.2	44	1.3	113	1.3	11.3
Other malignant neoplasms of skin	2028	8.1	88	2.5	958	10.8	3.4
Mesothelial and soft tissue	312	1.2	31	0.9	72	0.8	7.9
Breast	7275	28.9	502	14.3	3094	34.9	5.9
Cervix uteri	1991	7.9	179	5.1	790	8.9	7.7
Corpus uteri	1332	5.3	97	2.8	532	6.0	6.3
Ovary	838	3.3	139	4.0	272	3.1	12.6
Placenta	41	0.2	1	0.0	23	0.3	2.2
Female genital organs, other localization	64	0.3	7	0.2	9	0.1	9.1
Penis	107	0.4	10	0.3	41	0.5	8.3
Prostate	536	2.1	140	4.0	104	1.2	19.6
Testicle	382	1.5	34	1.0	146	1.6	7.6
Male genital organs, other localization	21	0.1	4	0.1	28	0.3	14.8
Kidney	441	1.8	93	2.6	106	1.2	16.2
Urinary bladder	591	2.4	109	3.1	124	1.4	13.6
Urinary tract other localization	8	0.0	13	0.4	3	0.0	59.1
Eyes, brain and other parts of central nervous system	456	1.8	90	2.6	102	1.1	15.7
Thyroid	308	1.2	25	0.7	97	1.1	6.9
Other endocrine glands	46	0.2	6	0.2	24	0.3	11.1
Ill-defined, secondary and unspecified sites	219	0.9	112	3.2	21	0.2	32.4
Hodgkin's disease	371	1.5	23	0.7	160	1.8	5.5
Malignant lymphomas	448	1.8	49	1.4	125	1.4	8.7
Leukaemias	380	1.5	44	1.3	140	1.6	9.7
Other lymphoid, haematopoietic and related tissue malignant neoplasms	98	0.4	9	0.3	32	0.4	8.3

Table 4.40 Malignant neoplasms, new cases according to localizations, Georgia, 2011

Localization / neoplasm	New cases		Deaths within 1 year after first diagnosis in previous reporting year	
	Total number	% from the total	Total number	% the from total
All neoplasms	**4252**	**100.0**	**1503**	**100.0**
Oral cavity organs and pharynx	100	2.4	38	2.5
Lips	20	0.5	5	0.3
Esophagus	24	0.6	12	0.8
Stomach	295	6.9	131	8.7
Rectum	303	7.1	104	6.9
Liver and gull bladder channels	142	3.3	80	5.3
Pancreases	96	2.3	36	2.4
Other digestive organs	18	0.4	24	1.6
Nasal cavity, middle ear and accessory sinuses	18	0.4	1	0.1
Larynx	180	4.2	44	2.9
Trachea, bronchus and lung	652	15.3	331	22.0
Other respiratory and intrathoracic organs	6	0.1	20	1.3
Bone and articular cartilage	45	1.1	27	1.8
Malignant melanoma of skin	45	1.1	14	0.9
Other malignant neoplasms of skin	148	3.5	12	0.8
Mesothelial and soft tissue	37	0.9	19	1.3
Breast	735	17.3	167	11.1
Cervix uteri	217	5.1	47	3.1
Corpus uteri	103	2.4	27	1.8
Ovary	150	3.5	56	3.7
Female genital organs, other localization	10	0.2	5	0.3
Penis	13	0.3	4	0.3
Prostate	169	4.0	57	3.8
Testicle	43	1.0	8	0.5
Male genital organs, other localization	3	0.1	5	0.3
Kidney	111	2.6	38	2.5
Urinary bladder	139	3.3	46	3.1
Urinary tract other localization	2	0.0	4	0.3
Eyes, brain and other parts of central nervous system	88	2.1	27	1.8
Thyroid	41	1.0	9	0.6
Other endocrine glands	6	0.1	3	0.2
Ill-defined, secondary and unspecified sites	131	3.1	58	3.9
Hodgkin's disease	40	0.9	4	0.3
Malignant lymphomas	61	1.4	21	1.4
Leukaemias	52	1.2	10	0.7
Other lymphoid, haematopoietic and related tissue malignant neoplasms	9	0.2	9	0.6

Table 4.41 Malignant neoplasms in women, new cases according to localizations, Georgia, 2011

Localization / neoplasm	Number of new cases	% from total	Incident per 100000 females
All neoplasms	**2116**	**100.0**	**90.1**
Oral cavity organs and pharynx	6	0.3	0.3
Lips	37	1.7	1.6
Esophagus	11	0.5	0.5
Stomach	111	5.2	4.7
Rectum	140	6.6	6.0
Liver and gull bladder channels	51	2.4	2.2
Pancreases	50	2.4	2.1
Other digestive organs	9	0.4	0.4
Nasal cavity, middle ear and accessory sinuses	4	0.2	0.2
Larynx	14	0.7	0.6
Trachea, bronchus and lung	91	4.3	3.9
Other respiratory and intrathoracic organs	2	0.1	0.1
Bone and articular cartilage	17	0.8	0.7
Malignant melanoma of skin	25	1.2	1.1
Other malignant neoplasms of skin	68	3.2	2.9
Mesothelial and soft tissue	19	0.9	0.8
Breast	730	34.5	31.1
Cervix uteri	217	10.3	9.2
Corpus uteri	103	4.9	4.4
Ovary	150	7.1	6.4
Female genital organs, other localization	10	0.5	0.4
Kidney	37	1.7	1.6
Urinary bladder	21	1.0	0.9
Urinary tract other localization	48	2.3	2.0
Eyes, brain and other parts of central nervous system	32	1.5	1.4
Thyroid	3	0.1	0.1
Ill-defined, secondary and unspecified sites	44	2.1	1.9
Hodgkin’s disease	18	0.9	0.8
Malignant lymphomas	26	1.2	1.1
Leukaemias	19	0.9	0.8
Other lymphoid, haematopoietic and related tissue malignant neoplasms	3	0.1	0.1

Table 4.42 Malignant neoplasms in men, new cases according to localizations, Georgia, 2011

Localization / neoplasm	Number of new cases	% from total	Incident per 100000 males
All neoplasms	**2136**	**100.0**	**100.0**
Oral cavity organs and pharynx	14	0.7	0.7
Lips	63	2.9	2.9
Esophagus	13	0.6	0.6
Stomach	184	8.6	8.6
Rectum	163	7.6	7.6
Liver and gull bladder channels	91	4.3	4.3
Pancreases	46	2.2	2.2
Other digestive organs	9	0.4	0.4
Nasal cavity, middle ear and accessory sinuses	14	0.7	0.7
Larynx	166	7.8	7.8
Trachea, bronchus and lung	561	26.3	26.3
Other respiratory and intrathoracic organs	4	0.2	0.2
Bone and articular cartilage	28	1.3	1.3
Malignant melanoma of skin	20	0.9	0.9
Other malignant neoplasms of skin	80	3.7	3.7
Mesothelial and soft tissue	18	0.8	0.8
Breast	5	0.2	0.2
Penis	13	0.6	0.6
Prostate	169	7.9	7.9
Testicle	43	2.0	2.0
Male genital organs, other localization	3	0.1	0.1
Kidney	74	3.5	3.5
Urinary bladder	118	5.5	5.5
Urinary tract other localization	2	0.1	0.1
Eyes, brain and other parts of central nervous system	40	1.9	1.9
Thyroid	9	0.4	0.4
Other endocrine glands	3	0.1	0.1
Ill-defined, secondary and unspecified sites	87	4.1	4.1
Hodgkin's disease	22	1.0	1.0
Malignant lymphomas	35	1.6	1.6
Leukaemias	33	1.5	1.5
Other lymphoid, haematopoietic and related tissue malignant neoplasms	6	0.3	0.3

Table 4.43 Malignant neoplasms, new cases according to stages (%), Georgia, 2006 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2006	4.7	25.7	22.0	43.3	4.3
2007	4.1	21.5	23.2	45.1	6.0
2008	6.0	21.5	23.2	45.1	4.1
2009	4.8	17.6	23.9	48.0	5.7
2010	4.5	20.5	25.1	45.0	4.9
2011	**3.6**	**18.8**	**22.2**	**46.9**	**8.5**

Table 4.44 Breast cancer, new cases according to stages (%), Georgia, 2006 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2006	7.8	42.0	23.5	25.8	1.0
2007	5.7	39.6	25.2	26.8	4.0
2008	7.4	39.7	25.4	24.0	3.4
2009	7.1	32.0	29.3	28.5	3.2
2010	6.1	36.5	31.6	23.3	2.6
2011	**5.7**	**34.8**	**26.3**	**26.8**	**6.4**

Table 4.45 Cervix uteri cancer, new cases according to stages (%), Georgia, 2006 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2006	11.0	38.8	23.2	24.8	2.2
2007	11.5	34.5	27.3	24.2	2.5
2008	12.4	36.0	22.1	25.1	4.5
2009	10.7	25.3	29.5	30.6	3.9
2010	12.6	29.5	34.9	19.9	3.1
2011	**13.4**	**22.1**	**31.3**	**21.7**	**11.5**

Table 4.46 Trachea, bronchus and lung cancer, new cases according to stages (%), Georgia, 2006 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2006	0.7	9.6	18.7	69.2	1.8
2007	0.4	6.4	21.6	68.1	3.5
2008	0.8	8.4	19.8	67.1	3.9
2009	1.5	6.4	16.5	70.9	4.7
2010	1.1	9.9	14.1	70.5	4.4
2011	**0.6**	**7.2**	**13.8**	**69.8**	**8.6**

Table 4.47 Prostate cancer, new cases according to stages (%), Georgia, 2002 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2002	16.0		20.7	63.3	0.0
2006	2.2	17.5	18.9	59.6	1.8
2007	0.5	18.3	23.7	53.8	3.8
2008	0.5	15.1	18.5	60.5	5.4
2009	0.9	11.3	20.7	61.3	5.9
2010	3.1	14.6	24.4	55.5	2.4
2011	**1.8**	**10.7**	**26.6**	**53.3**	**7.7**

Table 4.48 Rectum, rectosigmoid junction, anus, anal canal cancer, new cases according to stages (%), Georgia, 2006 – 2011

	I stage	II stage	III stage	IV stage	Unknown
2006	0.7	18.5	29.6	47.0	4.2
2007	0.8	21.3	27.3	46.4	4.1
2008	2.9	15.3	26.8	49.6	5.5
2009	1.8	15.5	28.5	48.2	6.0
2010	3.1	17.6	29.5	44.2	5.7
2011	**1.3**	**11.9**	**30.7**	**49.2**	**6.9**

Table 4.49 Breast cancer, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Number of new cases	1116	1156	1211	952	1015	1023	1055	730
Incidence rate per 100000 females	*47.8*	*49.4*	*51.5*	*40.9*	*43.7*	*44.2*	*45.2*	31.1
Number of cases enrolled by the end of the year	7892	8174	8393	8448	8655	9019	9139	7275
Prevalence rate per 100 000 population by the end of the year	341.7	353.9	363.4	366.0	375.3	389.4	391.4	309.9
Number of deaths	719	677	595	602	617	628	613	502
Mortality rate per 100 000 population	*31.1*	*29.3*	*25.8*	*26.1*	*26.8*	*27.1*	*25.3*	*21.4*
% of deaths of the total number of cases registered during the year	*8.2*	*7.5*	*6.3*	*6.4*	*6.5*	*6.4*	*6.2*	*5.9*
Number of deaths within a year of patients' first diagnoses	227	194	256	220	186	224	185	167
% of deaths within a year of patients' first diagnoses	*22.5*	*17.4*	*22.1*	*18.2*	*19.5*	*21.9*	*17.5*	*22.9*

Table 4.50 Cervix uteri cancer, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Number of new cases	308	334	327	252	267	281	261	217
Incidence rate per 100000 females	*13.3*	*14.5*	*14.1*	*10.9*	*11.6*	*12.1*	11.2	*9.2*
Number of cases enrolled by the end of the year	2388	2374	2378	2372	2398	2464	2449	1991
Prevalence rate per 100 000 females by the end of the year	*104.6*	*103.2*	*102.7*	*102.7*	*104.1*	*106.4*	*105.0*	*84.8*
Number of deaths	201	249	215	197	203	230	186	179
Mortality rate per 100 000 females	*8.8*	*10.8*	*9.3*	*8.5*	*8.8*	*9.9*	*8.0*	*7.6*
% of deaths of the total number of cases registered during the year	*7.7*	*9.2*	*8.0*	*7.5*	*7.7*	*8.4*	*6.9*	*7.7*
Number of deaths within a year of patients' first diagnoses	74	94	91	84	71	86	61	47
% of deaths within a year of patients' first diagnoses	*26.0*	*30.5*	*27.2*	*25.7*	*28.2*	*30.6*	*23.4*	*21.7*

Table 4.51 Prostate cancer, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Number of new cases	160	187	228	186	205	222	254	169
Incidence rate per 100000 males	7.9	9.1	11.0	8.9	9.9	10.6	11.9	7.8
Number of cases enrolled by the end of the year	380	441	472	475	511	555	618	536
Prevalence rate per 100 000 males by the end of the year	18.7	21.4	22.7	22.8	24.6	26.5	29.1	25.1
Number of deaths	157	137	169	159	162	186	168	140
Mortality rate per 100 000 males	7.7	6.6	8.1	7.6	7.8	8.9	7.9	6.6
% of deaths of the total number of cases registered during the year	29.2	23.7	26.4	25.1	24.1	25.1	21.4	19.9
Number of deaths within a year of patients' first diagnoses	70	63	80	83	92	89	89	57
% of deaths within a year of patients' first diagnoses	43.8	33.7	35.1	44.6	44.9	40.1	35.0	33.7

Table 4.52 Rectum cancer, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Number of new cases	405	440	406	366	385	386	387	303
Incidence rate per 100000 population	9.4	10.1	9.2	8.3	8.8	8.8	8.7	6.8
Number of cases enrolled by the end of the year	1426	1440	1426	1457	1513	1563	1642	1330
Prevalence rate per 100 000 population by the end of the year	33.0	33.0	32.4	33.2	34.5	35.4	36.7	29.7
Number of deaths	329	368	324	283	289	346	255	265
Mortality rate per 100 000 population	7.6	8.4	7.4	6.4	6.6	7.8	5.7	5.9
% of deaths of the total number of cases registered during the year	18.7	20.4	18.5	16.3	16.0	18.1	13.4	16.6
Number of deaths within a year of patients' first diagnoses	166	173	190	143	139	168	118	104
% of deaths within a year of patients' first diagnoses	41.0	39.3	46.8	39.1	36.1	43.5	30.5	34.3

Table 4.53 Number of deaths within a year after being diagnosed with cancer, Georgia, 2002 – 2011

	Number of new cases	Number of deaths	% of deaths from the total number of new cases
2002	5332	2209	41.4
2003	5251	2125	40.5
2004	5726	2177	38.0
2005	6045	2068	34.2
2006	6200	2306	37.2
2007	5066	2022	39.9
2008	5662	2007	35.4
2009	5656	2024	35.8
2010	5628	1737	30.9
2011	**4252**	**1503**	**35.3**

Table 4.54 Data on special treatments of malignant neoplasms, Georgia, 2006 – 2011

	2006	2007	2008	2009	2010	2011
Number of patients in clinical group II*	**3020**	**2253**	**2589**	**2525**	**2706**	**1957**
The course of treatment completed	2436	1684	2005	2130	2215	1658
Including the following methods of treatment::						
Surgical	818	571	776	791	758	597
Radiotherapy	226	148	270	212	256	126
Medication	240	193	252	334	379	309
Combined	1025	684	617	710	735	570
Complex	127	88	90	83	87	56

* *Clinical group II includes cancer patients who needed special treatment (surgery, radiotherapy, chemotherapy, etc.).*

Table 4.55 Cancer, hospital discharges by regions, Georgia, 2010 – 2011

	2010			2011		
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Number of deaths	Case fatality rate (%)
Ajara	1006	24	2.3	1159	16	1.4
Tbilisi	11151	286	2.5	12762	298	2.3
Kakheti	89	7	7.3	68	5	7.4
Imereti	1566	18	1.1	1572	22	1.4
Samegrelo and Zemo Svaneti	27	9	25.0	39	3	7.7
Shida Kartli	25	3	10.7	23	3	13.0
Kvemo Kartli	67	4	5.6	93	3	3.2
Guria	26	2	7.1	15	2	13.3
Samtskhe-Javakheti	7	0	0	7	2	28.6
Mtskheta-Mtianeti	0	0	0	2	1	50.0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0	0	0
Other departments	129	1	0.8	124	1	0.8
Georgia	**14093**	**354**	**2.5**	**15864**	**356**	**2.2**

Table 4.56 Cancer, hospital discharges in children under 15, by regions, Georgia, 2010 – 2011[*]

	2010			2011		
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Number of deaths	Case fatality rate (%)
Ajara	25	0	0.0	25	1	4.0
Tbilisi	964	11	1.1	952	9	0.9
Imereti	3	0	0.0	2	1	50.0
Georgia	**992**	**11**	**1.1**	**979**	**11**	**1.1**

[*] *No cases of hospitalization of cancer patients under the age of 15 years were registered in the rest of the regions.*

Table 4.57 Diseases of blood and blood-forming organs, morbidity rates, Georgia, 1998 – 2011

	All ages				Children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
1988	11423	211.7	4061	75.23	9691	757.8	3818	277.36
1990	10688	197.0	3311	61.07	8872	693.3	2932	216.32
1995	8788	183.3	3499	67.81	6719	675.2	2563	206.99
1996	9827	210.2	4978	97.50	6857	723.1	3218	262.63
2000	13189	296.2	6784	152.4	5576	613.0	2909	319.8
2001	16330	371.0	8511	193.4	6966	753.6	3826	413.9
2002	16442	376.1	7730	176.8	7469	815.4	4022	439.1
2003	14695	339.5	7400	170.9	7072	836.4	3700	437.6
2004	16175	370.0	8605	196.8	8233	898.9	4848	529.3
2005	16305	373.0	8505	194.6	8651	944.5	4955	541.0
2006	17048	387.6	9397	213.7	7624	959.6	4391	552.7
2007	19030	433.6	10264	233.9	7975	1039.5	4854	632.7
2008	19546	445.9	11672	266.3	8501	1130.2	5686	755.9
2009	25064	568.2	17653	400.2	12414	1648.8	10285	1366.1
2010	23535	528.5	17378	390.3	11977	1580.1	10072	1328.8
2011	**21878**	**488.0**	**15292**	**341.1**	**11290**	**1484.9**	**8996**	**1183.2**

Table 4.58 Diseases of blood and blood-forming organs by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1377	-	740	-	1792	-	863	-
Ajara	3109	799.8	2249	578.6	2479	632.2	1362	347.4
Tbilisi	2002	173.0	1365	117.9	2010	172.1	1113	95.3
Kakheti	2099	517.9	1525	376.3	2001	492.1	1472	36.0
Imereti	4864	692.5	3696	526.2	4351	616.3	3258	461.5
Samegrelo and Zemo Svaneti	2893	608.3	2035	427.9	2037	425.9	1511	315.9
Shida Kartli	1679	538.5	1424	456.7	1784	568.5	1490	474.8
Kvemo Kartli	1632	324.6	1324	263.3	1968	387.0	1581	310.9
Guria	1956	1396.1	1677	1197.0	1824	1300.1	1443	1028.5
Samtskhe-Javakheti	934	440.6	607	286.3	817	382.7	548	256.7
Mtskheta-Mtianeti	581	532.5	457	418.9	544	496.8	445	406.4
Racha-Lechkhumi and Kvemo Svaneti	337	709.5	212	446.3	159	336.9	131	277.5
Other departments	72	-	67	-	112	-	75	-
Georgia	**23535**	**528.5**	**17378**	**390.3**	**21878**	**488.0**	**15292**	**341.1**

Table 4.59 Diseases of blood and blood-forming organs in children by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	587	-	386	-	667	-	415	-
Ajara	1715	2598.5	1464	2218.2	1293	1944.4	832	1251.1
Tbilisi	678	344.7	535	272.0	570	287.9	421	212.6
Kakheti	1100	1596.5	922	1338.2	1115	1615.9	927	1343.5
Imereti	2592	2172.7	2210	1852.5	2282	1906.4	1911	1596.5
Samegrelo and Zemo Svaneti	1382	1710.4	1145	1417.1	1193	1471.0	978	1205.9
Shida Kartli	762	1437.7	676	1275.5	785	1475.6	681	1280.1
Kvemo Kartli	1084	1269.3	926	1084.3	1422	1649.7	1184	1373.5
Guria	1283	5390.8	1132	4756.3	1281	5382.4	1066	4479.0
Samtskhe-Javakheti	362	1005.6	293	813.9	337	930.9	290	801.1
Mtskheta-Mtianeti	344	1859.5	316	1708.1	256	1376.3	213	1145.2
Racha-Lechkhumi and Kvemo Svaneti	79	975.3	60	740.7	75	937.5	70	875.0
Other departments	9	-	7	-	14	-	8	-
Georgia	**11977**	**1580.1**	**10072**	**1328.8**	**11290**	**1484.9**	**8996**	**1183.2**

Table 4.60 Diseases of the blood and blood-forming organs, hospital discharges and case fatality rates, Georgia, 2011

	Discharged from an in-patient facility			Children aged 0-15		
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Number of deaths	Case fatality rate (%)
Ajara	282	1	0.4	21	0.0	0.0
Tbilisi	528	10	1.9	219	0.5	3.0
Kakheti	37	1	2.7	2	50.0	0.0
Imereti	126	6	4.8	47	6.4	13.0
Samegrelo and Zemo Svaneti	36	3	8.3	2	0.0	0.0
Shida Kartli	8	0	0.0	0	0.0	0.0
Kvemo Kartli	4	0	0.0	0	0.0	0.0
Guria	6	0	0.0	0	0.0	0.0
Samtskhe-Javakheti	2	0	0.0	0	0.0	0.0
Mtskheta-Mtianeti	0	0	0.0	0	0.0	0.0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0.0	0	0.0	0.0
Other departments	4	0	0.0	2	0.0	0.0
Georgia	**1033**	**21**	**2.0**	**293**	**1.7**	**6.5**

Table 4.61 Anemia, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Total number of registered cases	**14578**	**14236**	**14102**	**15828**	**16670**	**21914**	**20979**	**18545**
Prevalence rate per 100000 population	*333.5*	*325.6*	*320.7*	*360.7*	*380.3*	*496.8*	*471.1*	*413.6*
Total number of new cases	**8115**	**7751**	**8024**	**8976**	**10419**	**16012**	**15902**	**13734**
Incidence rate per 100000 population	*185.6*	*177.3*	*182.5*	*204.5*	*237.7*	*363.0*	*357.1*	*306.3*

Table 4.62 Anemia in children under 15, Georgia, 2004 – 2011

	2004	2005	2006	2007	2008	2009	2010	2011
Total number of registered cases	**7665**	**7851**	**6662**	**6930**	**7594**	**11449**	**11146**	**10339**
Prevalence rate per 100000 population	*825.9*	*857.2*	*838.5*	*903.3*	*1009.6*	*1520.7*	*1470.4*	*1359.9*
Total number of new cases	**4626**	**4636**	**3883**	**4416**	**5177**	**9666**	**9472**	**8450**
Incidence rate per 100000 population	*504.9*	*506.1*	*488.7*	*575.6*	*688.2*	*1283.8*	*1249.6*	*1111.4*

Table 4.63 Anemia by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1133	-	687	-	1341	-	681	-
Ajara	2820	722.0	2082	533.0	2149	548.1	1309	333.8
Tbilisi	1522	130.9	1209	104.0	1487	127.4	906	77.6
Kakheti	1939	477.4	1457	358.7	1846	454.0	1384	340.3
Imereti	4368	620.0	3304	469.0	3220	456.1	2613	370.1
Samegrelo and Zemo Svaneti	2699	565.7	1916	401.6	1855	387.8	1430	299.0
Shida Kartli	1611	514.7	1370	437.7	1715	546.5	1444	460.2
Kvemo Kartli	1479	292.5	1185	234.3	1739	342.0	1400	275.3
Guria	1808	1288.7	1533	1092.7	1730	1233.1	1426	1016.4
Samtskhe-Javakheti	798	375.0	559	262.7	708	331.6	514	240.7
Mtskheta-Mtianeti	404	369.6	330	301.9	508	463.9	429	391.8
Racha-Lechkhumi and Kvemo Svaneti	329	695.6	206	435.5	150	317.8	126	266.9
Other departments	69	-	64	-	97	-	72	-
Georgia	**20979**	**471.1**	**15902**	**357.1**	**18545**	**413.6**	**13734**	**306.3**

Table 4.64 Endocrine, nutritional and metabolic diseases, Georgia, 2000 – 2011

	All ages				Children aged 0-15			
	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
2000	140145	3147.8	32116	721.4	32756	3601.3	11856	1303.5
2001	121866	2750.3	31573	712.3	22434	2478.2	9484	1047.7
2002	120087	2747.0	30056	687.5	21842	2384.6	9452	1031.9
2003	124264	2870.6	28859	666.7	22420	2651.7	7985	944.4
2004	129346	2958.8	29920	684.4	22227	2426.7	6580	718.4
2005	137216	3138.9	31843	720.2	23716	2589.2	7906	863.2
2006	124016	2819.8	27660	628.9	18310	2304.6	6441	810.7
2007	118812	2707.4	27307	622.3	10392	1354.5	5602	730.2
2008	119864	2734.2	30580	697.6	9356	1243.8	5323	707.7
2009	124793	2829.2	40054	908.1	9053	1202.4	7982	1060.2
2010	129731	2913.5	43545	977.9	8124	1073.9	6416	848.1
2011	**140267**	**3128.6**	**41141**	**917.6**	**7254**	**954.1**	**6494**	**854.1**

Table 4.65 Some endocrine, nutritional and metabolic diseases, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Endocrine, nutritional and metabolic diseases	**129731**	**2913.5**	**43545**	**977.9**	**140267**	**3128.6**	**41141**	**917.6**
Including								
Sub clinical iodine-deficiency hypothyroidism and other hypothyroidism	23083	518.4	7240	162.6	26503.0	591.1	7457	166.3
Other non-toxic goitre	16503	370.6	5947	133.6	15756	351.4	6107	136.2
Thyrotoxicosis (hyperthyroidism)	5524	124.1	2465	55.4	5576	124.4	2163	48.2
Diabetes mellitus insulin dependent (type I)	17517	393.4	2894	65.0	17889	399.0	2754	61.4
Diabetes mellitus non-insulin dependent (type II)	52776	1185.2	7756	174.2	57442	1281.2	9415	210.0

Table 4.66 Endocrine, nutritional and metabolic diseases by regions, Georgia, 2011

	Cases registered by the end of the year				New cases			
	Total		In children		Total		In children	
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of registered cases	Incidence per 100000 population	Number of registered cases	Incidence per 100000 children
Abkhazia	3271	-	144	-	1184	-	115	-
Ajara	16209	4133.9	499	750.4	3355	855.6	941	1415.0
Tbilisi	48788	4178.5	1076	543.4	9642	825.8	292	147.5
Kakheti	15890	3908.0	3200	4637.7	3248	798.8	643	931.9
Imereti	22375	3169.3	604	504.6	8247	1168.1	855	714.3
Samegrelo and Zemo Svaneti	7393	1545.7	293	361.3	2670	558.2	890	1097.4
Shida Kartli	8536	2720.2	676	1270.7	4498	1433.4	983	1847.7
Kvemo Kartli	7986	1570.5	206	239.0	4145	815.1	795	922.3
Guria	1778	1267.3	108	453.8	840	598.7	293	1231.1
Samtskhe-Javakheti	3946	1848.2	318	878.5	1942	909.6	521	1439.2
Mtskheta-Mtianeti	2508	2290.4	113	607.5	793	724.2	130	698.9
Racha-Lechkhumi and Kvemo Svaneti	925	1959.7	13	162.5	364	771.2	32	400.0
Other departments	662	-	4	-	213	-	4	-
Georgia	**140267**	**3128.6**	**7254**	**161.8**	**41141**	**917.6**	**6494**	**854.1**

Table 4.67 Diabetes mellitus, Georgia, 2009 – 2011

	2009		2010		2011	
New cases	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**
Diabetes mellitus	**11127**	**252.3**	**11026**	**247.6**	**12606**	**281.2**
Including						
Insulin-dependent diabetes mellitus (Type I)	3390	76.9	2894	65.0	**2754**	**61.4**
Non-insulin-dependent diabetes mellitus (Type II)	7737	175.4	7756	174.2	**9415**	**210.0**
Number of patients enrolled by the end of the year	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**
Diabetes mellitus	**68914**	**1562.4**	**71205**	**1599.1**	**76619**	**1708.9**
Including						
Insulin-dependent diabetes mellitus (Type I)	19461	441.2	17517	393.4	17889	399.0
Non-insulin-dependent diabetes mellitus (Type II)	49453	1121.2	52776	1185.2	57442	1281.2

Table 4.68 Diabetes mellitus in children, Georgia, 2009 – 2011

	2009		2010		2011	
New cases	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**
Diabetes mellitus	**64**	**8.5**	**63**	**8.3**	**78**	**10.3**
Including						
Insulin-dependent diabetes mellitus (Type I)	57	7.6	35	4.6	41	5.4
Non-insulin-dependent diabetes mellitus (Type II)	7	0.9	19	2.5	18	2.4
Number of patients enrolled by the end of the year	**Number**	**Incidence per 100000 children**	**Number**	**Incidence per 100000 children**	**Number**	**Incidence per 100000 children**
Diabetes mellitus	**257**	**34.1**	**238**	**31.4**	**263**	**34.6**
Including						
Insulin-dependent diabetes mellitus (Type I)	228	30.3	189	24.9	190	25.0
New cases	29	3.9	32	4.2	38	5.0

Table 4.69 Diabetes mellitus, morbidity by regions, Georgia, 2011

	Cases registered by the end of the year				New cases			
	Total		In children		Total		In children	
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of registered cases	Incidence per 100000 population	Number of registered cases	Incidence per 100000 children
Abkhazia	1797	-	6	-	307	-	2	-
Ajara	8707	2220.6	6	9.0	835	213.0	1	1.5
Tbilisi	26977	2310.5	109	55.1	3415	292.5	10	5.1
Kakheti	6472	1591.7	18	26.1	1414	347.8	6	8.7
Imereti	12930	1831.4	34	28.4	2061	291.9	8	6.7
Samegrelo and Zemo Svaneti	2917	609.9	19	23.4	490	102.4	7	8.6
Shida Kartli	5218	1662.8	15	28.2	918	292.5	9	16.9
Kvemo Kartli	6303	1239.5	30	34.8	2094	411.8	30	34.8
Guria	1211	863.2	9	37.8	179	127.6		
Samtskhe-Javakheti	1890	885.2	12	33.1	408	191.1	4	11.0
Mtskheta-Mtianeti	1256	1147.0	5	26.9	239	218.3	1	5.4
Racha-Lechkhumi and Kvemo Svaneti	595	1260.6	0	0.0	165	349.6	0	0
Other departments	346	-	0	-	81	-	0	-
Georgia	**76619**	**1708.9**	**263**	**34.6**	**12606**	**281.2**	**78**	**10.3**

Table 4.70 Endocrine, nutritional and metabolic diseases, hospital discharges, Georgia, 2010– 2011

	2010				2011			
	Number of hospital discharges	Case fatality rate, %	In children		Number of hospital discharges	Case fatality rate, %	In children	
			Number of hospital discharges	Case fatality rate, %			Number of hospital discharges	Case fatality rate, %
Total	**3449**	**1.6**	**338**	**0.0**	**3163**	**1.9**	**248**	**0.0**
Including:								
Thyrotoxicosis	323	0	0	0	297	0.3	0	0.0
Diabetes mellitus	2093	1.9	243	0	1738	2.6	219	0.0

Table 4.71 Endocrine, nutritional and metabolic diseases, hospital discharges according to regions, Georgia, 2010 - 2011

	2010				2011			
	Number of hospital discharges	Case fatality rate, %	In children		Number of hospital discharges	Case fatality rate, %	In children	
			Number of hospital discharges	Case fatality rate, %			Number of hospital discharges	Case fatality rate, %
Ajara	317	2.8	2	0.0	354	0.3	2	0.0
Tbilisi	1743	0.9	303	0.0	1543	1.7	221	0.0
Kakheti	254	3.5	2	0.0	176	4.5	0	0.0
Imereti	590	0.8	23	0.0	592	1.9	15	0.0
Samegrelo and Zemo Svaneti	199	5.0	4	0.0	146	2.7	4	0.0
Shida Kartli	96	0.0	0	0.0	82	2.4	0	0.0
Kvemo Kartli	95	3.2	1	0.0	96	2.1	3	0.0
Guria	12	8.3	1	0.0	37	5.4	1	0.0
Samtskhe-Javakheti	83	2.4	2	0.0	66	6.1	1	0.0
Mtskheta-Mtianeti	13	0.0	0	0.0	2	0.0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	4	0.0	0	0.0	7	0.0	0	0.0
Other departments	43	0.0	0	0.0	62	0.0	1	0.0
Georgia	**3449**	**1.6**	**338**	**0.0**	**3163**	**1.9**	**248**	**0.0**

Table 4.72 Thyroid gland screenings, Georgia, 2009 – 2011

	2009		2010		2011	
	Total number	%	Total number	%	Total number	%
Referred to medical institutions						
Total	**46486**	**100**	**37856**	**100**	**33850**	**100**
Total number of thyroid gland hyperplasia	25780	55.4	23814	62.9	21487	63.5
Prescribed treatment	22764	88.3	22170	93.1	19474	90.6
Including children						
Total	**9912**	**100**	**6130**	**100**	**3922**	**100**
Total number of thyroid gland hyperplasia	5617	56.7	3389	55.3	2200	56.1
Prescribed treatment	4616	82.2	3109	91.7	1614	73.4

Table 4.73 Distribution of cases of thyroid gland enlargement by stages, Georgia, 2010 – 2011

	2010						2011					
	Number of cases	% from total number of screened	Stage (%)				Number of cases	% from total number of screened	Stage (%)			
			Ia	Ib	II	III			Ia	Ib	II	III
Total number of thyroid gland enlargements	**23814**	**62.9**	**42.8**	**21.6**	**25.8**	**9.8**	**21487**	**63.5**	**36.0**	**24.0**	**27.7**	**12.2**
Including children	3389	55.3	42.7	23.7	24.7	8.9	2200	56.1	42.6	27.9	26.0	3.5

Table 4.74 Distribution of cases of thyroid gland enlargement by regions, screening results, Georgia, 2011

	All ages			In children		
	Number of screenings	Number of cases of thyroid gland hyperplasia detection	% from the total number of screened	Number of screenings	Number of cases of thyroid gland hyperplasia detection	% from the total number of screened
Abkhazia	647	380	58.7	57	35	61.4
Ajara	2626	2309	87.9	281	170	60.5
Tbilisi	7029	4824	68.6	634	260	41.0
Kakheti	676	299	44.2	79	43	54.4
Imereti	12407	7996	64.4	751	337	44.9
Samegrelo and Zemo Svaneti	4157	2032	48.9	972	513	52.8
Shida Kartli	3409	2154	63.2	486	373	76.7
Kvemo Kartli	835	484	58.0	0	0	0
Guria	203	122	60.1	101	85	84.2
Samtskhe-Javakheti	802	501	62.5	330	302	91.5
Mtskheta-Mtianeti	809	296	36.6	231	82	35.5
Racha-Lechkhumi and Kvemo Svaneti	41	24	58.5	0	0	0
Other departments	209	66	31.6	0	0	0
Georgia	**33850**	**21487**	**63.5**	**3922**	**2200**	**56.1**

Table 4.75 Prevention of iodine deficiency activity, Georgia, 2006-2011

	2006	2007	2008	2009	2010	2011
Total number of iodine deficiency preventions	24910	25471	24805	21521	13395	10311
Including children	11205	10001	12369	7113	3351	2138

Table 4.76 Mental and behavioral disorders, Georgia, 1990 -2011

	All ages				In children			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
1990	74757	1378.2	2718	50.1	5074	396.5	465	36.3
1995	65031	1356.5	2122	44.3	3171	318.7	160	16.1
1996	66392	1420.3	1459	31.2	2747	289.7	131	13.8
2000	67641	1519.3	1817	40.8	1905	201.9	99	10.5
2001	67299	1526.1	1741	39.5	1710	185.0	147	15.9
2002	65161	1490.6	1728	39.5	1747	190.7	217	23.7
2003	65788	1519.7	1645	38.0	1459	172.6	215	25.4
2004	68993	1578.2	3206	73.3	1537	167.8	412	45.0
2005	71179	1628.2	3974	91.0	1662	181.5	564	61.6
2006	74022	1683.3	3810	87.2	1716	216.0	344	37.6
2007	72588	1654.1	2677	61.0	1496	195.0	167	21.8
2008	75448	1721.1	3740	85.3	1672	222.3	284	37.8
2009	76457	1733.4	2505	56.8	1651	219.3	343	45.6
2010	79216	1779.0	2339	52.5	1628	217.5	298	39.8
2011	**67736**	**1510.8**	**1870**	**41.7**	**1159**	**152.4**	**137**	**18.0**

Table 4.77 Mental and behavioural disorders by regions, Georgia, 2010 – 2011 [*]

	2010				2011			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1201	-	30	-	1221	-	20	-
Ajara	7500	1929.5	226	58.1	7594	1936.8	111	28.3
Tbilisi	9577	827.4	528	45.6	3310	283.5	393	33.7
Kakheti	6223	1535.4	153	37.7	6331	1557.1	210	51.6
ImereTi	21130	3008.3	597	85.0	18566	2629.7	475	67.3
Samegrelo and Zemo Svaneti	11745	2469.5	159	33.4	11523	2409.2	142	29.7
Shida Kartli	7517	2410.8	246	78.9	7591	2419.1	213	67.9
Kvemo Kartli	7345	1460.8	136	27.0	5982	1176.4	175	34.4
Guria	3034	2165.6	135	96.4	3110	2216.7	99	70.6
Samtskhe-Javakheti	1947	918.4	81	38.2				
Mtskheta-Mtianeti	1997	1830.4	48	44.0	2508	2290.4	32	29.2
Georgia	**79216**	**1779.0**	**2339**	**52.5**	**67736**	**1510.8**	**1870**	**41.7**

[*] *Data from psychoneurological inpatient facilities*

Table 4.78 Mental and behavioral disorders in children by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	0	-	0	-	0	-	0	-
Ajara	326	493.9	47	71.2	267	401.5	11	16.5
Tbilisi	318	161.7	64	32.5	68	34.3	13	6.6
Kakheti	131	190.1	15	21.8	126	182.6	17	24.6
ImereTi	311	260.7	112	93.9	294	245.6	66	55.1
Samegrelo and Zemo Svaneti	193	238.9	16	19.8	195	240.4	10	12.3
Shida Kartli	112	211.3	28	52.8	104	195.5	5	9.4
Kvemo Kartli	152	178.0	2	2.3	60	69.6	9	10.4
Guria	32	134.5	0	0.0	27	113.4	2	8.4
Samtskhe-Javakheti	45	125.0	12	33.3				
Mtskheta-Mtianeti	8	43.2	2	10.8	18	96.8	4	21.5
Georgia	**1628**	**217.5**	**298**	**39.8**	**1159**	**152.4**	**137**	**18.0**

Table 4.79 Mental and behavioural disorders by certain nosologies, Georgia, 2011

	Number of new cases	Number of registered cases by the end of the year	Incidence per 100000 population	Prevalence per 100000 population
All cases	**1870**	**67736**	**41.7**	**1510.8**
Organic, including symptomatic, mental disorders	288	9326	6.4	208.0
Dementia in other specified diseases classified elsewhere *(developed during epilepsy (G40.-+))*	*36*	*2192*	*0.8*	*48.9*
Organic personality disorders (including limbic epilepsy personality syndrome)	*83*	*4773*	*1.9*	*106.5*
Mental and behavioural disorders due to psychoactive substances use	11	2244	0.2	50.1
Schizophrenia, schizotypal and delusional disorders	646	19252	14.4	429.4
Including: schizophrenia	*241*	*12083*	*5.4*	*269.5*
schizotypal disorders	*116*	*2082*	*2.6*	*46.4*
persistent delusional disorders	*100*	*1813*	*2.2*	*40.4*
acute and transient psychotic disorders	*99*	*925*	*2.2*	*20.6*
schizoaffective disorders	*67*	*1840*	*1.5*	*41.0*
Mood (affective) disorders	139	4780	3.1	106.6
Including: maniac episode	*5*	*945*	*0.1*	*21.1*
bipolar affective disorder	*11*	*805*	*0.2*	*17.9*
depressive episode	*81*	*1374*	*1.8*	*30.6*
recurrent depressive disorders	*41*	*1615*	*0.9*	*36.0*
Neurotic, stress-related and somatoform disorders	238	8420	5.3	187.8
Behavioural syndromes associated with physiological disturbances and physical factors	1	437	0.02	9.7
Disorders of adult personality and behaviour	61	2345	1.4	52.3
Mental retardation	469	19466	10.5	434.2
Disorders of psychological development	1	1085	0.02	24.2
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	16	381	0.4	8.5

Table 4.80 Mental and behavioral disorders registered by the end of the year, by age and sex, Georgia, 2011

	Total	Including : aged				Females
		0-14	15-17	18-19	20-59	
Mental and behavioural disorders	**67736**	**1159**	**837**	**885**	**53956**	**28077**
Including:						
Organic, including symptomatic, mental disorders	9326	217	166	140	6677	3453
Mental and behavioural disorders due to psychoactive substances use	2244	0	0	0	2022	135
Schizophrenia, schizotypal and delusional disorders	19252	8	20	129	16810	9418
Including schizophrenia	12083	1	2	56	10616	5520
Mood (affective) disorders	4780	1	25	9	4055	2065
Neurotic, stress-related and somatoform disorders	8420	0	46	83	7225	4880
Behavioural syndromes associated with physiological disturbances and physical factors	437	2	1	0	422	161
Disorders of adult personality and behaviour	2345	0	0	33	1900	539
Mental retardation	19466	808	520	433	13660	6754
Disorders of psychological development	1085	36	46	58	924	525
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	381	87	13	0	259	147

Table 4.81 Mental and behavioral disorders, new cases, age and sex distribution, Georgia, 2011

	Total	Including : aged				Females
		0-14	15-17	18-19	20-59	
Mental and behavioural disorders	**1870**	**137**	**73**	**101**	**1244**	**809**
Including:						
Organic, including symptomatic, mental disorders	288	5	9	4	187	117
Mental and behavioural disorders due to psychoactive substances use	11	0	0	0	10	3
Schizophrenia, schizotypal and delusional disorders	646	1	4	37	517	282
Including Schizophrenia	*235*	*1*	*1*	*13*	*195*	*114*
Mood (affective) disorders	*139*	*0*	*0*	*1*	*114*	*78*
Neurotic, stress-related and somatoform disorders	*238*	*1*	*2*	*10*	*167*	*124*
Behavioural syndromes associated with physiological disturbances and physical factors	*1*	*0*	*0*	*0*	*0*	*1*
Disorders of adult personality and behaviour	*61*	*0*	*0*	*1*	*47*	*5*
Mental retardation	469	114	57	48	202	191
Disorders of psychological development	1	1	0	0	0	1
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	16	15	1	0	0	7

Table 4.82 Mental and behavioural disorders, hospital discharges by regions, Georgia, 2011

	Number of discharges	Including hospital deaths	Case fatality rate (%)
Total	**3138**	**46**	**1.5**
Including:			
Organic, including symptomatic, mental disorders	379	18	4.7
Mental and behavioural disorders due to psychoactive substances use	172	1	0.6
Schizophrenia, schizotypal and delusional disorders	2374	26	1.1
Including schizophrenia	*1732*	*22*	*1.3*
Mood (affective) disorders	*73*	*0*	*0*
Neurotic, stress-related and somatoform disorders	*2*	*0*	*0*
Behavioural syndromes associated with physiological disturbances and physical factors	*0*	*0*	*0*
Disorders of adult personality and behaviour	*17*	*0*	*0*
Mental retardation	102	0	0

Table 4.83 Mental and behavioural disorders, hospital discharges, Georgia, 2009 - 2011

	2009	2010	2011
Number of discharges	3488	3734	3138
Including: deaths	52	56	46
Case fatality rate (%)	*1.5*	*1.5*	*1.5*
Number of patient treated in the diurnal hospitals	575	593	680

Table 4.84 Diseases of the nervous system, Georgia, 2007 - 2011

	Total				Children under 15			
	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	New cases	Incidence per 100000 children
2007	93749	2136.3	26013	592.8	22003	2868.0	6555	854.4
2008	104523	2384.3	29049	662.6	22224	2954.5	6267	833.2
2009	121062	2744.6	45489	1031.3	27474	3649.1	13149	1746.4
2010	125619	2821.1	47742	1072.2	26896	3555.3	11406	1507.7
2011	**143717**	**3205.5**	**46095**	**1028.1**	**28079**	**3693.1**	**10340**	**1360.0**

Table 4.85 Diseases of the nervous system, morbidity by the regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	5410	--	1953	--	6406	--	2577	--
Ajara	5656	1455.1	2125	546.7	10533	2686.3	3464	883.4
Tbilisi	55519	4796.5	12160	1050.5	64546	5528.1	15081	1291.6
Kakheti	7394	1824.3	2750	678.5	6334	1557.8	2070	509.1
Imereti	17045	2426.7	8663	1233.3	16461	2331.6	8020	1136.0
Samegrelo and Zemo Svaneti	6560	1379.3	2361	496.4	5920	1237.7	1730	361.7
Shida Kartli	8751	2806.6	5246	1682.5	8024	2557.0	5254	1674.3
Kvemo Kartli	5308	1055.7	2640	525.1	10028	1972.1	5165	1015.7
Guria	1104	788.0	487	347.6	1092	778.3	407	290.1
Samtskhe-Javakheti	2468	1164.2	1256	592.5	2115	990.6	788	369.1
Mtskheta-Mtianeti	2594	2377.6	1089	998.2	2353	2148.9	1001	914.2
Racha-Lechkhumi and Kvemo Svaneti	1291	2717.9	660	1389.5	922	1953.4	472	1000.0
Other departments	6519	--	6352	--	8983	--	66	--
Georgia	**125619**	**2821.1**	**47742**	**1072.2**	**143717**	**3204.5**	**46095**	**1028.1**

Table 4.86 Diseases of the nervous system in children, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	846	--	521	--	541	--	306	--
Ajara	627	950.0	321	486.4	1033	1553.4	411	618.0
Tbilisi	16254	8263.3	4356	2214.5	16416	8290.9	3186	1609.1
Kakheti	825	1197.4	388	563.1	797	1155.1	371	537.7
Imereti	2556	2142.5	1683	1410.7	1862	1555.6	1092	912.3
Samegrelo and Zemo Svaneti	1050	1299.5	688	851.5	937	1155.4	439	541.3
Shida Kartli	2202	4154.7	1553	2930.2	2458	4620.3	2092	3932.3
Kvemo Kartli	1613	1888.8	1235	1446.1	3368	3907.2	2181	2530.2
Guria	219	920.2	107	449.6	251	1054.6	95	399.2
Samtskhe-Javakheti	530	1472.2	453	1258.3	270	745.9	97	268.0
Mtskheta-Mtianeti	128	691.9	76	410.8	118	634.4	58	311.8
Racha-Lechkhumi and Kvemo Svaneti	29	358.0	9	111.1	20	250.0	4	50.0
Other departments	17	--	16	--	8	-	8	-
Georgia	**26896**	**3555.3**	**11406**	**1504.7**	**28079**	**3693.1**	**10340**	**1360.0**

Table 4.87 Diseases of the nervous system by certain nosologies, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the nervous system	**125619**	**2821.1**	**47742**	**1072.2**	**143717**	**3205.5**	**46095**	**1028.1**
Including								
Inflammatory diseases of the central nervous system	5474	122.9	2627	59.0	6554	146.2	3209	71.6
Systemic atrophies primarily affecting the central nervous system	2259	50.7	1076	24.2	2363	52.7	986	22.0
Extrapyramidal and movement disorders	8764	196.8	2776	62.3	9517	212.3	2048	45.7
Other degenerative and demyelinating diseases of the nervous system	2740	61.5	1011	22.7	2607	58.1	883	19.7
Episodic and paroxysmal disorders	22174	498.0	6334	142.2	26246	585.4	5771	128.7
Including: Epilepsy and status epilepticus	*9384*	*210.7*	*1629*	*36.6*	*11498*	*256.5*	*1686*	*37.6*
Disorders of the peripheral nervous system	40424	907.8	16705	375.2	46594	1039.3	16765	373.9
Cerebral palsy and other paralytic syndromes	7258	163.0	2551	57.3	8107	180.8	2487	55.5

Table 4.88 Diseases of the nervous system in children by certain nosologies, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Diseases of the nervous system	**26896**	**3555.3**	**11406**	**1507.7**	**28079**	**3693.1**	**10340**	**1360.0**
Including								
Inflammatory diseases of the central nervous system	1604	212.0	1447	191.3	2249	295.8	1987	261.3
Systemic atrophies primarily affecting the central nervous system	251	33.2	195	25.8	462	60.8	279	36.7
Extrapyramidal and movement disorders	798	105.5	432	57.1	947	124.6	300	39.5
Other degenerative and demyelinating diseases of the nervous system	295	39.0	151	20.0	195	25.6	124	16.3
Episodic and paroxysmal disorders	4902	648.0	1928	254.9	5283	694.9	2090	274.9
Including: Epilepsy and status epilepticus	*2036*	*269.1*	*324*	*42.8*	*2272*	*298.8*	*389*	*51.2*
Disorders of the peripheral nervous system	1260	166.6	455	60.1	1225	161.1	406	53.4
Cerebral palsy and other paralytic syndromes	1910	252.5	430	56.8	2100	276.2	553	72.7

Table 4.89 Diseases of the nervous system, hospital discharges, Georgia, 2010 – 2011

	2010		2011	
	Hospital discharges	Case fatality rate (%)	Hospital discharges	Case fatality rate (%)
Diseases of the nervous system	**6468**	**5.3**	**6545**	**3.5**
Including				
Cerebral palsy in children	373	1.3	70	4.3
Disorders of the peripheral nervous system	1253	0.2	939	0.9

Table 4.90 Diseases of the nervous system, hospital discharges in children, Georgia, 2010 – 2011

	2010				2011			
			Children under 1				Children under 1	
	Number of discharges	Case fatality rate, (%)	Number of discharges	Case fatality rate, (%)	Number of discharges	Case fatality rate, (%)	Number of discharges	Case fatality rate, (%)
Diseases of the nervous system	**1680**	**0.7**	**573**	**0.3**	**1351**	**1.2**	**538**	**1.5**
Including								
Infantile cerebral palsy	146	3.4	16	6.2	64	4.7	3	0.0
Disorders of the peripheral nervous system	370	0.0	264	0.0	360	0.0	287	0.0

Table 4.91 Neurological beds performance indicators by the regions, Georgia, 2010 - 2011[*]

	2010				2011			
	Total number of beds	Average length of stay	Occupancy rate (days)	Bed rotation rate	Total number of beds	Average length of stay	Occupancy rate (days)	Bed rotation rate
Ajara	32	7.0	152.2	22.3	14	5.8	217.4	37.5
Tbilisi	168	6.8	150.1	22.1	101	5.0	185.9	37.3
Imereti	29	7.2	248.4	35.3	29	5.5	191.3	36.2
Samegrelo and Zemo Svaneti	8	5.2	310.4	59.4	9	4.9	300.8	61.2
Kvemo Kartli	15	4.6	98.9	21.3	16	4.3	93.4	21.8
Guria	10	7.1	84.2	12.2		7.6	31.3	4.1
Racha-Lechkhumi and Kvemo Svaneti	5	7.5	192.6	25.6	2	7.1	139.8	20.0
Other departments	22	11.0	209.0	18.9	22	11.6	276.0	23.6
Georgia	**289**	**7.0**	**164.9**	**23.9**	**193**	**5.7**	**189.7**	**33.6**

[*] *Other regions do not have in-patient beds for patients with neurological disorders*

Table 4.92 Diseases of the nervous system, hospital discharges, Georgia, 2010 – 2011

	2010				2011			
	Hospital discharges		Case fatality rate (%)		Hospital discharges		Case fatality rate (%)	
	All ages	Children	All ages	Children	All ages	Children	All ages	Children
Ajara	993	119	5.0	0.0	1059	159	0.9	0.6
Tbilisi	2345	898	4.4	0.4	2401	656	4.0	1.4
Kakheti	477	25	9.0	0.0	524	8	6.7	0.0
Imereti	1053	505	5.3	0.4	846	377	3.5	1.1
Samegrelo and Zemo Svaneti	329	29	0.6	0.0	226	65	0.0	0.0
Shida Kartli	523	61	13.0	0.0	629	51	6.4	2.0
Kvemo Kartli	234	27	6.0	0.0	165	14	3.0	7.1
Guria	48	14	0	0.0	142	19	4.2	0.0
Samtskhe-Javakheti	174	2	4.0	0.0	165	2	1.2	0.0
Mtskheta-Mtianeti	0	0	0.0	0.0	3	0	0.0	0.0
Racha-Lechkhumi and Kvemo Svaneti	28	0	0.0	0.0	40	0	2.5	0.0
Other departments	264	0	1.1	0.0	345	0	1.2	0.0
Georgia	6468	1680	**5.3**	**0.3**	**6545**	**1351**	**3.5**	**1.2**

Table 4.93 Nervous system surgeries and case fatality rate, Georgia, 2009 – 2011

	2009		2010		2011	
	Number of operations	Case fatality rate, (%)	Number of operations	Case fatality rate, (%)	Number of operations	Case fatality rate, (%)
Total number of operations	**3450**	**2.7**	**3387**	**2.5**	**3609**	**1.5**
Including on						
Brain	1101	6.6	1013	4.2	1126	1.6
Spinal cord	133	2.3	66	1.5	244	0.4
Dura and pia maters	284	0	107	10.7	36	11.1
Peripheral nervous system	144	0.7	109	0.9	103	0.0
Intervertebral disks	1701	0.1	1960	0.0	1979	0.1

Table 4.94 Nervous system surgeries by regions, Georgia, 2011*

	Total	Including on				
		Brain	Spinal cord	Dura and pia maters	Peripheral nervous system	Intervertebral disks
Ajara	346	9	4	5	3	317
Tbilisi	2415	886	230	6	89	1106
Imereti	501	142	6	18	2	318
Samegrelo and Zemo Svaneti	192	55	2	7	0	128
Shida Kartli	64	21	0	0	0	43
Kvemo Kartli	4	4	0	0	0	0
Other departments	87	9	2	0	9	67
Georgia	**3609**	**1126**	**244**	**36**	**103**	**1979**

Table 4.95 Diseases of the eye and adnexa, Georgia, 2007 – 2011

	All ages				Children			
	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	New cases	Incidence per 100000 children
2007	86322	1967.1	24573	560.0	14340	1869.1	7473	974.1
2008	104858	2391.9	35072	800.0	17102	2273.6	8648	1149.7
2009	123384	2797.3	47797	1083.6	19241	2555.6	10415	1383.3
2010	124576	2797.7	49531	1112.4	17695	2339.1	9679	1279.4
2011	**138351**	**3085.9**	**51745**	**1154.1**	**18423**	**2423.1**	**10296**	**1354.2**

Table 4.96 Diseases of the eye and adnexa by certain nosologies, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the eye and adnexa	**124576**	**2797.7**	**49531**	**1112.4**	**138351**	**3085.9**	**51745**	**1154.1**
Including								
Disorders of lens (cataract)	36309	815.4	11847	266.1	39353	877.7	11807	263.3
Glaucoma	12347	277.3	3783	85.0	13088	291.9	3894	86.9
Disorders of refraction and accommodation	37194	835.3	17274	387.9	43664	973.9	18262	407.3

* *In other regions there were no surgeries on the nervous system registered*

Table 4.97 Diseases of the eye and adnexa in children, certain nosologies, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Diseases of the eye and adnexa	**17695**	**2339.1**	**9679**	**1279.4**	**18423**	**2423.1**	**10296**	**1354.2**
Including								
Disorders of lens (cataract)	285	37.7	143	18.9	212	27.9	86	11.3
Glaucoma	75	9.9	21	2.8	61	8.0	16	2.1
Disorders of refraction and accommodation	7719	1020.4	3020	399.2	8316	1093.8	2826	371.7

Table 4.98 Diseases of the eye and adnexa by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	4865	--	1668	--	4830	-	1314	-
Ajara	11218	2886.0	5870	1510.2	12934	3298.6	6152	1569.0
Tbilisi	58258	5033.1	15030	1298.5	62870	5384.5	14932	1278.9
Kakheti	7410	1828.3	3154	778.2	6617	1627.4	2387	587.1
Imereti	15788	2247.7	7090	1009.4	16449	2329.9	8176	1158.1
Samegrelo and Zemo Svaneti	4606	968.5	1794	377.2	5131	1072.8	2240	468.3
Shida Kartli	7422	2380.4	5298	1699.2	7811	2489.2	5405	1722.4
Kvemo Kartli	4821	958.8	3330	662.3	10073	1980.9	6303	1239.5
Guria	2626	1874.4	1591	1135.6	2444	1742.0	987	703.5
Samtskhe-Javakheti	2490	1174.5	1573	742.0	3261	1527.4	2159	1011.2
Mtskheta-Mtianeti	2115	1938.6	1116	1022.9	2124	1939.7	1037	947.0
Racha-Lechkhumi and Kvemo Svaneti	808	1701.1	305	642.1	753	1595.3	195	413.1
Other departments	2149	--	1712	--	3054	--	458	--
Georgia	**124576**	**2797.7**	**49531**	**1112.4**	**138351**	**3085.9**	**51745**	**1154.1**

Table 4.99 Diseases of the eye and adnexa in children by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	747	--	437	--	815	--	339	--
Ajara	2015	3053.0	1262	1912.1	1733	2606.0	1087	1634.6
Tbilisi	7746	3938.0	3054	1552.6	8217	4150.0	3588	1812.1
Kakheti	864	1254.0	544	789.6	873	1265.2	504	730.4
Imereti	2653	2223.8	1508	1264.0	2472	2065.2	1325	1106.9
Samegrelo and Zemo Svaneti	435	538.4	265	328.0	457	563.5	284	350.2
Shida Kartli	1214	2290.6	994	1875.5	1183	2223.7	1103	2073.3
Kvemo Kartli	1057	1237.7	843	987.1	1636	1897.9	1387	1609.0
Guria	486	2042.0	393	1651.3	432	1815.1	334	1403.4
Samtskhe-Javakheti	144	400.0	112	311.1	283	781.8	128	353.6
Mtskheta-Mtianeti	241	1302.7	202	1091.9	257	1381.7	178	957.0
Racha-Lechkhumi and Kvemo Svaneti	84	1037.0	57	703.7	37	462.5	14	175.0
Other departments	9	--	8	--	28	--	25	--
Georgia	**17695**	**2339.1**	**9679**	**1279.4**	**18423**	**2423.1**	**10296**	**1354.2**

Table 4.100 Diseases of the eye and adnexa, hospital discharges, Georgia, 2010 – 2011

	2010			2011		
	Hospital discharges	Including children		Hospital discharges	Including children	
		0-15	0-1		0-15	0-1
Diseases of the eye and adnexa	**5631**	**252**	**4**	**6105**	**268**	**13**
Including						
Disorders of lens (cataract)	2879	29	0	3365	37	1
Glaucoma	594	4	0	581	10	0

Table 4.101 Ophthalmologic bed occupancy rates by the regions, Georgia, 2010 - 2011[*]

	2010				2011			
	Total Number of beds	Average length of stay	Occupancy Rate (days)	Bed rotation rate	Total Number of beds	Average length of stay	Occupancy rate (days)	Bed rotation rate
Ajara	13	1.7	160.7	95.6	11	1.2	119.2	102.3
Tbilisi	85	3.7	86.5	23.3	35	2.9	177.2	61.4
Kakheti	10	1.1	39.9	37.7	4	1.0	92.3	92.3
Imereti	20	1.4	26.9	18.8	20	1.6	23.1	14.7
Samegrelo and Zemo Svaneti	2	1.0	2.5	2.5	1	2.0	2.0	102.3
Guria	3	2.0	18.7	9.3	0	0.0	0.0	0.0
Georgia	**133**	**2.6**	**78.5.**	**28.1**	**71**	**2.1**	**112.5**	**53.7**

[*] *There are no ophthalmologic beds in other regions*

Table 4.102 Eye and adnexa surgery, Georgia, 2008 – 2011

	2008	2009	2010	2011
In-patient operations				
Total	**5748**	**5124**	**5723**	**6017**
Including microsurgery	3683	3372	4435	3661
Glaucoma operations	*603*	*594*	*588*	*614*
Enucleating surgery	*149*	*132*	*213*	*135*
Cataract operations	*3651*	*2803*	*3405*	*3680*
Out-patient operations				
Total	**5214**	**6751**	**7365**	**6961**
Including microsurgery	2212	3162	5123	1459
Glaucoma operations	*450*	*730*	*318*	*748*
Cataract operations	*3297*	*4123*	*4370*	*4351*

Table 4.103 Diseases of the eye and adnexa, in-patient surgeries by regions, Georgia, 2010-2011

	2010				2011			
	Total	Including			Total	Including		
		Glaucoma	Enucleating	Cataract		Glaucoma	Enucleating	Cataract
Ajara	896	64	58	653	832	21	4	643
Tbilisi	1841	153	84	772	2249	195	78	938
Kakheti	382	50	17	292	365	56	16	280
Imereti	1961	209	45	1092	1839	279	32	1209
Samegrelo and Zemo Svaneti	297	13	5	247	331	10	2	318
Shida Kartli	245	54	0	167	65	15	35	190
Kvemo Kartli	149	15	2	115	268	32	3	211
Guria	28	14	0	14	22	0	0	22
Samtskhe-Javakheti	37	12	0	25	34	6	0	22
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0	0	0	0	0
Mtskheta-Mtianeti	29	1	0	15	0	0	0	0
Other departments	58	3	2	13	12	0	0	2
Georgia	**5723**	**588**	**213**	**3405**	**6017**	**614**	**170**	**3839**

Table 4.104 Diseases of the eye and adnexa, out-patient surgeries by regions, Georgia, 2010 – 2011

	2010				2011			
	Total	Including			Total	Including		
		Glaucoma	Enucleating	Cataract		Glaucoma	Enucleating	Cataract
Ajara	6	0	0	0	9	1	0	0
Tbilisi	6058	4426	226	3378	5495	823	634	3402
Kakheti	0	0	0	0	177		11	166
Imereti	856	686	71	615	784	590	81	509
Samegrelo and Zemo Svaneti	4	4	0	137	4	4	0	173
Shida Kartli	153	3	13	103	294	32	20	20
Kvemo Kartli	111	4	4	85	85	1	2	81
Guria	91	0	0	0	90	6	0	0
Samtskhe-Javakheti	17	0	0	37	21	2	0	0
Racha-Lechkhumi and Kvemo Svaneti	40	0	3	0	0	0	0	0
Mtskheta-Mtianeti	29	0	1	15	2	0	0	0
Georgia	**7365**	**5123**	**318**	**4370**	**6961**	**1459**	**748**	**4351**

Table 4.105 Diseases of the ear and mastoid process, Georgia, 2007- 2011

	All ages				In children			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2007	27799	633.5	15382	350.5	8570	1117.0	6568	856.1
2008	32167	733.8	19900	453.9	8859	1177.7	6872	913.6
2009	42031	952.9	28289	641.3	13682	1817.2	11621	1543.5
2010	41059	922.1	27902	626.6	12559	1660.1	10622	1404.1
2011	**45463**	**1014.0**	**29862**	**666.1**	**14797**	**1946.2**	**12269**	**1613.7**

Table 4.106 Diseases of the ear and mastoid process, Georgia, 2010–2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the ear and mastoid process	**41059**	**922.1**	**27902**	**626.6**	**45463**	**1014.0**	**29862**	**666.1**
Including								
Otitis media	18200	408.7	12217	274.4	19533	435.7	12877	287.2

Table 4.107 Diseases of the ear and mastoid process in children, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Diseases of the ear and mastoid process	**12559**	**1660.1**	**10622**	**1404.1**	**14797**	**1946.2**	**12269**	**1613.7**
Including								
Otitis media	6216	821.7	5027	664.5	7220	949.6	5881	773.5

Table 4.108 Diseases of the ear and mastoid process, morbidity rates by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	2943	--	1210	--	2978	--	1079	--
Ajara	6048	1556.0	3703	952.7	5208	1328.2	2953	753.1
Tbilisi	9025	779.7	5709	493.2	11130	953.2	6955	595.7
Kakheti	3303	815.0	2219	547.5	2639	649.0	1831	450.3
Imereti	8301	1181.8	6501	925.5	7937	1124.2	6316	894.6
Samegrelo and Zemo Svaneti	3156	663.6	1938	407.5	3376	705.8	2035	425.5
Shida Kartli	2373	761.1	1726	553.6	2545	811.0	1949	621.1
Kvemo Kartli	1811	360.2	1543	306.9	4999	983.1	3422	673.0
Guria	1019	727.3	845	603.1	1299	925.9	1090	776.9
Samtskhe-Javakheti	1027	484.4	743	350.5	858	401.9	647	303.0
Mtskheta-Mtianeti	903	827.7	765	701.2	1017	928.8	849	775.3
Racha-Lechkhumi and Kvemo Svaneti	438	922.1	297	625.3	220	466.1	162	343.2
Other departments	712	--	703	--	1257	--	574	--
Georgia	**41059**	**922.1**	**27902**	**626.6**	**45463**	**1014.0**	**29862**	**666.1**

Table 4.109 Diseases of the ear and mastoid process in children by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 10000 children	Number of new cases	Incidence per 10000 children	Number of registered cases	Prevalence per 10000 children	Number of new cases	Incidence per 10000 children
Abkhazia	534	--	421	--	718	--	427	--
Ajara	2425	3674.2	1830	2772.7	1996	3001.5	1475	2218.0
Tbilisi	2140	1088.0	1920	976.1	2884	1456.6	2598	1312.1
Kakheti	915	1328.0	809	1174.2	840	1217.4	749	1085.5
Imereti	2149	1801.3	1826	1530.6	2342	1956.6	2055	1716.8
Samegrelo and Zemo Svaneti	1125	1392.3	879	1087.9	1178	1452.5	916	1129.5
Shida Kartli	863	1628.3	739	1394.3	975	1832.7	918	1725.6
Kvemo Kartli	949	1111.2	888	1039.8	2410	2795.8	1799	2087.0
Guria	635	2668.1	595	2500.0	762	3201.7	701	2945.4
Samtskhe-Javakheti	388	1077.8	337	936.1	283	781.8	248	685.1
Mtskheta-Mtianeti	321	1735.1	291	1573.0	304	1634.4	284	1526.9
Racha-Lechkhumi and Kvemo Svaneti	105	1296.3	78	963.0	57	712.5	55	687.5
Other departments	10	--	9	--	48	--	44	--
Georgia	**12559**	**1660.1**	**10622**	**1404.1**	**14797**	**1946.2**	**12269**	**1613.7**

Table 4.110 Diseases of the ear and mastoid process, hospital discharges, Georgia, 2010 – 2011

	2010		2011	
	Hospital discharges	Including children	Hospital discharges	Including children
Ajara	739	184	272	4
Tbilisi	324	8	1891	756
Kakheti	3	0	4	1
Imereti	110	55	62	21
Samegrelo and Zemo Svaneti	1	0	75	0
Shida Kartli	0	0	2	0
Kvemo Kartli	99	35	0	0
Guria	0	0	0	0
Samtskhe-Javakheti	0	0	0	0
Mtskheta-Mtianeti	3	0	1	0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0
Other departments	10	0	8	0
Georgia	**1289**	**282**	**2315**	**782**

Table 4.111 In-patient surgeries on ear, Georgia, 2008 – 2011

	2008	2009	2010	2011
Total number – all ages	**245**	**308**	**427**	**1938**
Including in children	*15*	*3*	*37*	*744*

Table 4.112 In-patient surgeries on ear by to regions, Georgia, 2010 - 2011[*]

	2010		2011	
	All ages	In children	All ages	In children
Ajara	37	0	59	0
Tbilisi	380	37	1871	744
Kakheti	0	0	2	0
Imereti	10	0	1	0
Samegrelo and Zemo Svaneti	0	0	2	0
Kvemo Kartli	0	0	1	0
Georgia	**427**	**37**	**1938**	**744**

Table 4.113 Diseases of the circulatory system, morbidity rates, Georgia, 2000 – 2011

	All ages				In children aged 0-15			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2002	187827	4296.6	56810	1299.6	3727	406.9	1321	144.2
2003	208472	4768.9	64140	1467.2	4049	442.1	1731	204.7
2004	235429	5385.5	70648	1616.1	5395	638.0	1614	176.2
2005	256981	5892.2	82533	1888.0	5214	634.3	1594	174.0
2006	282701	6427.9	83166	1891.0	5325	670.1	1732	218.0
2007	288964	6584.6	71198	1622.4	5181	675.3	1201	156.5
2008	306573	6993.3	74379	1696.7	5102	678.3	1250	166.2
2009	326421	7400.3	96038	2177.3	4775	634.2	1359	180.5
2010	337651	7582.9	98193	2205.2	4672	617.6	1103	145.8
2011	**363488**	**8107.4**	**103466**	**2307.7**	**4176**	**549.3**	**749**	**98.5**

Table 4.114 Diseases of the circulatory system, morbidity rates by certain nosologies, Georgia, 2005– 2011

	2005	2006	2007	2008	2009	2010	2011
Prevalence[*] per 100000 population	**5892.2**	**6427.9**	**6584.6**	**6993.3**	**7400.3**	**7582.9**	**8107.4**
Incidence per 100000 population	**1888.0**	**1891.0**	**1622.4**	**1696.7**	**2177.3**	**2205.2**	**2307.7**
Including							
Rheumatic diseases *Prevalence*	307.2	377.8	351.8	341.7	314.0	289.2	262.0
Incidence	82.7	100.0	87.4	72.9	76.9	124.3	76.9
Hypertensive diseases *Prevalence*	2962.6	3329.9	3441.4	3719.8	4088.3	4335.9	4733.2
Incidence	950.7	917.4	803.5	814.0	1109.4	1182.5	1267.3
Ischaemic heart diseases *Prevalence*	1857.8	1955.7	1868.7	1951.9	1981.8	1993.7	2080.3
Incidence	545.7	569.9	427.5	429.8	521.6	558.5	614.0
Cerebrovascular diseases *Prevalence*	255.9	261.1	274.0	281.2	316.8	333.7	346.0
Incidence	111.3	116.9	88.2	101.3	123.9	112.7	106.3

[*] *There were no surgeries on ear registered in other regions*

[*] *Prevalence – total number of patients registered by the end of the reporting year per 100 000 population*

Table 4.115 Diseases of the circulatory system in children, morbidity rates by certain nosologies, Georgia, 2005 – 2011

	2005	2006	2007	2008	2009	2010	2011
Prevalence per 100000 children	**634.3**	**670.1**	**675.3**	**678.3**	**634.2**	**617.6**	**549.3**
Incidence per 100000 children	**174.0**	**218.0**	**156.5**	**166.2**	**180.5**	**145.8**	**98.5**
Including							
Rheumatic diseases *Prevalence*	231.4	333.7	315.7	308.2	273.1	252.0	222.7
Incidence	82.1	81.4	53.2	51.0	33.3	63.0	26.3
Hypertensive diseases *Prevalence*	4.4	4.9	5.6	6.5	8.0	9.0	8.7
Incidence	3.4	2.4	0.8	1.3	5.7	3.0	3.3
Cerebrovascular diseases *Prevalence*	2.7	6.9	2.6	1.7	1.6	2.0	1.7
Incidence	0.3	5.5	0.5	1.6	1.1	0.9	0.3

Table 4.116 Diseases of the circulatory system by regions, Georgia, 2011

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	11188	-	2761	-
Ajara	21767	5551.0	7646	1950.0
Tbilisi	158530	13577.0	28281	2422.1
Kakheti	30008	7380.2	8035	1976.1
Imereti	50944	7216.0	20821	2949.6
Samegrelo and Zemo Svaneti	26045	5445.3	6940	1451.0
Shida Kartli	20719	6602.6	10195	3248.9
Kvemo Kartli	15867	3120.4	7920	1557.5
Guria	4513	3216.7	1456	1037.8
Samtskhe-Javakheti	9467	4434.2	4199	1966.8
Mtskheta-Mtianeti	6768	6180.9	2719	2483.1
Racha-Lechkhumi and Kvemo Svaneti	7113	15069.9	2052	4347.5
Other departments	559	-	441	-
Georgia	**363488**	**8107.4**	**103466**	**2307.8**

Table 4.117 Diseases of the circulatory system, according to certain nosologies, Georgia, 2011

	Cases registered by the end of the year				New cases			
	All ages		In children		All ages		In children	
	Number	%	Number	%	Number	%	Number	%
Diseases of the circulatory system	**363488**	**100**	**4176**	**100**	**103466**	**100**	**749**	**100**
Including								
Acute rheumatic fever	3038	0.8	355	8.5	1321	1.3	169	22.6
Chronic rheumatic heart diseases	8709	2.4	1338	32.0	2126	2.1	31	4.1
Hypertensive diseases	212209	58.4	66	1.6	56820	54.9	25	3.3
Ischaemic heart diseases	93269	25.6	0	0	27517	26.6	0	0
Pulmonary heart disease and diseases of pulmonary circulation	1237	0.3	7	0.2	672	0.6	3	0.4
Cerebrovascular diseases	15511	4.3	13	0.3	4768	4.6	2	0.3
Diseases of arteries, arterioles and capillaries	5672	1.6	27	0.6	2355	2.3	29	3.9
Other diseases of circulatory system	23843	6.6	2370	56.8	7887	7.6	490	65.4

Table 4.118 Hypertensive diseases by regions, Georgia, 2011

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	7668	-	1268	-
Ajara	14570	3715.9	4238	1210.8
Tbilisi	76255	6530.9	14137	845.5
Kakheti	20019	4923.5	4261	1048.0
Imereti	32755	4639.5	10156	1438.5
Samegrelo and Zemo Svaneti	16968	3547.6	4354	910.3
Shida Kartli	13807	4400.0	6463	2059.6
Kvemo Kartli	11468	2255.3	5474	1076.5
Guria	2721	1939.4	824	587.3
Samtskhe-Javakheti	6202	2904.9	2377	1113.3
Mtskheta-Mtianeti	5072	4632.0	1958	1788.1
Racha-Lechkhumi and Kvemo Svaneti	4252	9008.5	1020	2161.0
Other departments	452	-	290	-
Georgia	**212209**	**4733.2**	**56820**	**1267.3**

Table 4.119 Ischaemic heart diseases, distribution by certain nosologies, Georgia, 2011

	Registered by the end of the year		New cases	
	Number	%	Number	%
Ischaemic heart diseases	**93269**	**100**	**27517**	**100**
Including				
Angina pectoris	30948	33.2	9578	34.8
Acute myocardial infarction	2145	2.3	1743	6.3
Other acute ischaemic heart diseases	9864	10.6	5404	19.6
Other ischaemic heart diseases	50312	53.9	10792	39.3

Table 4.120 Rheumatic diseases, morbidity rates, Georgia, 2011

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Rheumatic diseases	**12746**	**284.3**	**3687**	**82.2**
Acute rheumatic fever	3038	67.8	1321	29.5
Including rheumatic fever with heart involvement	999	22.9	240	5.3
Chronic rheumatic heart diseases	8709	194.2	2126	47.4

Table 4.121 Diseases of the circulatory system, hospital discharges, Georgia, 2011

	Total number – all ages	In children	Case fatality rate (%)
Diseases of circulatory system	**44731**	**374**	**6.1**
Including			
Acute rheumatic fever	104	16	0.0
Including rheumatic fever with heart involvement	50	14	0.0
Chronic rheumatic heart diseases	433	3	1.6
Hypertensive diseases	2808	0	0.8
Ischaemic heart diseases	20786	0	3.8
Including: Angina pectoris	7579	29	0.4
Acute myocardial infarction	6385	0	8.6
Recurrent myocardial infarction	725	0	4.8
Other acute ischaemic heart diseases	1897	0	4.5
Chronic ischaemic heart disease	4200	0	2.3
Pulmonary heart disease and diseases of pulmonary circulation	577	0	19.1
Cerebrovascular diseases	7335	0	15.4
Including: Subarachnoid haemorrhage	533	0	25.0
Intracerebral and other nontraumatic intracranial haemorrhages	1098	0	28.1
Cerebral infarction	3297	0	14.5
Occlusion and stenosis of precerebral and cerebral arteries, not resulting in cerebral infarction	697	0	5.3
Other cerebrovascular diseases	117	0	7.7

Table 4.122 Diseases of the circulatory system, hospital discharges and case fatality rate by regions, Georgia, 2011

	Total number of discharges	Including hospital deaths	Case fatality rate (%)
Ajara	3815	258	6.8
Tbilisi	22293	1162	5.2
Kakheti	1490	169	11.3
Imereti	7521	446	5.9
Samegrelo and Zemo Svaneti	2473	147	5.9
Shida Kartli	1226	122	10.0
Kvemo Kartli	2644	147	5.6
Guria	699	94	13.4
Samtskhe–Javakheti	1212	101	8.3
Mtskheta–Mtianeti	413	22	5.3
Racha–Lechkhumi and Kvemo Svaneti	169	4	2.4
Other departments	776	43	5.5
Georgia	**44731**	**2715**	**6.1**

Table 4.123 Surgeries on the circulatory system, Georgia, 2008 – 2011

	2008		2009		2010		2011	
	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)
Operations on the heart	**1253**	**4.6**	**1373**	**3.5**	**1382**	**4.3**	**2352**	**1.4**
Including								
On open heart	732	5.2	788	5.2	546	0.0	776	0.5
Due to Congenital malformations	65	9.2	162	2.5	148	18.9	423	6.1
Implantation of a cardio stimulator	250	0.8	112	0.9	157	0.0	220	0.9
Endovascular balloon dilatation	195	1.0	187	0	218	0.0	892	0.0
Operations on the blood vessels	**3207**	**0.3**	**3957**	**0.5**	**4649**	**0.3**	**5040**	**0.7**
Including								
On arteries	315	0.6	732	1.9	658	0.8	920	2.1
On veins	951	0.1	1678	0.1	1669	0.1	1617	0.2
On lymphatic vessel	76	0.0	24	0.0	77	0.0	249	0.0
Endovascular	1449	0.3	1216	0.2	1785	0.1	1484	0.1

Table 4.124 Diseases of the respiratory system, Georgia, 1996 – 2011

	All ages				Children aged 0-15			
	Number of registered cases	Prevalence	Number of registered cases	Prevalence	Number of registered cases	Prevalence	Number of registered cases	Prevalence
1996	214753	4594.1	156414	3346.1	119845	12637.9	95268	10046.2
2000	215841	4848.1	150606	3382.8	95182	10464.6	76566	8417.9
2001	225259	5083.7	156535	3532.7	101740	11238.8	79996	8836.9
2002	260808	5966.1	188241	4306.1	129307	14117.3	105717	11541.9
2003	304217	7027.6	236091	5453.8	157730	18655.2	137155	16221.8
2004	306984	7022.3	235532	5387.9	161811	17666.0	139364	15215.3
2005	328310	7510.2	249115	5698.6	177023	19326.8	151521	16542.6
2006	381538	8675.3	313784	7134.7	203398	25600.8	182795	23007.6
2007	351087	8000.3	288793	6580.8	184920	24103.2	169776	22129.3
2008	362824	8276.5	299800	6838.8	184384	24512.6	169762	22568.7
2009	505340	11456.6	447518	10145.7	259136	34418.4	246604	32753.9
2010	494194	11098.5	439289	9865.5	256897	33958.6	244385	32304.7
2011	**558241**	**12451.3**	**470741**	**10499.6**	**283497**	**37287.5**	**259815**	**34172.7**

Table 4.125 Diseases of the respiratory system by regions, Georgia, 2011

	All ages				Children aged 0-15			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	19655	-	12904	-	10620	-	7971	-
Ajara	44293	11296.4	25430	6485.6	19818	29801.5	12836	19302.3
Tbilisi	174104	14911.3	152993	13103.2	99404	50204.0	92122	46526.3
Kakheti	52031	12796.6	46664	11476.6	23642	34263.8	22329	32360.9
Imereti	78166	11071.7	70046	9921.5	39842	33284.9	38527	32186.3
Samegrelo	33122	6924.9	27431	5735.1	16225	20006.2	15263	18820.0
Shida Kartli	44275	14109.3	41198	13128.7	22741	42746.2	22252	41827.1
Kvemo Kartli	37701	7414.2	32008	6294.6	22095	25632.3	20206	23440.8
Guria	18329	13064.1	17054	12155.4	8792	36941.2	8394	35268.9
Samtskhe–Javakheti	18663	8741.5	17099	8008.9	9707	26814.9	9542	26359.1
Mtskheta–Mtianeti	18460	16858.4	17441	15927.9	8535	45887.1	8415	45241.9
Racha–Lechkhumi and Kvemo Svaneti	5361	11358.1	4655	9862.3	1490	18625.0	1444	18050.0
Other departments	14081	-	5818	-	586	-	514	-
Georgia	**558241**	**12451.3**	**470741**	**10499.6**	**283497**	**37287.5**	**259815**	**34172.7**

Table 4.126 Diseases of the respiratory system by certain nosologies, Georgia, 2011

	All ages		In children	
	Prevalence	Incidence	Prevalence	Incidence
Total number of diseases of the respiratory system	**12451.3**	**10499.6**	**37287.5**	**34172.7**
Including				
Acute upper respiratory infections	7600.2	7168.1	27782.8	26535.1
Pneumonia	652.0	611.5	1213.1	1162.8
Other lower respiratory infections	1245.8	1134.8	3029.1	2798.8
Other diseases of upper respiratory tract	1001.9	549.3	2577.7	1464.4
Including allergic rhinitis	260.4	152.2	454.6	305.8
Chronic lower respiratory diseases	1017.0	292.9	811.0	406.9
Including: Chronic and not specified bronchitis	*435.5*	*160.1*	*443.9*	*293.8*
Emphysema	*21.0*	*4.1*	*2.9*	*0.1*
Asthma and status asthmaticus	*364.9*	*62.2*	*228.3*	*50.8*
Other chronic obstructive pulmonary disease	*101.8*	*38.6*	*71.0*	*22.2*
Bronchiectasis	*8.2*	*2.2*	*0.4*	*0.1*
Lung diseases due to external agents	*5.6*	*2.8*	*2.8*	*1.4*
Other respiratory diseases principally affecting the interstitium	6.6	2.5	5.3	4.2
Suppurative and necrotic conditions of lower respiratory tract	1.3	0.6	0.4	0
Other diseases of the respiratory system	109.5	69.3	78.9	55.5

Table 4.127 Diseases of the respiratory system according to certain nosologies, Georgia, 2011

	All ages				Children			
	Number of registered cases	%	Number of new cases	%	Number of registered cases	%	Number of new cases	%
Total number of diseases of the respiratory system	**558241**	**100**	**470741**	**100**	**283497**	**100**	**259815**	**100**
Including								
Acute upper respiratory infections	340748	61.0	321373	68.3	211233	74.5	201746	77.6
Pneumonia	29231	5.2	27418	5.8	9223	3.2	8841	3.4
Other lower respiratory infections	55854	10.0	50876	10.8	23030	8.1	21279	8.2
Other diseases of upper respiratory tract	44920	8.0	24629	5.2	19598	6.9	11134	4.3
Including allergic rhinitis	11676	2.1	6822	1.4	3456	1.2	2325	0.9
Chronic lower respiratory diseases	45595	8.2	13133	2.8	6166	2.2	3094	1.2
Including: Chronic and not specified bronchitis	*19527*	*3.5*	*7176*	*1.5*	*3375*	*1.2*	*2234*	*0.8*
Emphysema	*940*	*0.2*	*186*	*0.04*	*22*	*0.01*	*1*	*0.0004*
Asthma and status asthmaticus	*16359*	*2.9*	*2789*	*0.6*	*1736*	*0.6*	*386*	*0.1*
Other chronic obstructive pulmonary disease	*4565*	*0.8*	*1731*	*0.4*	*540*	*0.2*	*169*	*0.1*
Bronchiectasis	*367*	*0.1*	*98*	*0.02*	*3*	*0.001*	*1*	*0.0004*
Lung diseases due to external agents	253	0.04	127	0.03	21	0.01	11	0.004
Other respiratory diseases principally affecting the interstitium	294	0.05	114	0.02	40	0.1	32	0.01
Suppurative and necrotic conditions of lower respiratory tract	58	0.01	28	0.01	3	0.001	0	0
Other diseases of the respiratory system	4909	0.9	3105	0.6	600	0.2	422	0.2

Table 4.128 Asthma and status asthmaticus by regions, Georgia, 2010 – 2011

	2010				2011			
	All ages		Children aged 0-15		All ages		Children aged 0-15	
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	595	--	38	--	374	-	51	-
Ajara	1339	344.5	121	183.3	881	224.7	83	124.8
Tbilisi	4280	369.8	481	244.5	4047	346.6	322	162.6
Kakheti	1191	293.9	52	75.5	896	220.4	45	65.2
Imereti	3522	501.4	494	414.1	3128	443.1	375	313.3
Samegrelo	1675	352.2	192	237.6	1406	294.0	143	176.3
Shida Kartli	871	279.3	62	117.0	786	250.5	47	88.3
Kvemo Kartli	804	159.9	81	94.8	518	101.9	48	55.7
Guria	538	384.0	99	416.0	461	328.6	111	466.4
Samtskhe–Javakheti	445	209.9	26	72.2	346	162.1	21	58.0
Mtskheta–Mtianeti	345	316.2	11	59.5	237	216.4	14	75.3
Racha–Lechkhumi and Kvemo Svaneti	265	557.9	11	135.8	166	351.7	7	87.5
Other departments	208	--	1	--	2	-	1	-
Georgia	**16078**	**361.1**	**1669**	**220.6**	**13248**	**295.5**	**1268**	**166.8**

Table 4.129 New cases of asthma and status asthmaticus by regions, Georgia, 2010 – 2011

	2010				2011			
	All ages		Children aged 0-15		All ages		Children aged 0-15	
	Number of new cases	Incidence per 100000 population	Number of new cases	Incidence per 100000 children	Number of new cases	Incidence per 100000 population	Number of new cases	Incidence per 100000 children
Abkhazia	85	--	8	--	68	-	11	-
Ajara	261	67.1	19	28.8	130	33.2	14	21.1
Tbilisi	695	60.0	124	63.0	704	60.3	126	63.6
Kakheti	285	70.3	21	30.5	178	43.8	15	21.7
Imereti	694	98.8	135	113.2	711	100.7	86	71.8
Samegrelo	207	43.5	37	45.8	174	36.4	43	53.0
Shida Kartli	270	86.6	22	41.5	272	86.7	23	43.2
Kvemo Kartli	248	49.3	44	51.5	296	58.2	34	39.4
Guria	86	61.4	21	88.2	75	53.5	14	58.8
Samtskhe–Javakheti	127	59.9	16	44.4	97	45.4	9	24.9
Mtskheta–Mtianeti	78	71.5	2	10.8	55	50.2	8	43.0
Racha-Lechkhumi and Kvemo Svaneti	44	92.6	0	0	25	53.0	3	37.5
Other departments	205	--	1	--	4	-	-	-
Georgia	**3285**	**73.8**	**450**	**59.5**	**2789**	**62.2**	**386**	**50.8**

Table 4.130 Diseases of the respiratory system, hospital discharges, Georgia, 2011

	All ages		In children			
			Aged 0 - 15		Aged 0 – 1	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality ate, %	Number of hospital discharges	Case fatality rate, %
Diseases of the respiratory system	**63515**	**1.2**	**40277**	**0.2**	**10160**	**0.5**
Including						
Acute upper respiratory infections	17574	0.1	16438	0.02	4819	0.02
Influenza	3705	0.5	2314	0.04	296	0.3
Pneumonia	15718	1.2	7077	0.2	2219	0.3
Other lower respiratory infections	5496	0.1	5164	0.04	2101	0.1
Other diseases of upper respiratory tract	8581	0.0	5225	0.0	187	0.0
Including allergic rhinitis	*35*	*0.0*	*15*	*0.0*	*0*	*0.0*
Chronic lower respiratory diseases	3817	1.3	529	0.0	81	0.0
Including: Chronic and not specified bronchitis	*745*	*0.1*	*295*	*0.0*	*57*	*0.0*
Emphysema	113	4.4	1	0.0	0	0.0
Asthma and status asthmaticus	602	0.8	111	0.0	0	0.0
Other chronic obstructive pulmonary disease	1530	1.8	10	0.0	4	0.0
Bronchiectasis	15	0.0	1	0.0	0	0.0
Lung diseases due to external agents	69	8.7	1	0.0	0	0.0
Other respiratory diseases principally affecting the interstitium	569	11.2	2	50.0	2	100.0
Suppurative and necrotic conditions of lower respiratory tract	293	0.7	20	0.0	1	0.0
Other diseases of the respiratory system	1806	17.2	587	7.7	281	10.0

Table 4.131 Diseases of the respiratory system, hospital discharges and case fatality rate by regions, Georgia, 2011

	All ages		In children			
			Aged 0 - 15		Aged 0 – 1	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %
Ajara	6248	0.9			947	1.2
Tbilisi	19863	2.2	13156	0.3	3423	0.7
Kakheti	4177	0.8	2811	0.1	715	0.3
Imereti	11207	1.1	6616	0.1	1397	0.4
Samegrelo	7644	0.5	5442	0.0	1421	0.0
Shida Kartli	3268	0.4	2282	0.0	731	0.1
Kvemo Kartli	4690	0.8	2822	0.1	594	0.5
Guria	1280	0.8	934	0.2	195	0.5
Samtskhe–Javakheti	2833	0.3	1788	0.0	643	0.0
Mtskheta–Mtianeti	352	2.0	69	0.0	23	0.0
Racha–Lechkhumi and Kvemo Svaneti	824	0.4	362	0.3	71	1.4
Other departments	1129	0.4	15	0.0	0	0.0
Georgia	**63515**	**1.2**	**40277**	**0.2**	**10160**	**0.5**

Table 4.132 Surgeries on the respiratory system, Georgia, 2011

	Number of operations	On Children	Number of deaths	Case fatality rate (%)
Respiratory system surgeries	**989**	**108**	**10**	**1.0**
Including				
Pulmonectomy	74	0	0	0.0
Resection of a part of the lung	116	17	0	0.0
Resection of a segment of the lung	82	0	1	1.2
On the larynx	268	13	1	0.4
Resection of the trachea	90	4	1	1.1
Resection of the bronchus	1	0	0	0.0
Resection of the pleura	3	0	0	0.0

Table 4.133 Diseases of the digestive system, Georgia, 2001 – 2011

	All ages				In children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2001	97651	2203.8	39997	902.7	12250	1353.1	7114	785.9
2002	98854	2261.3	36380	832.2	15249	1664.8	10193	1112.8
2003	103803	2397.9	39759	918.5	11414	1350.0	6813	805.8
2004	113272	2591.1	41885	958.1	13398	1462.8	8085	882.7
2005	161769	3700.5	84876	1941.6	18123	1978.6	12609	1376.6
2006	141047	3207.1	56599	1286.9	14926	1878.7	9605	1208.9
2007	216640	4936.7	120659	2749.5	23700	3089.2	17872	2329.5
2008	198957	4538.5	92400	2107.8	24501	3257.2	16901	2246.9
2009	280680	6363.3	166087	3765.4	25164	3342.3	19030	2527.6
2010	261977	5883.4	151848	3410.2	23718	3135.2	17296	2286.3
2011	**422928**	**9433.2**	**224583**	**5009.2**	**35827**	**4712.2**	**26372**	**3468.6**

Table 4.134 Diseases of the digestive system, prevalence by certain nosologies, Georgia, 2011

	Number of registered cases	Prevalence per 100000 population	In children	
			Number of registered cases	Prevalence per 100000 children
Diseases of the digestive system	**422928**	**9433.2**	**35827**	**4712.2**
Including				
Diseases of oral cavity, salivary glands and jaw	243428	5429.5	19566	2573.5
Diseases of oesophagus, stomach and duodenum	66787	1489.7	4578	602.1
Including: gastric and duodenal peptic ulcers	*19363*	*431.9*	*110*	*14.5*
gastritis and duodenitis	*42174*	*940.7*	*3312*	*435.6*
Liver diseases	6315	140.9	41	5.4
Disorders of gallbladder, biliary tract and pancreas	63766	1422.3	3547	466.5
Including: cholelithiasis and cholecystitis	*52282*	*1166.1*	*2645*	*347.9*
Acute pancreatitis and other disorders of pancreas	*2713*	*60.5*	*14*	*1.8*

Table 4.135 Diseases of the digestive system, incidence by certain nosologies, Georgia, 2011

	Number of new cases	Incidence per 100000 population	In children	
			Number of new cases	Incidence per 100000 children
Diseases of the digestive system	**224583**	**5009.2**	**26372**	**3468.6**
Including				
Diseases of oral cavity, salivary glands and jaw	161975	3612.8	16561	2178.2
Diseases of oesophagus, stomach and duodenum	24060	536.6	2902	381.7
Including: gastric and duodenal peptic ulcers	*4905*	*109.4*	*53*	*7.0*
Gastritis and duodenitis	*16425*	*366.4*	*2213*	*291.1*
Liver diseases	2230	49.7	27	3.6
Disorders of gallbladder, biliary tract and pancreas	18716	417.5	1652	217.3
Including: cholelithiasis and cholecystitis	*15578*	*347.5*	*1307*	*171.9*
Acute pancreatitis and other disorders of pancreas	*1071*	*23.9*	*7*	*0.9*

Table 4.136 Diseases of the digestive system, incidence rate by regions, Georgia, 2010 – 2011

	2010				2011			
			In children				In children	
	New cases	Incidence per 100000 population	New cases	Incidence per 100000 children	New cases	Incidence per 100000 population	New cases	Incidence per 100000 children
Abkhazia	3252	--	773	--	2897	-	731	-
Ajara	5228	1345.0	1324	2006.1	34615	8828.1	2575	3872.2
Tbilisi	61529	5315.7	7084	3601.4	112006	9592.8	13574	6855.6
Kakheti	8664	2137.7	1270	1843.3	8314	2044.8	1937	2807.2
Imereti	21790	3102.2	1543	1293.4	33284	4714.4	1748	1460.3
Samegrelo and Zemo Svaneti	7895	1660.0	1178	1457.9	9526	1991.6	1493	1840.9
Shida Kartli	7147	2292.2	1040	1962.3	6789	2163.5	1025	1926.7
Kvemo Kartli	5325	1059.1	961	1125.3	8309	1634.0	1350	1566.1
Guria	1536	1096.4	595	2500.0	2316	1650.7	1081	4542.0
Samtskhe–Javakheti	7638	3602.8	896	2488.9	2585	1210.8	440	1215.5
Mtskheta–Mtianeti	2841	2604.0	496	2681.1	2386	2179.0	329	1768.8
Racha–Lechkhumi and Kvemo Svaneti	665	1400.0	88	1086.4	553	1171.6	39	487.5
Other departments	18338	--	48	--	1003	-	50	-
Georgia	**151848**	**3410.2**	**17296**	**2286.3**	**224583**	**5009.2**	**26372**	**3468.6**

Table 4.137 Diseases of the digestive system, hospital discharges, Georgia, 2011

	Number of hospital discharges	Including deaths	Case fatality rate (%)	In children		Case fatality rate (%)
				Number of hospital discharges	Including deaths	
Diseases of the digestive system	**34100**	**711**	**2.1**	**3804**	**8**	**0.2**
Including						
Diseases of oral cavity, salivary glands and jaw	648	0	0	136	0	0.0
Gastric and duodenal, peptic ulcers	2326	83	3.6	7	0	0.0
Gastritis and duodenitis	785	6	0.8	146	0	0.0
Diseases of appendix	6628	7	0.1	1480	0	0.0
Hernia	6326	20	0.3	1081	2	0.2
Diseases of peritoneum	745	61	8.2	61	0	0.0
Diseases of liver	723	120	16.6	13	4	30.8
Cholecystitis, cholelithiasis and other disorders of biliary tract	4551	34	0.7	32	0	0.0

Table 4.138 Diseases of the digestive system, hospital discharges and case fatality rate by regions, Georgia, 2010 – 2011

	2010				2011			
	All ages		In children		All ages		In children	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %
Ajara	2677	2.1	286	0.3	2544	2.3	323	0.3
Tbilisi	13190	2.3	1532	0.1	13952	2.3	1488	0.5
Kakheti	2280	1.1	270	0.0	1784	1.6	219	0.0
Imereti	5812	1.0	590	0.0	5417	1.8	572	0.0
Samegrelo and Zemo Svaneti	3032	0.8	197	0.0	2494	1.5	135	0.0
Shida Kartli	2212	1.7	354	0.3	2226	1.5	303	0.0
Kvemo Kartli	2748	1.5	541	0.0	2628	1.0	552	0.0
Guria	705	2.4	92	0.0	703	2.6	103	0.0
Samtskhe–Javakheti	870	1.3	129	0.0	643	2.6	71	0.0
Mtskheta–Mtianeti	342	1.8	6	0.0	159	1.9	19	0.0
Racha–Lechkhumi and Kvemo Svaneti	187	3.2	5	0.0	179	1.7	10	0.0
Other departments	558	0.2	0	0.0	1371	4.8	9	0.0
Georgia	**34613**	**1.7**	**4002**	**0.1**	**34100**	**2.1**	**3804**	**0.2**

Table 4.139 Diseases of the genitourinary system, Georgia, 2000 – 2011

	All ages				In children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2000	51574	1158.4	21233	476.9	4892	537.8	3166	348.1
2001	55205	1245.9	25223	569.2	5155	569.5	3200	353.5
2002	58945	1348.4	25000	571.9	5841	637.7	3852	420.6
2003	60127	1389.0	27001	623.7	5932	701.6	4073	481.7
2004	69913	1599.3	31485	720.2	6895	752.8	4671	510.0
2005	70913	1622.2	31644	723.9	7013	765.7	4914	536.5
2006	79722	1812.7	40356	917.6	6136	772.3	4064	511.5
2007	79233	1805.5	33772	769.6	5635	734.5	3599	469.1
2008	91904	2096.4	48298	1101.7	5861	779.2	3878	515.6
2009	112647	2553.8	64652	1465.7	7981	1060.0	6152	817.1
2010	121634	2731.6	71952	1615.9	7193	950.8	5582	737.9
2011	**138016**	**3078.4**	**77139**	**1720.5**	**6889**	**906.1**	**5215**	**685.9**

Table 4.140 Diseases of the genitourinary system, Georgia, 2010 – 2011

	2010		2011	
	Number of registered cases	% from the total number of cases	Number of registered cases	% from the total number of cases
Diseases of the genitourinary system	**121634**	**100**	**138016**	**100**
	Including			
Glomerulonephritis, nephritic and nephrotic syndromes	8003	6.6	8283	6.0
Chronic tubulo-interstitial nephritis (kidney infections)	5804	4.8	5389	3.9
Renal failure	1528	1.3	1557	1.1
Urolithiasis	12977	10.7	13362	9.7
Diseases of male genital organs	17622	14.5	21866	15.8
Including: Hyperplasia of prostate	*6815*	*5.6*	*9718*	*7.0*
Inflammatory diseases of prostate	*5375*	*4.4*	*6620*	*4.8*
Male infertility	*519*	*0.4*	*643*	*0.5*
Diseases of female genital organs	61794	50.8	66818	48.4
Including: Salpingitis, oophoritis	*12111*	*10.0*	*13306*	*9.6*
Endometrios	*2583*	*2.1*	*3670*	*2.7*
Erosion and ectropion of cervix uteri	*9190*	*7.6*	*10722*	*7.8*
Menstruation disorders	*10920*	*9.0*	*11612*	*8.4*
Menopausal and other perimenopausal disorders	*7532*	*6.2*	*7686*	*5.6*
Female infertility	*3130*	*2.6*	*3935*	*2.9*

Table 4.141 Diseases of the genitourinary system according to regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	5405	-	2529	-	5578	-	2281	-
Ajara	10944	2815.5	5663	1456.9	19788	5046.7	10329	2634.3
Tbilisi	36407	3145.3	21533	1860.3	42797	3665.4	25190	2157.4
Kakheti	8708	2148.5	4677	1154.0	8196	2015.7	4104	1009.3
Imereti	18551	2641.1	11098	1580.0	16689	2363.9	10519	1489.9
Samegrelo	11284	2372.6	6006	1262.8	11687	2443.4	5484	1146.6
Shida Kartli	8522	2733.2	6078	1949.3	9278	2956.7	6058	1930.5
Kvemo Kartli	6475	1287.8	4717	938.1	9042	1778.2	6819	1341.0
Guria	2731	1949.3	1650	1177.7	2775	1977.9	1590	1133.3
Samtskhe–Javakheti	3930	1853.8	2430	1146.2	3316	1553.2	1981	927.9
Mtskheta–Mtianeti	3960	3629.7	2125	1947.8	2629	2400.9	1351	1233.8
Racha–Lechkhumi and Kvemo Svaneti	1342	2825.3	702	1477.9	1101	2332.6	598	1266.9
Other departments	3375	-	2744	-	5140	-	835	-
Georgia	**121634**	**2731.6**	**71952**	**1615.9**	**138016**	**3078.4**	**77139**	**1720.5**

Table 4.142 Diseases of the genitourinary system in children by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	613	-	362	-	562	-	342	-
Ajara	754	1142.4	553	837.9	598	899.2	411	618.0
Tbilisi	2491	1266.4	1853	942.0	2801	1414.6	2031	1025.8
Kakheti	561	814.2	487	706.8	554	802.9	447	647.8
Imereti	899	753.6	754	632.0	640	534.7	522	436.1
Samegrelo	505	625.0	366	453.0	392	483.4	289	356.4
Shida Kartli	330	622.6	286	539.6	374	703.0	324	609.0
Kvemo Kartli	311	364.2	269	315.0	401	465.2	357	414.2
Guria	391	1642.9	353	1483.2	281	1180.7	246	1033.6
Samtskhe–Javakheti	169	469.4	146	405.6	150	414.4	125	345.3
Mtskheta–Mtianeti	107	578.4	97	524.3	79	424.7	71	381.7
Racha–Lechkhumi and Kvemo Svaneti	58	716.0	53	654.3	46	575.0	40	500.0
Other departments	4	-	3	-	11	-	10	-
Georgia	**7193**	**950.8**	**5582**	**737.9**	**6889**	**906.1**	**5215**	**685.9**

Table 4.143 Diseases of the genitourinary system by certain nosologies, Georgia, 2011*

	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Diseases of the genitourinary system	**138016**	**3078.4**	**77139**	**1720.5**
Glomerulonephritis, nephritic and nephrotic syndromes	8283	184.7	3541	79.0
Chronic tubulo-interstitial nephritis (kidney infections)	5389	120.2	2112	47.1
Renal failure	1557	34.7	616	13.7
Urolithiasis	13362	298.0	4579	102.1
Diseases of male genital organs	21866	1023.9	11416	534.6
Including: Hyperplasia of prostate	*9718*	*455.0*	*5164*	*241.8*
Inflammatory diseases of prostate	*6620*	*310.0*	*3510*	*164.4*
Male infertility	*643*	*45.8*	*244*	*17.4*
Diseases of female genital organs	66818	2846.0	40326	1717.6
Including: Salpingitis, oophoritis	*13306*	*566.7*	*8140*	*346.7*
Endometriosis	*3670*	*156.3*	*2170*	*92.4*
Erosion and ectropion of cervix uteri	*10722*	*456.7*	*6398*	*272.5*
Disorders of menstruation	*11612*	*996.9*	*6843*	*587.5*
Menopausal and other perimenopausal disorders	*7686*	*659.9*	*4309*	*369.9*
Female infertility	*3935*	*337.8*	*2513*	*215.7*

Table 4.144 Diseases of the genitourinary system in children by certain nosologies, Georgia, 2011

	Number of registered cases	Prevalence per 100000 children	New cases	Incidence per 100000 children
Diseases of the genitourinary system	**6889**	**906.1**	**5215**	**685.9**
Glomerulonephritis, nephritic and nephrotic syndromes	874	115.0	509	66.9
Chronic tubulo-interstitial nephritis (kidney infections)	389	51.2	237	31.2
Renal failure	40	5.3	18	2.4
Urolithiasis	74	9.7	45	5.9
Diseases of male genital organs	1237	308.6	1207	301.1
Including: Hyperplasia of prostate	*3*	*0.7*	*2*	*0.5*
Inflammatory diseases of prostate	*15*	*3.7*	*10*	*2.5*
Diseases of female genital organs	623	173.3	516	143.5
Including: Salpingitis, oophoritis	*61*	*17.0*	*52*	*14.5*
Endometriosis	*0*	*0*	*0*	*0*
Erosion and ectropion of cervix uteri	*7*	*1.9*	*6*	*1.7*
Disorders of menstruation	*357*	*99.3*	*275*	*76.5*

** Rates of diseases of the genitourinary system are calculated according to the target population*

Table 4.145 Diseases of the genitourinary system, hospital discharges by the regions, Georgia, 2011

	Number of hospital discharges	Including deaths	Case fatality rate (%)	In children aged <15		
				Number of hospital discharges	Including deaths	Case fatality rate (%)
Ajara	1208	8	0.7	158	0	0.0
Tbilisi	8693	67	0.8	676	4	1.2
Kakheti	388	0	0.0	17	0	0.0
Imereti	2349	10	0.4	47	0	0.0
Samegrelo	948	10	1.1	34	0	0.0
Shida Kartli	1235	1	0.1	74	0	0.0
Kvemo Kartli	231	0	0.0	7	0	0.0
Guria	217	0	0.0	3	0	0.0
Samtskhe–Javakheti	90	0	0.0	1	0	0.0
Mtskheta–Mtianeti	13	0	0.0	0	0	0.0
Racha–Lechkhumi and Kvemo Svaneti	71	0	0.0	0	0	0.0
Other departments	185	1	0.8	0	0	0.0
Georgia	**15628**	**97**	**0.6**	**1017**	**4**	**1.0**

Table 4.146 Diseases of the genitourinary system, hospital discharges and case fatality rate, Georgia, 2011

	All ages			Aged 0-15	
	Number of hospital discharges	Including deaths		Number of hospital discharges	
		Total	Case fatality rate (%)	Total	Case fatality rate (%)
Total	**15628**	**97**	**0.6**	**1017**	**0.4**
Including					
Glomerulonephritis, nephritic and nephrotic syndromes	454	4	0.9	113	0
Chronic tubulo-interstitial nephritis (kidney infections)	836	1	0.1	78	0
Urolithiasis	771	1	0.1	11	0
Prostate disorders	1690	5	0.3	7	0

Table 4.147 Diseases of the genitourinary system, surgeries, Georgia, 2011

	Total number of surgeries	Number of surgeries in children	Including deaths	Case fatality rate (%)
Total	**60820**	**770**	**24**	**0.04**
Operations on kidneys and ureter	2718	101	9	0.33
Including: Kidney transplantation	*15*	*0*	*0*	*0.0*
Resection of kidney	*247*	*0*	*0*	*0.0*
Nephrectomy	*333*	*9*	*1*	*0.30*
On ureters	*278*	*7*	*2*	*0.72*
On bladder	*1152*	*12*	*6*	*0.52*
On urethra	*232*	*72*	*0*	*0.0*
Operations on Prostate	1352	4	6	0.44
Orchiectomy	457	18	0	0.0
Operations on female genital organs	11202	19	4	0.04
Including: Uteri D&C	*2666*	*1*	*0*	*0.0*
Female sterilization	*261*	*0*	*0*	*0.0*
Amputation of uteri	*871*	*0*	*0*	*0.0*
Extirpation of uteri	*4370*	*0*	*2*	*0.05*
Ovarian resection	*833*	*18*	*0*	*0.0*
Ovariectomy	*576*	*0*	*0*	*0.0*
Excision tissue of female external genital organs	*226*	*0*	*0*	*0.0*
Obstetrical - gynecological operations	40346	1	0	0.0

Table 4.148 Congenital malformations, deformations and chromosomal abnormalities, Georgia, 2001-2011

	All ages				Children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2001	5377	121.3	1031	23.3	4463	493.0	856	94.6
2002	5950	136.1	1276	29.2	4972	556.7	985	110.3
2003	5822	134.5	1040	24.0	4940	584.3	683	80.8
2004	6438	147.3	1192	27.3	5509	601.5	997	108.8
2005	5898	134.9	1067	24.4	4975	543.2	911	99.5
2006	5774	131.3	1261	28.7	4823	607.0	1049	132.0
2007	6185	140.9	1264	28.8	5216	679.9	1142	148.8
2008	7251	165.4	1685	38.4	6100	811.0	1318	175.2
2009	8148	184.7	1887	42.8	6749	896.4	1382	183.6
2010	8959	201.2	2443	54.9	7547	997.6	1932	255.4
2011	**9198**	**205.2**	**1664**	**37.1**	**7677**	**1009.7**	**1415**	**186.1**

Table 4.149 Congenital malformations, deformations and chromosomal abnormalities by regions, Georgia, 2011

	Number of registered cases		Prevalence per 100000 population		New cases		Incidence per 100000 population	
	All ages	Children	All ages	Children	All ages	Children	All ages	Children
Abkhazia	123	94	-	-	39	35	-	-
Ajara	171	101	43.6	151.9	38	36	21.5	54.1
Tbilisi	7488	6517	641.3	3291.4	1071	904	100.1	456.6
Kakheti	245	184	60.3	266.7	95	87	18.1	126.1
Imereti	339	287	48.0	239.8	145	141	8.9	117.8
Samegrelo	160	108	33.5	133.2	73	45	13.1	55.5
Shida Kartli	113	82	36.0	154.1	52	40	11.9	75.2
Kvemo Kartli	127	98	25.0	113.7	66	56	6.9	65.0
Guria	202	159	144.0	668.1	50	42	36.9	176.5
Samtskhe–Javakheti	34	21	15.9	58.0	13	12	7.3	33.1
Mtskheta–Mtianeti	18	14	16.4	75.3	9	7	4.4	37.6
Racha–Lechkhumi and Kvemo Svaneti	12	9	25.4	112.5	9	9	7.7	112.5
Other departments	166	3	-	-	4	1	-	-
Georgia	**9198**	**7677**	**205.2**	**1009.7**	**1664**	**1415**	**40.9**	**186.1**

Table 4.150 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2010 - 2011

	All ages			Children aged 0-15			
	Number of hospital discharges	Including deaths	Case fatality rate (%)	Number of hospital discharges	Including deaths	Case fatality rate (%)	Case fatality rate (%) in children under 1 year
2010	2122	69	3.3	1588	66	4.2	9.2
2011	**2103**	**59**	**2.8**	**1691**	**50**	**3.0**	**6.7**

Table 4.151 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges and case fatality rate by regions, Georgia, 2011

	All ages		Children aged 0-15				
	Number of hospital discharges	Case fatality rate (%)	Number of hospital discharges	Including deaths	Case fatality rate (%)	Case fatality rate (%) in children under 1 year	
						Including deaths	Case fatality rate (%)
Ajara	68	5.9	59	4	6.8	4	9.3
Tbilisi	1874	2.6	1524	39	2.6	29	5.4
Kakheti	4	0.0	0	0	0.0	0	0.0
Imereti	75	9.3	62	7	11.3	7	28.0
Samegrelo	0	0.0	0	0	0.0	0	0.0
Shida Kartli	7	0.0	7	0	0.0	0	0.0
Kvemo Kartli	16	0.0	1	0	0.0	0	0.0
Guria	1	0.0	1	0	0.0	0	0.0
Samtskhe–Javakheti	31	0.0	31	0	0.0	0	0.0
Mtskheta–Mtianeti	0	0.0	0	0	0.0	0	0.0
Racha–Lechkhumi and Kvemo Svaneti	0	0.0	0	0	0.0	0	0.0
Other departments	27	0.0	2	0	0.0	0	0.0
Georgia	**2103**	**2.8**	**1691**	**50**	**3.0**	**40**	**6.2**

Table 4.152 Injury, poisoning and certain other consequences of external causes, Georgia, 2001 – 2011

	All ages				Children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2001	29332	662.0	23709	535.1	6146	678.9	4979	550.0
2002	34355	785.9	28714	656.8	8172	892.2	6908	754.2
2003	34007	785.6	28741	663.9	7152	845.9	6058	716.5
2004	36948	845.2	32488	743.2	7717	842.5	6936	757.3
2005	35614	814.7	32032	732.7	7431	811.3	6804	742.8
2006	32892	747.9	29697	675.2	7174	903.0	6808	856.9
2007	32318	736.4	28715	654.3	7174	903.0	6279	818.4
2008	31088	709.2	29201	666.1	7298	970.2	6978	927.7
2009	44673	1012.8	42147	955.5	7428	986.6	7211	957.8
2010	39522	685.4	38302	658.1	7361	973.0	7286	963.1
2011	**43384**	**967.7**	**35914**	**801.0**	**7651**	**1006.3**	**7087**	**932.1**

Table 4.153 Injury, poisoning and certain other consequences of external causes, incidence rates and case distribution, Georgia, 2011

	All ages			In children		
	New cases	Incidence per 100000 population	%	New cases	Incidence per 100000 children	%
Injury, poisoning and certain other consequences of external causes	**35914**	**801.0**	**100**	**7087**	**932.1**	**100**
Including						
Fracture of skull and facial bones, neck, ribs, sternum and spine	1031	23.0	2.9	66	8.7	0.9
Intracranial injury	494	11.0	1.4	69	9.1	1.0
Injuries to upper and lower limbs	6268	139.8	17.5	818	107.6	11.5
Dislocation, sprain and strain of joints and ligaments	4636	103.4	12.9	864	113.6	12.2
Injuries to the thorax, intra-abdominal and pelvic organs	347	7.7	1.0	20	2.6	2.3
Wounds, injuries of blood vessels, superficial injuries	17671	394.1	49.2	3636	478.2	51.3
Injuries of nerves and spinal cord	599	13.4	1.7	6	0.8	0.1
Burns and corrosions	973	21.7	2.7	334	43.9	4.7
Poisoning by drugs, medicaments and biological substances, toxic effects of substances chiefly nonmedical as to source	556	12.4	1.5	120	15.8	1.7
Including: Poisoning by drugs, medicaments and biological substances	*86*	*1.9*	*0.2*	*22*	*2.9*	*0.3*
Toxic effects of substances chiefly nonmedical as to source	*140*	*3.1*	*0.4*	*29*	*3.8*	*0.4*

Table 4.154 Injury, poisoning and certain other consequences of external causes by regions, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1122	--	1121	--	1295	--	1181	--
Ajara	3966	1020.3	3934	1012.1	7296	1860.7	5880	1499.6
Tbilisi	5763	497.9	4943	427.0	6592	564.6	5742	491.8
Kakheti	3852	950.4	3741	923.0	3754	923.3	3547	872.4
Imereti	5794	824.9	5765	820.8	4735	670.7	4627	655.4
Samegrelo	14376	3022.7	14342	3015.6	3242	677.8	3208	670.7
Shida Kartli	2139	686.0	2137	685.4	1901	605.8	1733	552.3
Kvemo Kartli	2645	526.1	2637	524.5	4854	954.6	3989	784.5
Guria	1856	1324.8	1850	1320.5	1850	1318.6	1832	1305.8
Samtskhe–Javakheti	2586	1219.8	2494	1176.4	1498	701.6	1462	684.8
Mtskheta–Mtianeti	1903	1744.3	1969	1713.1	1422	1298.6	1406	1284.0
Racha–Lechkhumi and Kvemo Svaneti	587	1235.8	576	1212.6	671	1421.6	666	1411.0
Other departments	1933	--	1893	--	4274	--	641	--
Georgia	**39522**	**685.4**	**38302**	**658.1**	**43384**	**967.7**	**35914**	**801.0**

Table 4.155 Injury, poisoning and certain other consequences of external causes in children, Georgia, 2010 – 2011

	2010				2011			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	96	-	95	-	136	-	121	-
Ajara	797	1207.6	796	1206.1	738	1109.8	572	860.2
Tbilisi	1322	672.1	1308	665.0	1477	746.0	1464	739.4
Kakheti	872	1265.6	860	1248.2	863	1250.7	856	1240.6
Imereti	1293	1083.8	1286	1078.0	1239	1035.1	1194	997.5
Samegrelo	756	935.6	741	917.1	619	763.3	612	754.6
Shida Kartli	355	669.8	354	667.9	342	642.9	333	625.9
Kvemo Kartli	476	557.4	472	552.7	1176	1364.3	893	1036.0
Guria	585	2458.0	584	2453.8	538	2260.5	532	2235.3
Samtskhe–Javakheti	504	1400.0	489	1358.3	311	859.1	298	823.2
Mtskheta–Mtianeti	255	1378.4	251	1356.8	148	795.7	148	795.7
Racha–Lechkhumi and Kvemo Svaneti	41	506.2	41	506.2	46	575.0	46	575.0
Other departments	9	-	9	-	18	-	18	-
Georgia	**7361**	**973.0**	**7286**	**963.1**	**7651**	**1006.3**	**7087**	**932.1**

Table 4.156 **Injury, poisoning and certain other consequences of external causes, hospital discharges by regions, Georgia, 2010-2011**

	2010				2011			
	All ages		In children		All ages		In children	
	Hospital discharges	Case fatality rate (%)	Hospital discharges	Case fatality rate (%)	Hospital discharges	Case fatality rate (%)	Hospital discharges	Case fatality rate (%)
Ajara	2001	2.0	246	1.6	1792	1.6	320	0.3
Tbilisi	10798	2.1	1714	0.6	8985	2.1	1478	0.5
Kakheti	1460	2.6	120	0.8	956	2.9	95	0.0
Imereti	3431	2.8	293	1.4	2840	3.6	185	1.3
Samegrelo	1670	4.2	19	0.0	1223	5.9	138	0.7
Shida Kartli	776	3.0	89	0.0	618	2.4	30	0.0
Kvemo Kartli	625	3.0	61	0.0	781	2.3	57	0.0
Guria	351	3.4	38	0.0	337	3.3	37	0.0
Samtskhe–Javakheti	308	3.9	34	0.0	315	2.2	26	0.0
Mtskheta–Mtianeti	511	0.2	0	0.0	114	0	0	3.5
Racha–Lechkhumi and Kvemo Svaneti	65	0	5	0.0	49	8.2	1	0.0
Other departments	607	0.7	0	0.0	681	0.0	11	0.0
Georgia	**22603**	**2.4**	**2619**	**0.7**	**18691**	**2.6**	**2378**	**0.6**

CHAPTER 5.

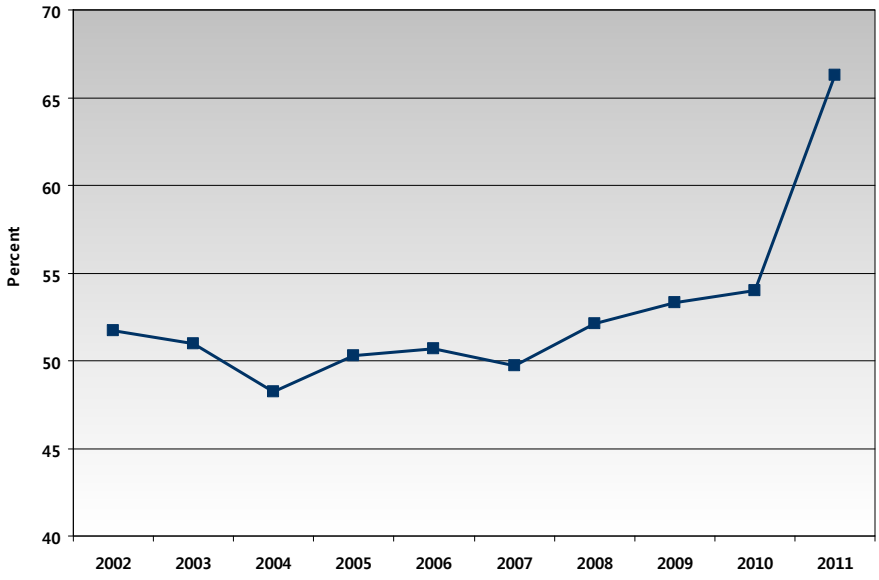
MATERNAL AND CHILD HEALTH

Maternal and child health indicators are recognized as health gauges and determinants of social welfare worldwide.

In 2011 more than 50% of the total population comprised of women of the reproductive age and children of the ages 0-15. Thus, the major part of health services and state programs are dedicated to their well-being.

According to the data from women consultation centers, 80994 ***pregnant women*** were registered in Georgia in 2011. During the reporting year, 66.3% of these women were enrolled timely - before the 12th week of pregnancy (Figure 5.1). During the year, 52613 pregnant women were taken from the enrollment lists, out of which, 89.5% carried the pregnancies to the end, in 2.4% of cases spontaneous abortions were registered (gestation age less than 22 weeks); 86.9% of women had term deliveries.

Figure 5.1 **Share of pregnant women initiating antenatal care during the first trimester, Georgia, 2011**



In 2011, 81.6% (83% - in 2010) of enrolled pregnant women had at least 4 antenatal care visits. During these visits 90.9% of the pregnant women were tested for Rh-factor, 88.1% - for syphilis and 82.4% - for HIV infection. Additionally, 8.7% was referred for Hepatitis C testing.

Since June 2007, a screening program for pregnant women to identify carriers of hepatitis B surface antigen (HBsAg), and passive immunization against hepatitis B for newborns with high risk of infection (born of antigen-positive mothers) have been available. These activities are supported by the Rostropovich-Vishnevskaya Foundation (RVF). In 2011, 56316 (69.5%) pregnant women were screened using HBs immune-ferment test systems. 1159 HBsAg positive cases were sent for confirmation to the NCDC laboratories in Tbilisi, Kutaisi and Batumi. 1130 pregnant women (1.4%) were detected as antigen-positive after laboratory confirmation.

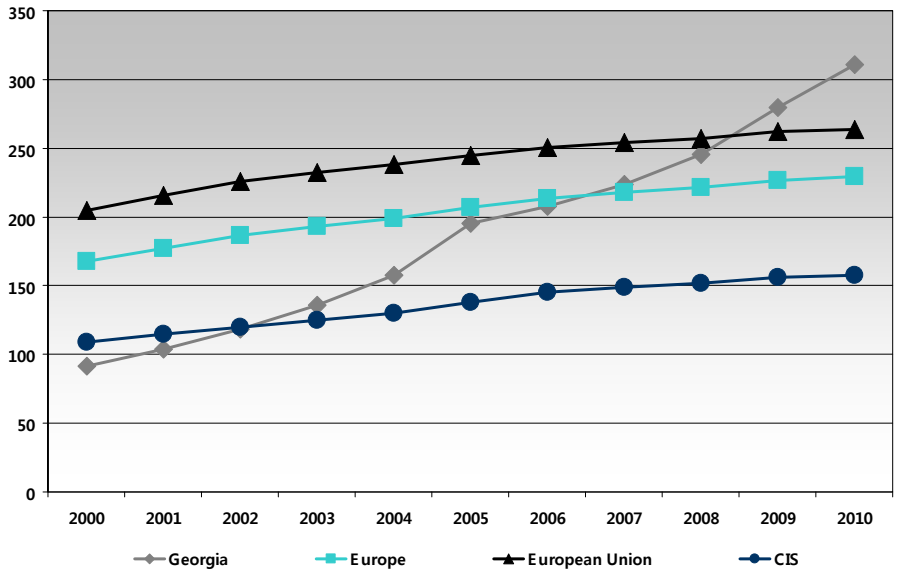
In 2011, 1295 infants born of antigen-positive mothers were vaccinated with anti-hepatitis B virus (HBIG) immunoglobulin.

According to the data from women consultation centers, 7.2% of pregnant women were diagnosed with anemia during the first trimester; 3.4% - with genitourinary system diseases and 3.2% - with thyroid gland pathologies. During the reporting year, 3062 (3.8%) women were hospitalized due to pregnancy related pathologies.

In 2011, 57413 **deliveries** were registered by health facilities, of which 59.5% were physiological and 40.5% - pathological. 99.6% of deliveries took place at maternity clinics and departments

In 2011, 20143 caesarean sections were performed in Georgia. During the last decade, the increase of the number of caesarean sections was observed in Georgia, like in the majority of developed countries (Figure 5.2).

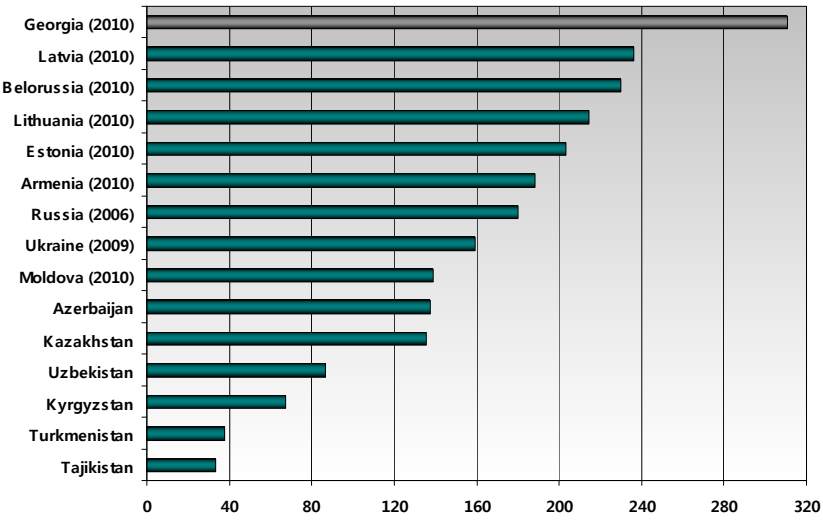
Figure 5.2 Cesarean sections rate per 1000 live births



წყარო: HFADB

Georgia has the highest number of caesarean sections per 1000 live births among former Soviet Union republics (Figure 5.3).

Figure 5.3 Cesarean sections rate per 1000 live births, former Soviet Union, last available year

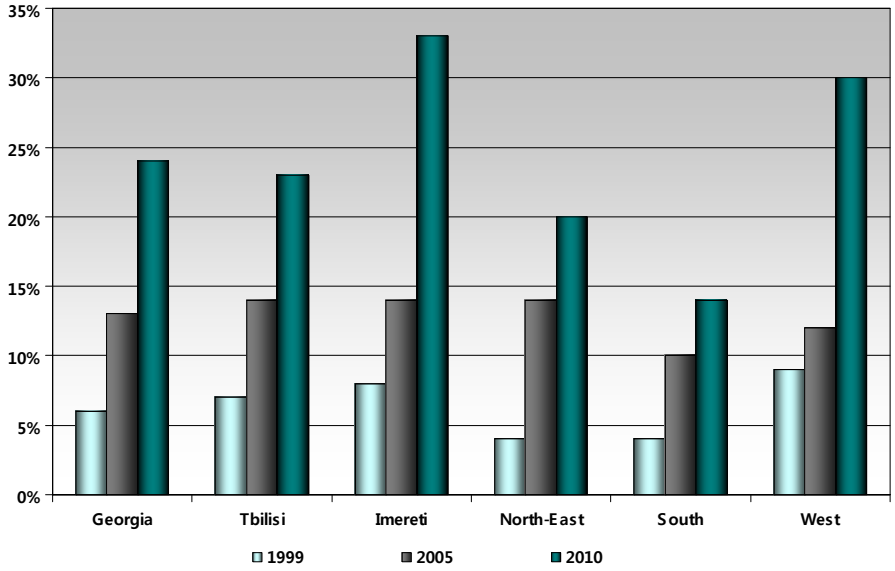


Source: HFADB

According to the WHO analysis of the data collected from 137 countries, Georgia is among countries where the share of caesarean sections is excessive. According to the WHO recommendations the “normal share” of caesarean sections is 10% to 15%. In 2011, the number of caesarean sections performed in Georgia reached the 35.1% of the total number of deliveries - since 2000 the number of caesarean sections has being increased 3.5 times.

The increase of the percentage of caesarean sections in the total number of deliveries has been documented by Reproductive Health Surveys (GERHS) as well: during the period covered by surveys the indicator has increased 4 times (Figure 5.4).

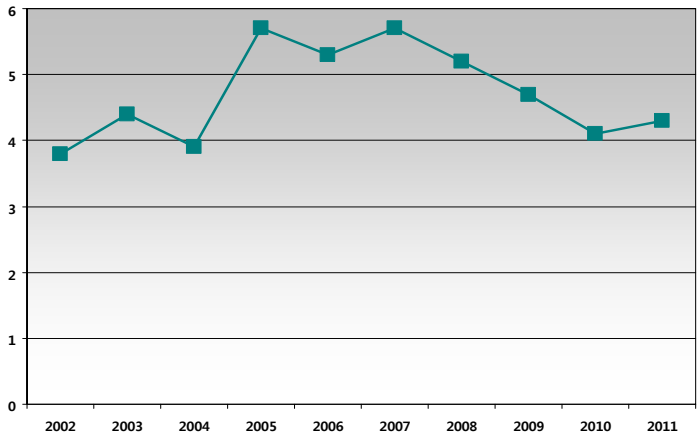
Figure 5.4 Percent of cesarean sections from all deliveries, RHS



As official and research data show highest shares of caesarean sections are registered in Samegrelo and Zemo Svaneti, also in Ajara and Imereti regions.

According to the data from maternity clinics the cases of ***intrapartum and postpartum complications included:*** anemia (5.3%), perinatal laceration during pregnancy (4.3%), complications due to malpresentation and malposition of fetus (2.9%), pre-eclampsia and eclampsia (2.8%), and abnormalities of forces of labor (2.5%). Share of deliveries complicated by obstetric traumas, which is one of the indicators for obstetric care quality assessment, has shown a downward trend from 5.7% to 4.3%, though in 2011, it achieved 4.3% (Figure 5.5).

Figure 5.5 Share of deliveries complicated by obstetric traumas (%), Georgia



The incidence rate of intra partum and post partum infections (including post caesarean section peritonitis) has been stable in Georgia and always less than 0.1% (0.04% in 2011).

During the reporting year, 31185 ***abortions*** were registered. The total induced abortions rate (TIAR) equaled to 0.8. The TIAR was high among 20 - 29 (35.9 per 1000 women) and 30-34 age groups (47.8 per 1000 women). The vacuum extraction was used in 42.3%, while medication abortions - in 7.6%.The number of abortions done during the first pregnancy is less that 1%.

During last years, the official statistics and Reproductive Health Surveys (GERHS) data differed significantly. During 1999 - 2005 the studies identified 80% gap between TIARs calculated using official statistics and surveys results. In 2007 – 2010, significant improvement of collecting the official statistics decreased this discrepancy to 44% (Figure 5.6, 5.7).

Figure 5.6 **Total Induced Abortion Rate; Survey Estimates and Official Sources, Georgia**

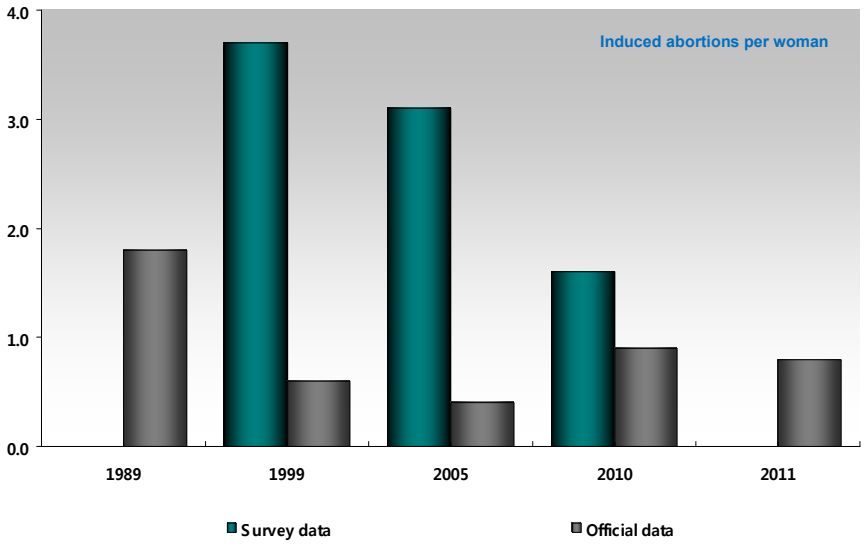
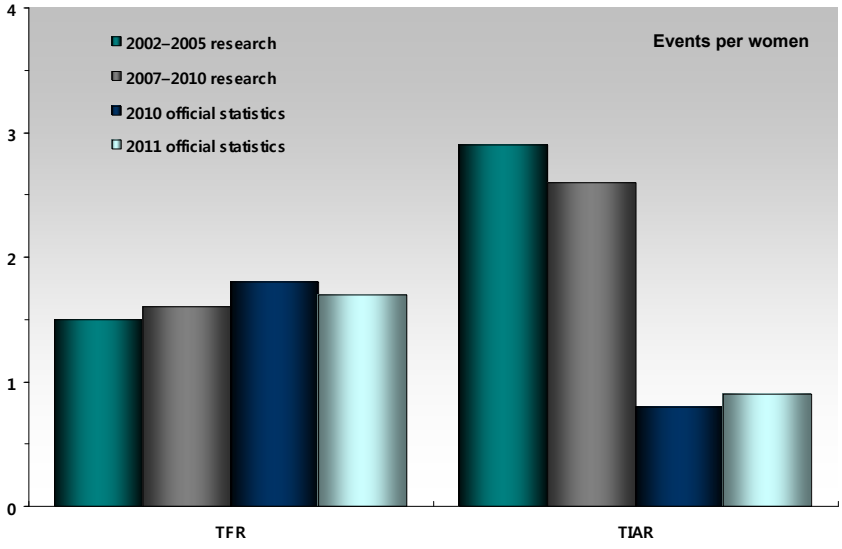
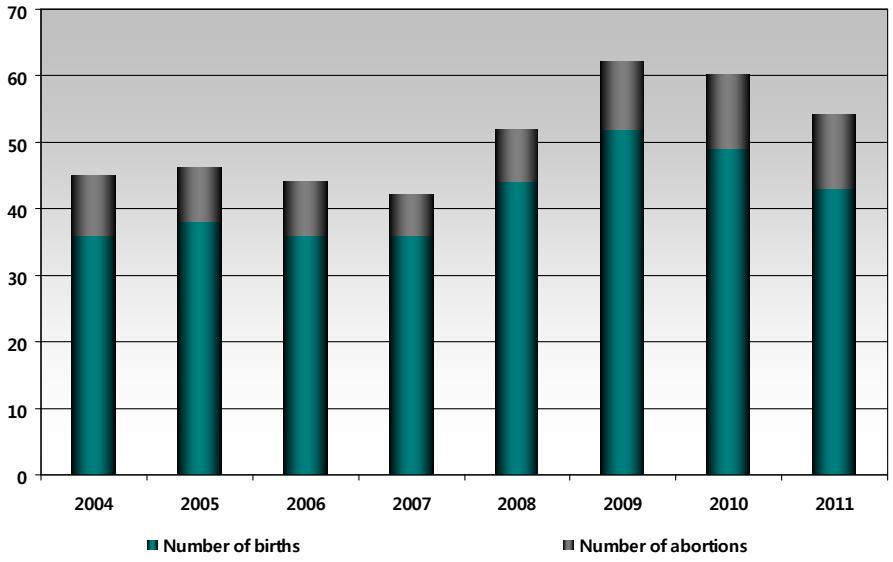


Figure 5.7 **Total Fertility and Total Abortion Rates, Survey Estimates and Official Statistics, Georgia**



During last years in Georgia, adolescent (15 – 19 years) pregnancy rate decreased. Since 2009, adolescent pregnancy rate in has decreased by 12.9% (Figure 5.8). In the Western European countries this indicator varies from 15 to 25. In some countries of the Eastern and Central Europe this indicator is 2-4 times higher.

Figure 5.8 **Adolescent pregnancy rate per 1000 women aged 15-19, Georgia, 2000 – 2011**



In 2011, 16 cases of maternal deaths were reported; **maternal mortality rate*** - 27.6. The majority of deaths are due to eclampsia/ pre-eclampsia (44%).

Causes of maternal mortality, Georgia, 2011

Death causes	ICD-X Codes	Number	%
Died during pregnancy, delivery and puerperium	**O00-O99**	**16**	**100**
Including			
Severe pre-eclampsia	O14.1	3	18.8
Eclampsia in pregnancy	O15.0	3	18.8
Eclampsia in the puerperium	O15.2	1	6.3
Venous complication in the puerperium, unspecified	O87.9	1	6.3
Delayed and secondary postpartum hemorrhage	O72.2	1	6.3
Rupture of uterus during labor	O71.1	1	6.3
Maternal distress during labor and delivery	O75.0	1	6.3
Puerperal sepsis	O85	1	6.3
Obstetric thromboembolism	O88.2	1	6.3
Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, childbirth and the puerperium	O99.1	1	6.3
Diseases of the respiratory system complicating pregnancy, childbirth and the puerperium	O99.5	2	12.5

In 2011, there were 7 cases of late maternal deaths registered.

The State Services Development Agency and National Statistics Office of Georgia are involved in the birth registration in Georgia. According to their data, in 2011, there were 58014 **live births** registered. Birth rate slightly reduced from 1.8 to 1.7.

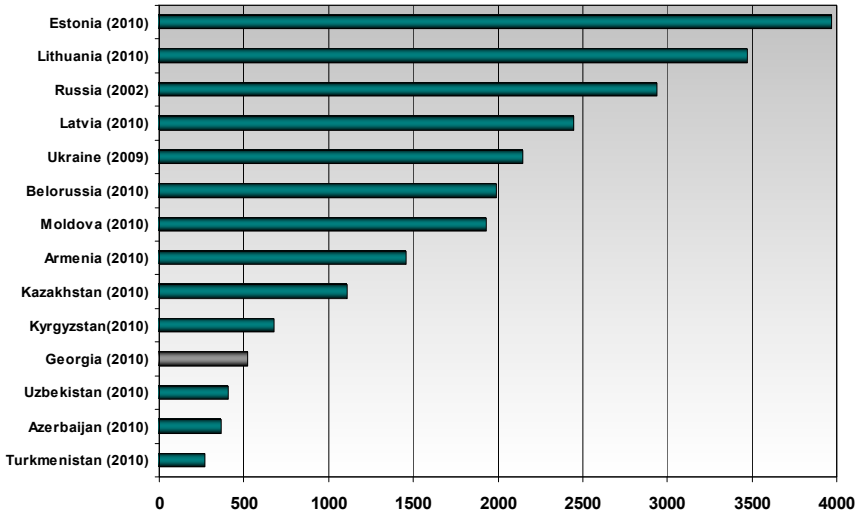
* *For additional information see the chapter on "*Health-related Millennium Development Goals*"*

National Center for Disease Control and Public Health collects data on the number of birth from medical institutions in order evaluate their health service provision. According to the NCDC data, in 2011, there were 57503 **live births** and almost all deliveries (99.8%) had been attended by qualified health professionals (an MDG indicator).

5.4% of infants born in inpatient facilities were underweight and 8.5% weighed more than 40000gr.

According to the data from maternity clinics, 9% of infants were born sick or got sick after the birth. 87.6% of such cases were caused by certain conditions originating in the perinatal period and 9.1% of cases - by congenital abnormalities. Prevalence of congenital abnormalities in live-borns is characterized with a downward trend and is almost 4 times lower than the corresponding indicator for the European Union; among former Soviet Union republics Georgia occupies the 11th position (Figure 5.9).

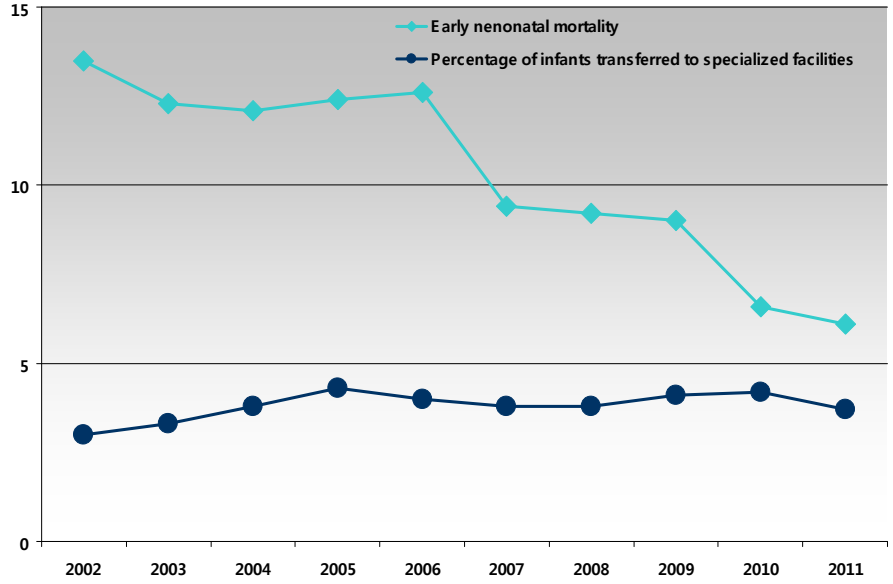
Figure 5.9 **Congenital malformations, incidence rate per 100000 live births, former Soviet Union, last available year**



Source: HFADB

Last years a referral system for newborns (transferring that from maternities to specialized infant clinics) works within the frame of State financed programs; this is reflected in the reduction of the early mortality. In 2011, 3.7% of infants were transferred from maternity clinics to the departments for premature newborns (Figure 5.10).

Figure 5.10 **Early neonatal mortality rate and percent of newborns transferred from maternity clinics to specializes hospitals, Georgia**



According to the data of maternity homes, breastfeeding was initiated within the first hour of life for 70.7% of live-borns; 35.1% of infants were breastfed at the age of 3 months.

Globally, a large proportion of the child mortality occurs in the neonatal period. According to the WHO, early neonatal mortality accounts for 43% of under 5 deaths and represents more than a half of overall infant mortality.

Neonatal mortality rate among under 5 mortality in Georgia is higher than the average rate throughout the World; during last years it fluctuated between 62% and 81%.

According to official statistics and survey data, there was a decline of infant mortality rate. Since 2006 infant mortality rate dropped by 45.9%.

Neonatal mortality, Georgia

	Neonatal mortality rate per 1000 live births	Neonatal mortality rate in under 5 mortality rate, %	Neonatal mortality rate in <1 mortality rate, %	Early neonatal mortality rate in neonatal rate, %
2006	15.7	79	85	81
2007	11.8	62	84	80
2008	11.8	74	83	78
2009	12.5	81	89	72
2010	9.6	72	80	69
2011	8.5	71	77	72

Even though neonatal mortality rate declined, the rates of neonatal and early neonatal mortality in Georgia are high compared to the European and the CIS countries (Figures 5.11, 5.12).

Figure 5.11 Neonatal mortality rate, former Soviet Union, last available year

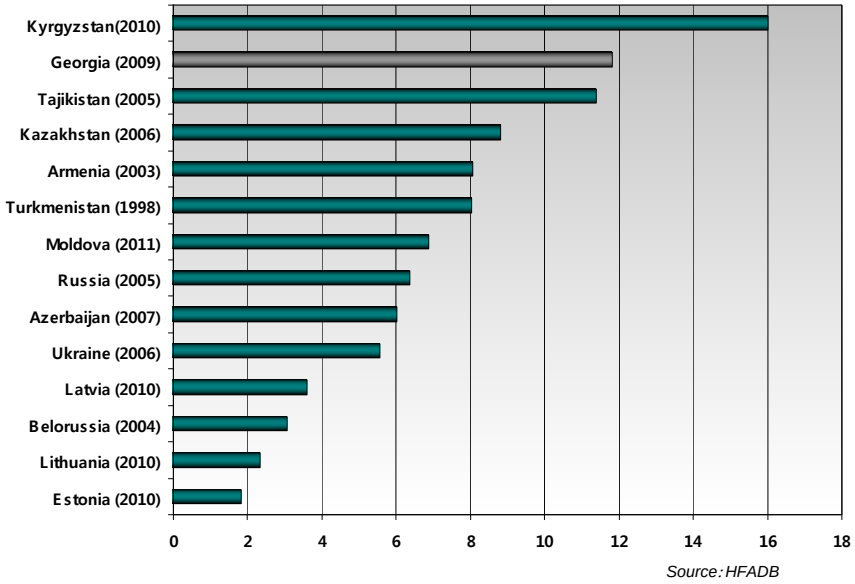
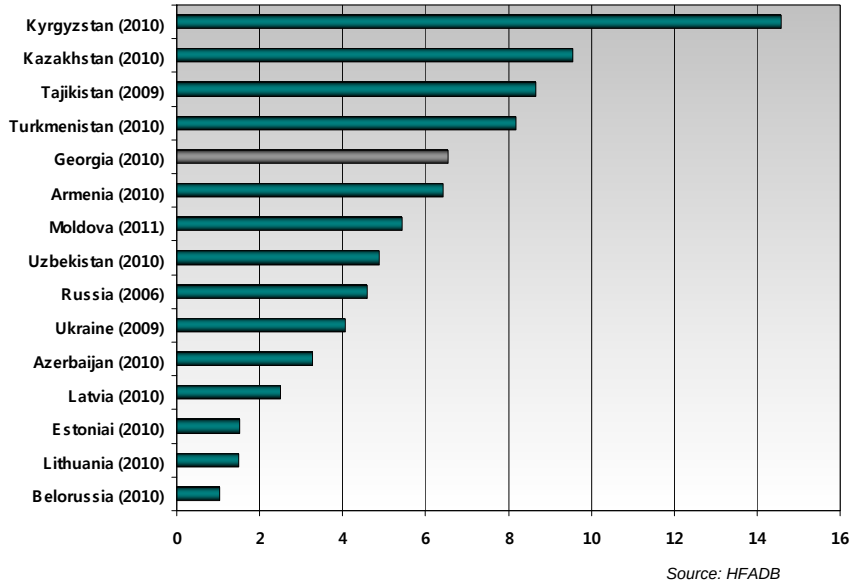
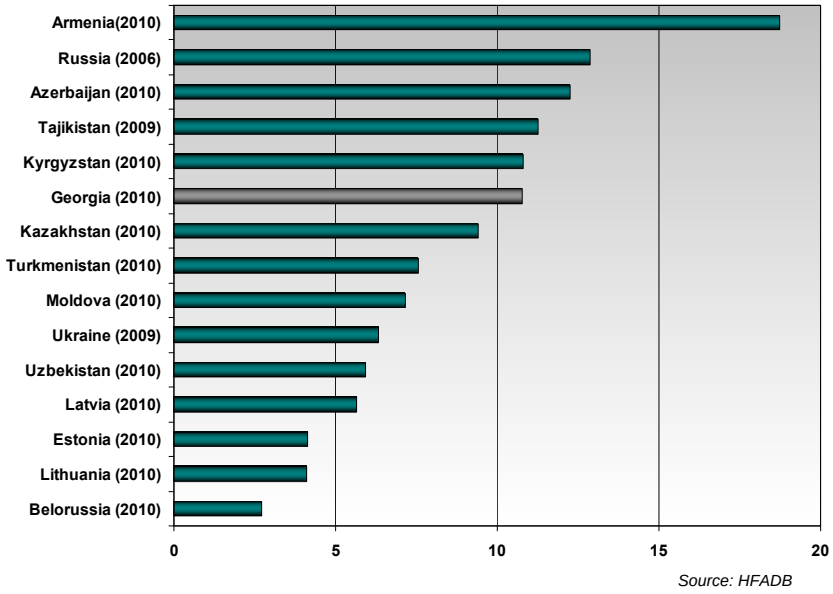


Figure 5.12 Early neonatal mortality rate, Former Soviet Union, last available year



During last years, there was noticed a **stillbirth ratio** reduction. Since 2006, the stillbirth rate decreased by 43.5%. In 2011, the stillbirth rate (9.5/1000) was 2.5 times higher than in the European Union and was within the range of the corresponding indicators in the former Soviet Union republics (Georgia occupies the sixth position) (Figure 5.13).

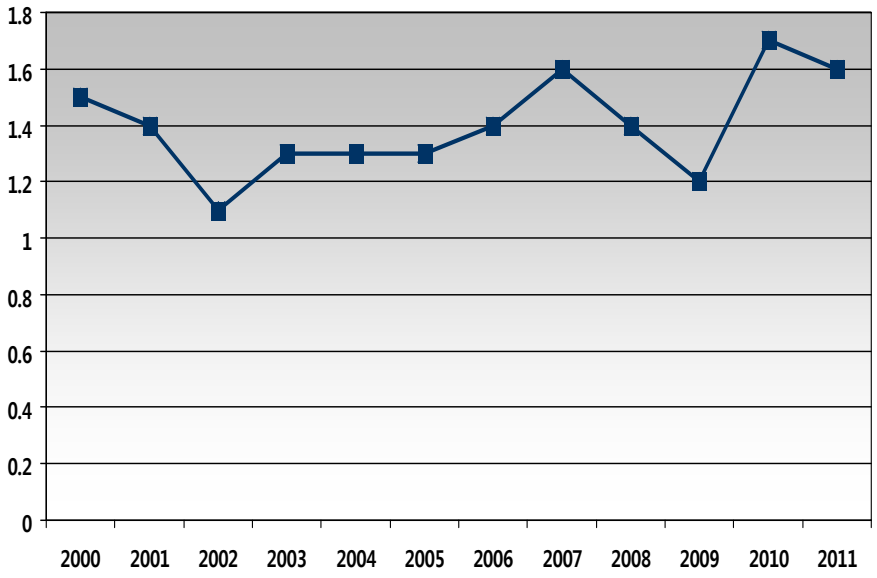
Figure 5.13 Stillbirth ratio per 100000 births, ex USSR, last available year



Source: HFADB

Perinatal mortality, which includes stillbirths and early neonatal mortality, is an integrated indicator, which estimates quality of services provided to pregnant women, delivering mothers and infants. According to the WHO estimates, stillbirths constitute more than 50% of all cases of perinatal deaths, but the adequate ratio of perinatal deaths' components is very important. By the mentioned estimations ratio of the stillbirths to early neonatal deaths for Georgia should not exceed 1.2, which was the case only in 2009. In 2010-2011, the ratio between stillbirths to early neonatal mortality exceeded the recommended number significantly (Figure 5.14).

Figure 5.14 Ratio of stillbirths to early neonatal deaths, Georgia, 2000–2011



Globally one third of fetal deaths happen intrapartum. According to the WHO estimates, this share in developed countries amounts to 10% (0.6 per 1000 births); in developing countries - around 24-37% (9 per 1000 births). According to the same source, Georgia is among countries where the share should be around 29%. According to the data collected from maternity clinics, the share of fetal mortality during delivery is 4.2%.

In 2011, in Georgia, according to the data, provided by medical institutions, 767 children **died** at the age under 15 years. The majority of the cases (90.3%) were registered at hospitals.

Infant deaths account to 82.7% of the children deaths. ***Infant mortality*** rate was 11.0 per 1000 live births. Main causes of the infant mortality belong to the following classes:

- certain conditions originating in the perinatal period (71.3%);
- diseases of the respiratory system (7.7%);
- congenital malformations, deformations and chromosomal abnormalities (6.9%);
- certain infectious and parasitic diseases (6.9%).

In 2011, according to the data, collected from out-patient facilities, 406709 ***new cases of diseases*** (incidence – 53493.2) in children aged under 15 were registered. The highest incidence was registered in the class diseases of the respiratory system (34172.7).

During the reporting year, there were 73389 cases of ***hospital discharges*** registered in children. Hospitalization rate was 9652.6 per 100000 children. Hospitalization rates were high in the following classes:

- respiratory system diseases – 5297.5;
- certain infectious and parasitic diseases – 1445.0;
- certain conditions originating in the perinatal period – 876.6.

Share of hospitalizations of infants in the total number of children hospitalizations was 30.5%; hospitalization rate in infants was 37480.7 per 100000 infants. Infant hospitalization rates were high in the following classes of diseases:

- respiratory system diseases – 17018.4;
- certain conditions originating in the perinatal period – 11164.;
- certain infectious and parasitic diseases – 5120.6.

Table 5.1 Births, child and maternal mortality rates (data collected from health facilities), Georgia, 2006 – 2011

	2006	2007	2008	2009	2010	2011
Total number of deliveries	48181	49626	56096	61656	61928	57413
Including hospital deliveries	47593	49317	55850	61441	61653	57318
home deliveries	588	309	246	215	275	95
Total number of live births	47856	49476	56025	61677	61901	57503
Including home live births without further hospitalization	536	308	235	209	255	95
Total number of stillbirths	817	738	717	665	682	554
Total number of infant deaths (at the age 0-1year)*	882	699	802	872	741	634
Total number of early neonatal deaths (at the age 0-6 days)	604	467	516	558	410	349
Total number of late neonatal deaths(at the age7-28 days)	146	118	147	214	186	139
Total number of post neonatal deaths (at the age 29-365 days)	132	114	139	100	145	146
Total number of under-five deaths*	945	945	898	949	830	691
Total number of maternal deaths	11	10	8	33	12	16
Stillbirth rate per 1000 births	16.8	14.7	12.6	10.7	10.9	9.5
Early neonatal mortality rate per 1000 live births	12.6	9.4	9.2	9.0	6.6	6.1
Late neonatal mortality rate per 1000 live births	3.1	2.4	2.6	3.5	3.0	2.4
Perinatal mortality rate per 1000 births	29.2	24.0	21.7	19.7	17.4	15.6
Infant mortality rate per 1000 live births*	18.4	14.1	14.3	14.1	12.0	11.0
Under-five mortality rate per 1000 live births*	19.7	15.7	16.0	15.4	13.4	12.0
Maternal mortality rate per 100000 live births **	23.0	20.2	14.3	52.1	19.4	27.6

Table 5.2 Births and infant deaths by the regions (data collected from health facilities), Georgia, 2011

	Number of live births	Number of stillbirths	Stillbirth ratio per 1000 births	Number of infant deaths	Infant mortality rate per 1000 live births	Number of early neonatal deaths	Mortality rate per 1000 live births	Perinatal mortality rate per 1000 births
Abkhazia	2	0	-	0	-	0	-	-
Ajara	5362	43	8.0	57	10.6	38	7.1	15.0
Tbilisi	24770	267	10.7	363	14.7	152	6.1	16.7
Kakheti	3365	29	8.5	15	4.5	10	3.0	11.5
Imereti	8791	98	11.0	144	16.4	120	13.7	24.5
Samegrelo and Zemo Svaneti	3972	27	6.8	16	4.0	9	2.3	9.0
Shida Kartli	3326	32	9.5	12	3.6	9	2.7	12.2
Kvemo Kartli	4610	42	9.0	17	3.7	7	1.5	10.5
Guria	947	5	5.3	4	4.2	2	2.1	7.4
Samtskhe-Javakheti	1960	6	3.1	5	2.6	1	0.5	3.6
Mtskheta-Mtianeti	321	3	9.3	0	0	0	0	9.3
Racha-Lechkhumi and Kvem Svaneti	77	2	25.3	1	13.0	1	13.0	38.0
Georgia	**57503**	**554**	**9.5**	**634**	**11.0**	**349**	**6.1**	**15.6**

** The total number of infant and under-five deaths includes both in-patient and out-patient deaths, registered by health facilities*
***2009 – 2011 data are counted according to GeoStat.*

Table 5.3 Women consultation facilities data on antenatal care, Georgia, 2011

	Number of pregnancies taken from the enrollment lists	Pregnancy brought to the end		Pregnant women with 4 antenatal care visits	
		Number	%	Number	%
Abkhazia	422	394	93.4	270	68.5
Ajara	5776	5150	89.2	4704	91.3
Tbilisi	18839	16707	88.7	13037	78.0
Kakheti	3467	3177	91.6	2786	87.7
Imereti	8930	7921	88.7	6719	84.8
Samegrelo and Zemo Svaneti	3570	3171	88.8	2776	87.5
Shida Kartli	3392	3132	92.3	3033	96.8
Kvemo Kartli	4637	4290	92.5	2397	55.9
Guria	977	918	94.0	725	79.0
Samtskhe-Javakheti	2000	1725	86.3	1556	90.2
Mtskheta-Mtianeti	466	427	91.6	368	86.2
Racha-Lechkhumi and Kvemo Svaneti	137	87	63.5	69	79.3
Georgia	**52613**	**47099**	**89.5**	**38440**	**81.6**

Table 5.4 Women consultation facilities data on antenatal care, Georgia, 2011

	Number of pregnant women who initiated antenatal care during the reporting year	Pregnant women tested for syphilis		Pregnant women tested for HIV		Pregnant women tested for Hepatitis B	
		Number	%	Number	%	Number	%
Abkhazia	359	313	87.2	230	64.1	294	93.9
Ajara	5935	5260	88.6	5090	85.8	4831	91.8
Tbilisi	19958	17973	90.1	17220	86.3	17074	95.0
Kakheti	3503	2967	84.7	2754	78.6	2832	95.4
Imereti	8610	7910	91.9	7045	81.8	7388	93.4
Samegrelo and Zemo Svaneti	4250	4022	94.6	3940	92.7	4016	99.9
Shida Kartli	3654	2956	80.9	2142	58.6	2170	73.4
Kvemo Kartli	4762	4202	88.2	4196	88.1	4104	97.7
Guria	1117	934	83.6	955	85.5	914	97.9
Samtskhe-Javakheti	2979	2044	68.6	1802	60.5	1995	97.6
Mtskheta-Mtianeti	415	396	95.4	391	94.2	375	94.7
Racha-Lechkhumi and Kvemo Svaneti	150	90	60.0	83	55.3	99	110.0
Georgia	**55692**	**49067**	**88.1**	**45848**	**82.3**	**46092**	**93.9**

Table 5.5 Live births and stillbirths according to the birth weight (data from maternity hospitals), Georgia, 2011

	Total	500 - 999	1000 - 1499	1500-2499	2500-3999	> 4000
Number of live births	**57408**	**128**	**400**	**2598**	**49417**	**4865**
% from the total number of livebirths	100	0.2	0.7	4.5	86.1	8.5
Number of stillbirths	554	236	76	110	121	11
% from the total number of stillbirths	100	42.6	13.7	19.9	21.8	2.0

Table 5.6 Incidence of diseases in newborns (data from maternity hospitals), Georgia, 2011

	Total number of cases	Incidence rate per 1000 live births
Total	5155	89.8
Including		
Certain conditions originating in the perinatal period	4514	78.6
Including: Disorders of newborn related to slow fetal growth and fetal malnutrition	842	14.7
Birth trauma	216	3.8
Including: Intracranial laceration and hemorrhage due to birth injury	28	0.5
Respiratory disorders specific to the perinatal period	1849	32.2
Including: Intrauterine hypoxia and birth asphyxia	711	12.4
Respiratory distress syndrome of newborn	1020	17.8
Congenital pneumonia	2	0.0
Infections specific to the perinatal period	338	5.9
Including: Sepsis of newborn	83	1.4
Hemorrhagic disease of newborn and fetus	103	1.8
Including: Newborn affected by intrauterine (fetal) blood loss	8	0.1
intracranial (nontraumatic) hemorrhages of newborn and fetus	53	0.9
Hematological disorders of newborn and fetus	425	7.4
Including: Hemolytic disease of fetus or newborn due to isoimmunization	313	5.5
Disseminated intravascular coagulation of newborn and fetus	6	0.1
Other disturbances of cerebral status of newborn	613	10.7
Other disorders originating in the perinatal period	128	2.2
Congenital malformations, deformations and chromosomal abnormalities	468	8.2
Other problems with newborn	173	3.0

Table 5.7 Essential data on breastfeeding, Georgia, 2010 – 2011

	2010		2011	
	Total number of breastfed infants	% from the total number of live births	Total number of breastfed infants	% from the total number of live births
Data collected from the maternity hospitals				
Breastfeeding initiated during the first hour after birth	42525	69.0	40571	70.7
Breastfeeding initiated in 1-8 hours after birth	11478	18.6	9882	17.2
Breastfeeding initiated in 8-24 hours after birth	3842	6.2	2947	5.1
Total number of the breastfed newborns	60090	97.5	55340	96.4
Data collected from the children policlinics				
Newborns breastfed at the age of 3 months	28156	45.5	20179	35.1

Table 5.8 Caesarean sections number, rate and structure, Georgia, 2010 – 2011

	2010			2011		
	Total number of cases	Ratio per 1000 live births	% from the total number	Total number of cases	Ratio per 1000 live births	% from the total number
Total	**19442**	**314.1**	**100**	**20143**	**350.9**	**100**
Including						
Scheduled	10240	--	52.6	11563	--	57.4
Urgent	9212	--	47.4	8580	--	42.6

Table 5.9 Caesarean sections number and indicators, Georgia, 2011

	Number of deliveries	Total number of caesarean sections	% from the total number of deliveries	Ratio per 1000 live births
Abkhazia	2	0	0.0	0.0
Ajara	5341	2166	40.6	404.0
Tbilisi	24728	8661	35.0	349.7
Kakheti	3367	1230	36.5	365.5
Imereti	8794	3457	39.3	393.2
Samegrelo and Zemo Svaneti	3965	1758	44.3	442.6
Shida Kartli	3331	1118	33.6	336.1
Kvemo Kartli	4603	1240	26.9	269.0
Guria	947	286	0.0	0.0
Samtskhe-Javakheti	1944	149	7.7	76.0
Mtskheta-Mtianeti	313	77	24.6	239.9
Racha-Lechkhumi and Kvemo Svaneti	78	1	1.3	13.0
Georgia	**57413**	**20143**	**35.1**	**350.3**

Table 5.10 Abortions and contraception, Georgia,1991 – 2011

	Total number of live births	Abortions		Abortion ratio per 1000 live births	Number of intrauterine devices inserted	Number of women who used hormonal contraception
		Total number	Including mini abortions			
1991	89091	59384	9772	717.7	15790	7732
1992	72631	50748	10256	730.8	9588	5419
1993	61594	45131	8391	789.4	8379	3468
1994	57311	45858	10295	857.9	9127	3983
1995	56341	39538	7522	715.2	9538	5181
1996	53300	30003	5867	554.1	10817	3699
1997	52851	23403	5541	447.6	8171	4869
1998	49588	21018	6806	423.8	9148	6276
1999	46827	18306	6549	390.9	11539	9142
2000	46765	14951	5414	319.7	9120	7865
2001	46006	15008	5330	326.2	9032	8755
2002	45033	13908	5143	308.8	8252	8143
2003	44093	13834	5183	313.7	9084	9340
2004	46373	17210	6552	371.1	9047	10996
2005	47022	19734	6710	419.7	9643	10783
2006	47856	21204	7478	443.1	7581	10742
2007	49476	20644	7583	417.3	7548	9541
2008	56025	22062	7662	393.8	6554	12171
2009	61677	24311	8361	394.2	6408	10324
2010	61901	25585	10621	413.3	7528	20620
2011	**57503**	**31185**	**13208**	**542.3**	**7434**	**16917**

Table 5.11 Abortions by the age groups, Georgia, 2011

	All ages	Age groups						
		< 15	15-19	20-29	30-34	35-39	40-44	45
Total number	**31185**	**15**	**1729**	**15195**	**8913**	**3917**	**1282**	**134**
Indicator per 1000 women	26.8	0.1	11.4	42.3	54.2	24.5	8.2	0.8
Including								
Spontaneous abortions	4132	10	310	2190	1014	440	141	27
Induced abortions	26859	5	1410	12884	7855	3463	1135	107
Gestational age less than 12 weeks	26762	5	1405	12833	7826	3454	1133	106
Mini abortions (Gestational age less than 5 weeks)	13208	0	582	6319	3923	1747	581	56
At gestational age 12-22 weeks (due to medical or social reasons)	97	0	5	51	29	9	2	1
Number of abortions during the first pregnancy terminated by induced	288	0	53	142	64	23	5	1

Table 5.12 Essential data on reproductive health, Georgia,* 2011

	Examinations			From the total number of encounters				
	Both sexes	Females	Males	Due to infertility			Due to climacteric (females)	Due to abortion
				Both sexes	Females	Males		
Abkhazia	978	978	0	34	34	0	29	8
Ajara	4631	4093	538	295	258	37	401	489
Tbilisi	37754	36747	1007	7935	7492	443	3690	450
Kakheti	352	352	0	16	16	0	24	6
Imereti	15730	13953	1777	751	714	37	1052	820
Samegrelo and Zemo Svaneti	4161	4067	94	122	122	0	296	9
Shida Kartli	5613	5612	1	118	117	1	174	237
Kvemo Kartli	6267	6129	138	256	256	0	415	727
Guria	1153	1135	18	62	62	0	150	70
Samtskhe-Javakheti	559	557	2	168	168	0	1	322
Mtskheta-Mtianeti	593	593	0	78	78	0	157	5
Racha-Lechkhumi and Kvemo Svaneti	462	461	1	4	4	0	39	17
Georgia	**78253**	**74677**	**3576**	**9839**	**9321**	**518**	**6428**	**3160**

Table 5.13 Essential data on reproductive health, Georgia*, 2011

	Encounters for a contraception method selection		
	Both sexes	Females	Males
Abkhazia	106	0	106
Ajara	1051	107	944
Tbilisi	3280	60	3220
Kakheti	28	0	28
Imereti	6505	1533	4972
Samegrelo and Zemo Svaneti	1129	86	1043
Shida Kartli	398	0	398
Kvemo Kartli	958	138	820
Guria	148	18	130
Samtskhe-Javakheti	58	2	56
Mtskheta-Mtianeti	97	0	97
Racha-Lechkhumi and Kvemo Svaneti	24	1	23
Georgia	**13782**	**1945**	**11837**

* *Encounters to out-patient facilities due to reproductive health problems, excluding antenatal care visits*

Table 5.14 Child deaths registered by health facilities, Georgia, 2011

	Children under 15 years				Including							
					Children under 1				Children under 5			
	Total number of deaths	Mortality rate per 1000 children	% of the inpatient deaths	% of the outpatient deaths	Total number of deaths	Mortality rate per 1000 children	% of the inpatient deaths	% of the outpatient deaths	Total number of deaths	Mortality rate per 1000 children	% of the inpatient deaths	% of the outpatient deaths
Abkhazia	1	-	0.0	100.0	0	0.0	0.0	0.0	1	-	0.0	100.0
Ajara	76	114.3	78.9	21.1	57	10.6	89.5	10.5	64	11.9	82.8	17.2
Tbilisi	424	214.1	99.8	0.2	363	14.7	100.0	0.0	389	15.7	99.7	0.3
Kakheti	24	34.8	58.3	41.7	15	4.5	86.7	13.3	22	6.5	59.1	40.9
Imereti	160	133.7	96.3	3.8	144	16.4	98.6	1.4	150	17.1	98.0	2.0
Samegrelo and Zemo Svaneti	22	27.1	59.1	40.9	16	4.0	75.0	25.0	18	4.5	72.2	27.8
Shida Kartli	13	24.4	84.6	15.4	12	3.6	91.7	8.3	12	3.6	91.7	8.3
Kvemo Kartli	32	37.1	37.5	62.5	17	3.7	58.8	41.2	24	5.2	41.7	58.3
Guria	5	21.0	80.0	20.0	4	4.2	75.0	25.0	4	4.2	75.0	25.0
Samtskhe-Javakheti	9	24.9	11.1	88.9	5	2.6	20.0	80.0	6	3.1	16.7	83.3
Mtskheta-Mtianeti	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Racha-Lechkhumi and Kvemo Svaneti	1	12.5	100.0	0.0	1	13.0	100.0	0.0	1	13.0	100.0	0.0
Georgia	**767**	**100.9**	**90.4**	**9.6**	**634**	**11.0**	**95.7**	**4.3**	**691**	**12.0**	**92.6**	**7.4**

Table 5.15 Incidence of diseases in children under 1 and under 5, Georgia, 2011

	Children under 1		Children under 5	
	Total number of new cases	Incidence rate per 1000 infants	Total number of new cases	Incidence rate per 1000 children < 5
All diseases	**62933**	**1054.2**	**216229**	**770.0**
Including				
Certain infectious and parasitic diseases	3276	54.9	19501	69.4
Neoplasms	18	0.3	57	0.2
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	2351	39.4	6490	23.1
Endocrine, nutritional and metabolic diseases	2592	43.4	4344	15.5
Mental and behavioural disorders	3	0.1	14	0.05
Diseases of the nervous system	3546	59.4	6242	22.2
Diseases of the eye and adnexa	2157	36.1	6286	22.4
Diseases of the ear and mastoid process	2096	35.1	6685	23.8
Diseases of the circulatory system	100	1.7	217	0.8
Diseases of the respiratory system	39369	659.4	143900	512.5
Diseases of the digestive system	2114	35.4	6775	24.1
Diseases of the skin and subcutaneous tissue	2071	34.7	7012	25.0
Diseases of the musculoskeletal system and connective tissue	190	3.2	693	2.5
Diseases of the genitourinary system	664	11.1	2737	9.7
Certain conditions originating in the perinatal period	955	16.0	955	3.4
Congenital malformations, deformations and chromosomal abnormalities	540	9.0	874	3.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	687	11.5	1971	7.0
Injury, poisoning and certain other consequences of external causes	204	3.4	1476	5.3

Chapter 6.

Main Health Determinants

Non-communicable diseases are the leading cause of morbidity and mortality in Georgia; they account for more than 60% of all death and impairment cases. Statistical data on behavioral risk-factors in Georgia are available only from studies, conducted in Georgia with the support of various international and non-governmental organizations, such as:

- 2006 – 2007 – Non-communicable diseases risk-factors survey in Georgia;
- 2009 – Georgia National Nutrition Survey (GNNS-2009);
- 2009 – School Survey Project on Alcohol and Other Drugs, Georgia (ESPAD);
- 2010 – Chronic disease risk factor surveillance (STEPS2010);
- 2000, 2005, 2010 – Reproductive Health Survey (GERHS);
- 2011-2012 – Migrant Health Survey (MHS).

Migrant Health Survey (MHS)

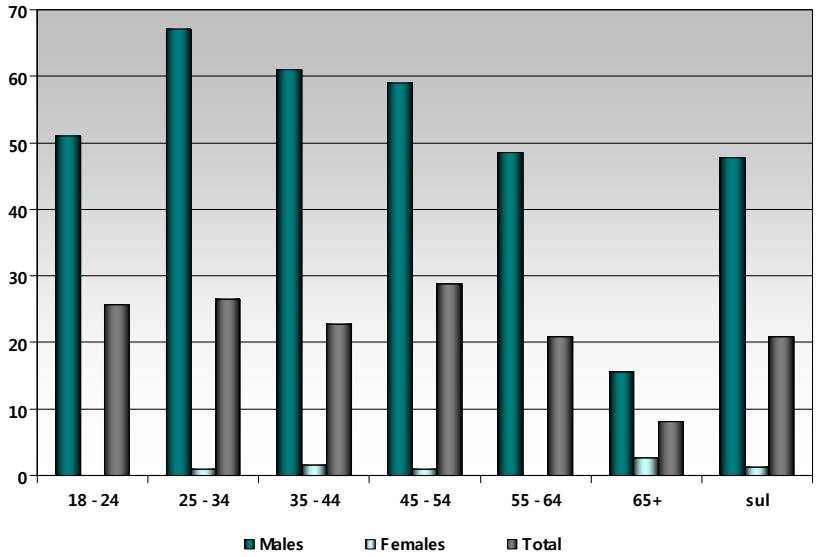
In 2011-2012, Migrant Health Survey was conducted in Georgia with involvement more than 1400 people over 18, including 1185 internally displaced persons, which were force to migrate by the August 2008 Georgia-Russia war. The survey identified the following:

Tobacco consumption

Currently any kind of tobacco product (smoking and smokeless) was consumed by 20.9 % of respondents (47.7% male and 1.2% female). Huge difference of smoking prevalence between men and women was documented. Apparently, historical tendencies of prevalence of smoking among sexes have not changed in Georgia so far, thus, higher prevalence is reported among men compared to women.

According to age groups, smoking was most prevalent among those aged 45-54 years (28.8%). The lowest prevalence was among individuals of 65 and older age groups (8.1%). 51% of smokers were males aged 18-24.

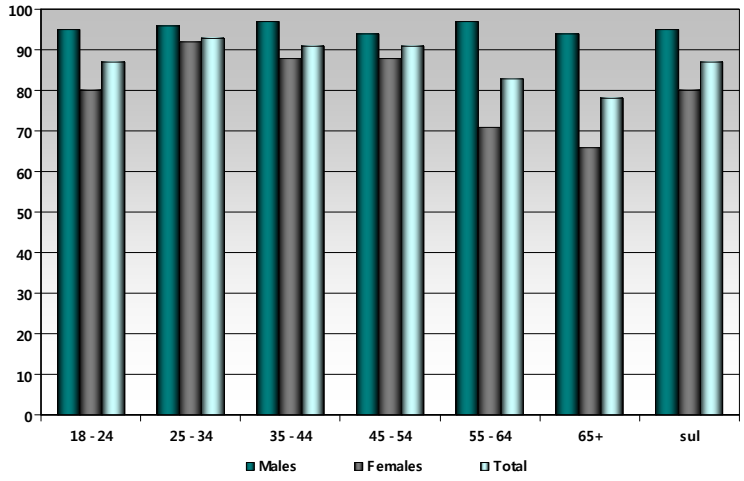
Figure 6.1 **Current smokers (%) by sex and age groups, MHS**



Alcohol consumption

Prevalence of alcohol consumption is very high among IDPs and amounts up to 86.6 percent (in males - 95.4 percent). In each age group prevalence of alcohol consumption among males is approximately the same (94%-97.3%), among females the highest prevalence was revealed in 25-34 age group (91.9%) and it decreased with the age.

Figure 6.2 **Ever alcohol consumers (%) according to sex and age groups, MHS**



Diet

According to the survey, the majority of respondents - 52.2% (males – 58.6%, females – 48.1%), have three meals a day. All respondents take fewer than five servings of fruit and vegetables a day, on average. Average frequency of fruit consumption was three days a week and average frequency of vegetable consumption was five days a week. There is no difference according to sex or age.

Meat and fish products are consumed on average once per week and average number of servings is two. Meat and fish consumption days, as well as number of consumed servings per day, were higher among men than among women.

Dairy products are consumed two days per week on average, and average number of servings consumed is three. These figures slightly vary within age and sex groups.

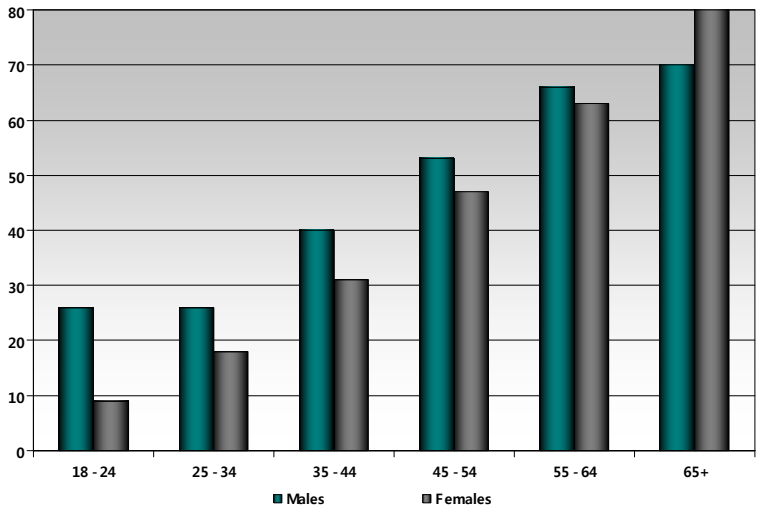
Consumption of bread and cereals occupied the first place in food types consumed among interviewed; 7 days a week and 5 servings a day. Level of intake of sweets and products containing sugar takes the second place and follows bread and cereal products consumption.

The results of the Survey showed that all respondents (100%) are under diet related risk.

History of raised blood pressure

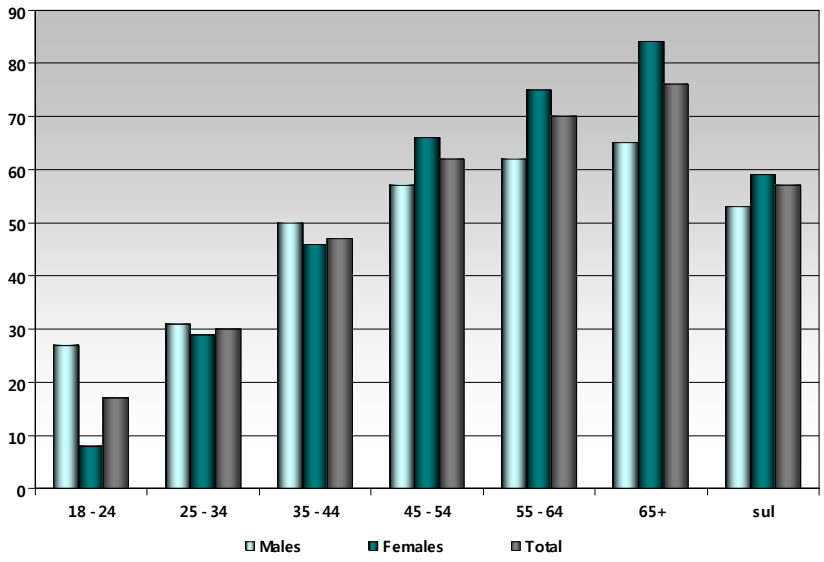
The majority of respondents (78.6%) reported as having ever measured the blood pressure by medical personnel. The most significant is the prevalence of not checking the blood pressure among men of 45-54 age group. While estimating the cardiovascular risks, the age of 45 years and higher among men was considered as one of the risk factors. Hypertension was reported by 56.6 % of respondents. Hypertension prevalence increases with the age.

Figure 6.3 **Hypertension (≥140/90 mmHg, without medication) prevalence by sex and age groups (%), MHS**



51.8% of respondents have got neither high blood pressure, nor any antihypertensive medication taken. 53.9% from the remaining respondents (males - 53.9% and females - 53.8%) are on hypertension treatment. Hypertension prevalence was lower among females of younger ages. In the age group of 55-64 the prevalence was the same in males and females. Although, in the age group than 65 and older prevalence was higher in females than in males.

Figure 6.4 **Ever diagnosed hypertension prevalence (%) by sex and age groups, MHS**



Diabetes history

Majority of respondents (67%) have never checked blood sugar level. Among 15% of remaining respondents occurrence of hyperglycemia was reported.

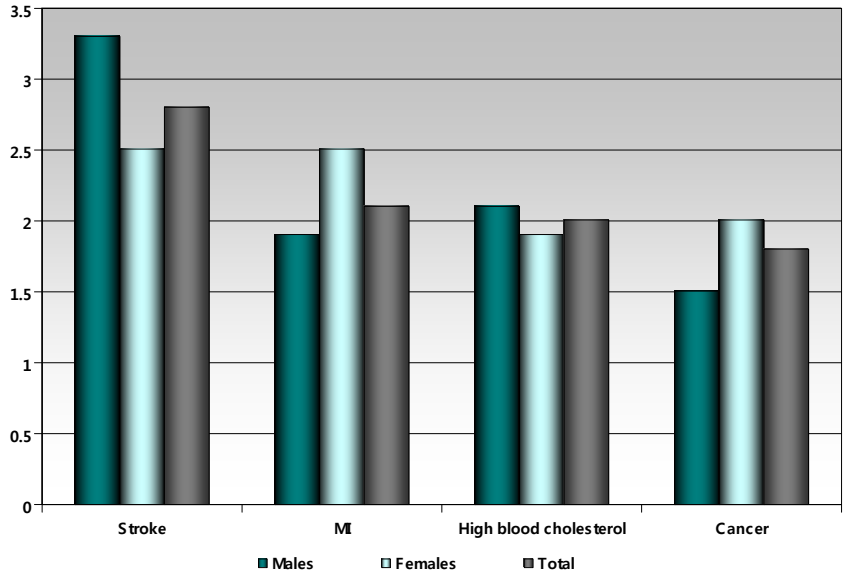
History of other diseases

Stroke occupies the first place in the history of diseases - 2.8% (in males - 3.3%; in females - 2.5%); followed by myocardial infarction (2.2%) (in males - 1.9%; in females - 2.5%), raised blood cholesterol (2%) (in males - 2.1%; in females - 1.9%), and cancer (1.8%) (in males - 1.5%; in females - 2%). Frequency of the above-mentioned diseases proportionally increases with age.

Family history of diseases

High blood pressure (with 50.5% prevalence) occupies the first place in the family history, followed by cancer (16.3%), diabetes (14.2%), stroke (13.2%) and myocardial infarction (6.2%). Only 2% of respondents mentioned hypercholesterolemia in the family history of diseases.

Figure 6.5 Prevalence of diseases (%) by sex, MHS



Physical activity

16.7% of respondents of respondents stated that their work involves vigorous-intensity activity that causes large increases in breathing or heart rate for at least 10 minutes continuously. Vigorous-intensity activities as part of work are performed throughout 4 days in a typical week.

Physical measurements

According to the Body Mass Index (BMI), 4 groups were distinguished. For both sexes the biggest group - 39.6%, (males - 27.7%, females - 36.3%) consisted of people having normal weight (BMI=18.5-24.9). Prevalence of underweight (BMI<18.5) was 2.1% for both sexes (males – 0.6% and females – 3.1%); 35.6% percent (males – 43%; females – 30%) were overweight (BMI=25.0-29.9) and 25.4% (males - 18.7%; females – 30.4%) were obese (BMI=30.0).

KNOWLEDGE, ATTITUDE AND PRACTICES ON NONCOMMUNICABLE DISEASES

Knowledge on NCDs

As the most prevalent NCDs in Georgia 76.4% of respondents (males - 71.1%; females - 80.2%) have mentioned cardiovascular diseases; 66.2% (males - 61.4%; females – 69.8%) have mentioned cancer and 48.6% (males – 46%; females – 50.3%) - diabetes mellitus.

Although, 23.4% of respondents (males - 24.2%; females - 22.8%) incorrectly mentioned HIV/AIDS as a prevalent NCD in Georgia; 17.2% (males – 18.1%; females - 16.6%) mentioned hepatitis and more 45.1% (males– 42.6%; females - 46.9%) identified influenza as a prevalent NCD in Georgia.

Knowledge of NCDs risk factors

Knowledge of major risk-factors for NCD diseases was extremely low: tobacco as one of the risk factors of NCDs was mentioned by 65.5% of respondents (males – 67.2%; females – 64.1%); excessive use of alcohol - by 64.8% of respondents (males – 64.1%; females – 65.3%); unhealthy diet - by 71.1% of respondents (males – 67.6%; females – 73.6%); physical inactivity - by 37.2% of respondents (males – 35.2%; females – 38.5%).

Attitude and practices toward NCDs

The level of awareness of NCDs and corresponding practices are fairly poor. 58.6% of respondents were not able to propose anything when inquired on ways to prevent and manage NCDs. The majority of surveyed are either unaware or find it difficult to specify concrete ways to avoid contracting NCDs, or encounter difficulties in adherence to these preventive measures in spite of their willingness to do so. About 20% of respondents specified on such broad categories as requirement for increasing the responsibility of the government and enhancing respective support coupled with the special appeal to enhance quality control on food products; ensuring employment opportunities; striving for the betterment of economic conditions and increasing the benefits for social services; guaranteeing peaceful co-existence and healthy environment for all; increasing taxes on alcohol and tobacco products. Only a tiny minority of respondents (2%) consider that timely practice of preventive screening (at least twice a year) as well as referral to doctor for advice and regular check-ups are the best ways for managing and preventing NCDs.

Table 6.1 BMI among by age groups, Georgia, MHS, 2011-12

	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65+	Total
Underweight	8%	4%	2%	1%	1%	1%	2%
Normal weight	82%	50%	36%	23%	23%	34%	37%
Overweight	9%	33%	36%	38%	38%	38%	36%
Obesity	1%	13%	27%	39%	31%	27%	25%

Table 6.2 Risk-factors prevalence according to the results of interviews, Georgia, 2011-2012

	Male	Female	Both sexes
Current smokers	70.3%	25.0%	65.9%
Average age of starting smoking (years)	20	37	21
Lifetime alcohol consumption	100.0%	50.0%	95.1%
Alcohol consumption during the past 12 months	97.3%	100.0%	97.4%
Alcohol consumption during the past 30 days	83.3%	100.0%	84.2%
The maximum number of alcohol drinks during the past 30 days	21	2	20
Average number of fruit servings days per week	4	3	4
Average number of fruit servings per typical days	2	2	2
Average number of vegetable servings days per week	3	4	4
Average number of vegetable servings per typical days	2	3	2
Average number of meat servings days per week	2	3	2
Average number of meat servings per typical days	2	1	2
Average number of fish servings days per week	1	2	1
Average number of fish servings per typical days	1	2	1
Average number of dairy products servings days per week	1	2	1
Average number of dairy products servings per typical days	2	2	2
Average number of bread and cereals servings days per week	7	7	7
Average number of bread and cereals servings per typical days	3	3	3
Average number of sweets servings days per week	5	5	5
Average number of sweets servings per typical days	2	3	2
Work involving high intense activity	15.3%	3.9%	8.7%
Work involving average intense activity	55.0%	61.1%	58.4%
Walk or use a bicycle for at least 10 minutes continuously to get to and from	73.1%	75.9%	74.7%
High level sports activity	4.2%	0.9%	2.3%
Average level of sports activity- intensive for at least 110 minutes	5.7%	2.8%	4.0%
BMI >= 140 and/or DBP >= 90	83.8%	50.0%	80.5%
SBP >= 160 and/or DBP >= 100	48.6%	0.0%	43.9%
SBP>= 140 and/or DBP >= 90 or on medication	83.8%	75.0%	82.9%
SBP >= 160 and/or DBP >= 100 or on medication	51.4%	25.0%	48.8%

Glossary

1. **Statistics** – the social science directed toward obtaining, processing, and analyzing information that describes the quantitative patterns in the multiform life of a society.
2. **Statistical Data** (– the results of measurements, surveys, experiments, analysis.
3. **Statistical Data Sources** – state management agencies (e.g., Ministry of Health, received data from the health facilities); censuses data, surveys data, etc.
4. **Population** - the set of individuals from which a statistical sample is taken (the total number of inhabitants constituting country population, region population, particular ethnic, social, or age group).
5. **Population size** – is equal to the algebraic sum of the basic size of the population by the last census, natural increase, and net migration during the passed period.
6. **Mid-year population** - the arithmetic mean of the population at the beginning and at the end of a year.
7. **Age standardization** – a method of adjusting the crude rate to eliminate the effect of differences in population age structures when comparing crude rates for different periods of time, different geographic areas and/or different population sub-groups (e.g. between one year and the next and/or states and territories, indigenous and non-indigenous populations). Adjustments are usually undertaken for each of the comparison populations against a standard population (rather than adjusting one comparison population to resemble another).

European Standard population

Age (years)	%	Age (years)	%
0	1.6	45-49	7
1-4	6.4	50-54	7
5-9	7	55-59	6
10-14	7	60-64	5
15-19	7	65-69	4
20-24	7	70-74	3
25-29	7	75-79	2
30-34	7	80-84	1
35-39	7	85+	1
40-44	7	all ages	100

8. **Medical statistics** - the application of statistical knowledge and methods to the field of medicine and health.
9. **Health** - a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. Health is the extent to which an individual or group is able, on the one hand, to realize aspirations and satisfy needs and, on the other hand, to cope with the interpersonal, social, biological, and physical environments. Health is therefore a resource for everyday life, not the objective of living; it is a positive concept embracing social and personal resources as well as physical and psychological capacities. Population health is not merely the sum of the health of individuals; it also entails consideration of the nature of the distribution of health throughout the population.
10. **Health status** – is a concept that gives medical assessment of population health on aggregated specific indicators, such as encounter for health services, disease, need for medical examination, etc. Health status may be measured by an observer, who performs an examination and rates the individual along any of several dimensions, including presence or absence of life-threatening illness, risk factors for premature death, severity of disease, and overall health. Individual health status may also be assessed by the person's physical functioning, emotional well-being, pain or discomfort, and overall perception of health.

    Depending on the health status individuals are divided into 3 groups:

    Group I - healthy individuals, they did not present any complaints, not have a history of chronic diseases, none functional disorders have been found during medical examinations;

    Group II - practically healthy persons with a history of acute and chronic disease that does not

affect the functions of vital organs and does not affect the ability to work;
Group III - patients with chronic diseases requiring systematic medical supervision:

- with compensated;
- with sub-compensated;
- with de-compensated course of disease.

11. **Primary health care** – a basic level of health care that includes programs directed at the promotion of health, early diagnosis of disease or disability, and prevention of disease. Primary health care is provided in an ambulatory facility to limited numbers of people, often those living in a particular geographic area. It includes continuing health care, as provided by a family practitioner. In Georgia, since 2006, primary health care is defined as a non-hospital health care, it means that all services provided in out-patient clinics.
12. **Primary health care facilities** – all out-patient facilities (out-patient departments co-social with hospitals, policlinics, ambulatories, health centers, doctor health posts, etc.), with at least one health professional (doctor, nurse). Dental clinics (cabinets) provide only the dental care not included. Indicator of PCH facilities per 100000 population:

$$\frac{\text{Total number of PCH facilities} * 100000}{\text{Midyear population}}$$

13. **Morbidity** – an incidence of ill health in some period of time; departure from a state of physical or psychological well-being, resulting from disease, illness, injury, or sickness account for the contact with health services.
14. **Encounter** – a face-to-face transaction between a health worker and a patient or client for the physical examination, diagnostics, consultation, and treatment purposes. Places and types for encounters are: physician's cabinets (offices), ambulatories, policlinics, hospital admission departments (emergency departments), houses/flats (any places where a face-to-face transaction occurs), clinics, and any health facilities except hospitals. Total number of encounters per one person per year:

$$\frac{\text{Total number of encounters per year} * 100000}{\text{Midyear population}}$$

15. **First encounter** – patient's first visit to a doctor.
16. **Recurrent encounter** - visit to a doctor for continued treatment of the acute cases or the chronic (previously identified and registered) cases.
17. **Case detection** – diagnostic and registration of a disease.
18. **Incidence** – the number of newly diagnosed cases (all acute cases of disease, the first registration of the chronic diseases) during a specific time period.

$$\frac{\text{Total number of new cases of the diseases} * 100000}{\text{Midyear population}}$$

19. **Prevalence** – the total number of all new and old cases of a disease or occurrences of an event registered during a particular year.

$$\frac{\text{Total number of all registered cases of the diseases} * 100000}{\text{Midyear population}}$$

20. **Prevalence by the end of the year**

$$\frac{\text{Total number of all cases of the diseases by the end of the year} * 100000}{\text{Midyear population}}$$

21. **Hospital** – residential establishment equipped with in-patient facilities for 24-hour care, providing medical, surgical, etc. testing, treatment, and rehabilitation, staffed with professionally trained health care personnel (at least one doctor). Total number of hospitals includes general type, specialized, emergency, and long-stay hospitals and not includes balneal facilities, sanatoriums, welfare homes for physically and mentally disabled, retirement homes, day care facilities.
    Indicator for total number of hospitals per 100000 population:

$$\frac{\text{Total number of the in-patient clinics} * 100000}{\text{Midyear population}}$$

22. **Hospital bed** – one bed in a 24-hour section for treatment of a patient (in-patient bed). The number of hospital beds indicates hospital capacity and power. The number of hospital beds not includes beds for newborns and diurnal beds. Indicator for total number of hospital beds per 100000 population:

$$\frac{\text{Total number of hospital beds} * 100000}{\text{Midyear population}}$$

23. **Hospital morbidity** – refers to the number of hospitalizations.
24. **Hospitalization level**

$$\frac{\text{Total number of hospital discharges, live and dead} * 100000}{\text{Midyear population}}$$

25. **Average length of stay**

$$\frac{\text{Total number of bed / days spent by patients in a hospital}}{\text{Total number of all hospital discharges in the given hospital}}$$

26. **Hospital bed rotation rate**

$$\frac{\text{Total number of hospital discharges}}{\text{Total number of hospital beds}}$$

27. **Bed occupancy rate**

$$\frac{\text{Total number of bed / days spent by patients in a hospital}}{\text{Total number of hospital beds}}$$

28. **Hospital case fatality rate**

$$\frac{\text{Total number of deaths in the hospital} * 100}{\text{Total number of discharges from the given hospital}}$$

29. **Gestational age** - the duration of gestation is measured from the first day of the last normal menstrual period. Gestational age is expressed in completed days or completed weeks (events occurring 280 to 286 completed days after the onset of the last normal menstrual period are considered to have occurred at 40 weeks of gestation). Gestational age is frequently a source of confusion, when calculations are based on menstrual dates. For the purposes of calculation of gestational age from the date of the first day of the last normal menstrual period and the date of delivery, it should be borne in mind that the first day is day zero and not day one; days 0-6 therefore correspond to "completed week zero"; days 7-13 to "completed week one"; and the 40th week of actual gestation is synonymous with "completed week 39". Where the date of the last normal menstrual period is not available, gestational age should be based on the best clinical estimate. In order to avoid misunderstanding, tabulations should indicate both weeks and days.

    Pre-term

    Less than 37 completed weeks (less than 259 days) of gestation.

    Term

    From 37 completed weeks to less than 42 completed weeks (259 to 293 days) of gestation.

    Post-term

    42 completed weeks or more (294 days or more) of gestation.

30. **Live birth** - the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn.
31. **Birth weight** - the first weight of the fetus or newborn obtained after birth. For live births, birth weight should preferably be measured within the first hour of life before significant postnatal weight loss has

occurred. While statistical tabulations include 500 g groupings for birth weight, weights should not be recorded in those groupings. The actual weight should be recorded to the degree of accuracy to which it is measured. The definitions of "low", "very low", and "extremely low" birth weight do not constitute mutually exclusive categories. Below the set limits they are all-inclusive and therefore overlap (i.e. "low" includes "very low" and "extremely low", while "very low" includes "extremely low").

Low birth weight

Less than 2500 g (up to and including 2499 g).

Very low birth weight

Less than 1500 g (up to and including 1499 g).

Extremely low birth weight

Less than 1000 g (up to and including 999 g).

32. **Crude birth rate** – the number of live births occurring in a stated population during the stated period of time, usually a year, per 1000 population of the same period of time.

$$\frac{\text{Total number of live births} * 1000}{\text{Midyear population}}$$

33. **Age-specific birth rate –** the number of live births to women of the particular age group during the stated period of time, usually a year, per 1000 women of the same age group.

$$\frac{\text{Total number of live births to women of x age group} * 1000}{\text{Total number of women of the same age group}}$$

34. **Total fertility rate** – the expected average number of children that would be born to a woman in her lifetime if she were to pass through her childbearing years (usually for ages 15–49) experiencing the age-specific fertility rates prevailing in a given year/period. It is obtained by summing the single-year age-specific rates at a given time to be divided by 1000. In the case of data give in five-year age groups total fertility rate is the sum of the age-specific birth rates multiplied by 5 and divided by 1000. Total fertility rate is the sufficiently precise index.

$$\frac{\text{The sum of the single-year age-specific rates}}{1000}$$

35. **Gross reproduction rate** – the average number of daughters that would be born to a woman if she survived to the end of her reproductive years and conformed to the age-specific fertility rate of a given year, this rate provides a measure of the replacement fertility of a population in the absence of mortality. Gross reproduction rate are based on female fertility. It is also possible, but by no means the standard practice, to calculate analogous rates for the male population. Gross reproduction rate not takes into account the fact that some women will die before entering and completing their child-bearing years, so it is not a realistic assessment of the reproductive potential of a population.

(Proportion of female livebirths) * (Total fertility rate)

36. **Net reproduction rate** – the average number of daughters that would be born to a female if she passed through her lifetime conforming to the age-specific fertility and mortality rates of a given year. This index means that each generation of mothers is having exactly enough daughters to replace themselves in the population. Net reproduction rates are based on female fertility and mortality. It is also possible, but by no means the standard practice, to calculate analogous rates for the male population.

(Proportion of female livebirths) * (Total fertility rate) * (Total number of surviving women)

37. **Numerical secondary ratio of sexes –** the ratio of males to females in a population at time of birth, is commonly assumed to be 105 boys to 100 girls. A range of sex ratios at birth of between 103 to 107 boys per 100 girls has been observed in different societies, and among different ethnic and racial groups within a given society.
38. **Death –** a permanent cessation of all vital functions (the irreversible cessation of organism functioning) at any moment of life (from the birth).
39. **Cause of death** - all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries. The purpose of the definition is to ensure that all the relevant information is recorded and that

the certifier does not select some conditions for entry and reject others. The definition does not include symptoms and modes of dying, such as heart failure or respiratory failure.

40. **Underlying cause of death** - the underlying cause has been defined as a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.
41. **Crude death rate** - the total number of deaths to residents in a specified geographic area (country, state, county, etc.) divided by the total population for the same geographic area (for a specified time period, usually a calendar year) and multiplied by 1000.

$$\frac{\text{Total number of deaths} * 1000}{\text{Midyear population}}$$

42. **Death rate by cause of death** – calculated for specific causes of death. Consistent cause-of-death data is needed to monitor national trends in deaths, evaluate prevention programs, and conduct research that will ultimately lead to a reduction in these deaths.

$$\frac{\text{Total number of deaths of the specific cause of death} * 100000}{\text{Midyear population}}$$

43. **Age-specific death rate** – refers to the total number of deaths per 1000 people of a specific age group (one-year, five-year, etc. age groups are used) in a given time period (usually one/two years).

$$\frac{\text{Total number of deaths of a specific age group} * 1000}{\text{Total number of people of the same age group}}$$

44. **Infant mortality rate** – the number of children dying under a year of age in a given year per 1000 live births in the same year. Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one, if subject to age-specific mortality rates of that period. Infant mortality rate is a leading indicator of the level of child health and overall development in countries. It is also MDG indicator. The total number of live births is often used as the denominator to calculate the infant mortality rate.

$$\frac{\text{Total number of infant deaths} * 1000}{\text{Total number of live births}}$$

45. **Mortality under age 5** – refers to the death of infants and children under the age of five, is the number of children who die by the age of five, during the stated period of time, usually a year, per thousand live births of the same period of time. Under-five mortality rate is the probability of a child born in a specific year or period dying before reaching the age of five, if subject to age-specific mortality rates of that period.

$$\frac{\text{Total number of deaths of children under the age of five} * 1000}{\text{Total number of live births}}$$

46. **Neonatal period** - commences at birth and ends 28 completed days after birth. Neonatal deaths may be subdivided into early neonatal deaths, occurring during the first seven days of life, and late neonatal deaths, occurring after the seventh day but before the 28 completed days of life.
47. **Neonatal mortality rate** – number of deaths during the first 28 completed days of life per 1000 live births in a given year or period.

$$\frac{\text{Total number of neonatal deaths} * 1000}{\text{Total number of live births}}$$

48. **Early neonatal mortality rate**

$$\frac{\text{Total number of early neonatal deaths} * 1000}{\text{Total number of live births}}$$

49. Early neonatal mortality rate, weight-specific

$$\frac{\text{Total number of early neonatal deaths in weight groups of 1000 g and more} * 1000}{\text{Total number of live births in weight groups of 1000 g and more}}$$

50. Stillbirth (dead born fetus) - death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

51. Stillbirth rate – the ratio of the number of still deaths in one year to the total number of both live births and fetal deaths in the same year.

$$\frac{\text{Total number of still births} * 1000}{\text{Total number of live births + Total number of still births}}$$

52. Stillbirth rate, weight-specific

$$\frac{\text{Total number of still births in weight groups of 1000 g and more} * 1000}{\text{Total number of births in weight groups of 1000 g and more}}$$

53. Perinatal period - The perinatal period commences at 22 completed weeks (154 days) of gestation (the time when birth weight is normally 500 g), and ends seven completed days after birth.

54. Perinatal mortality rate

$$\frac{\text{Total number of early neonatal deaths + Total number of still births} \times 1000}{\text{Total number of live births + Total number of still births}}$$

55. Post-neonatal mortality rate

$$\frac{\text{Infant deaths occurring from 28 days and before 1 year of life} * 1000}{\text{Total number of live births}}$$

56. Natural increase rate – a measure of population growth (in the absence of migration) comprising addition of newborns to the population and subtraction of deaths.

a) Crude birth rate - Crude death rate

b) $\frac{(\text{Live births during a year} - \text{deaths during the year}) * 1000}{\text{Midyear population}}$

57. Maternal death – a maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

58. Late maternal death - a late maternal death is the death of a woman from direct or indirect obstetric causes more than 42 days but less than one year after termination of pregnancy.

59. Pregnancy-related death - a pregnancy-related death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.

Maternal deaths should be subdivided into two groups:

Direct obstetric deaths: those resulting from obstetric complications of the pregnant state (pregnancy, labour and puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above.

Indirect obstetric deaths: those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which were aggravated by physiologic effects of pregnancy.

60. Maternal mortality rate

$$\frac{\text{Total number of maternal deaths (direct and indirect)} * 100000}{\text{Total number of women of reproductive age}}$$

61. Maternal mortality ratio

$$\frac{\text{Total number of maternal deaths (direct and indirect)} * 100000}{\text{Total number of live births}}$$

62. **Direct obstetric mortality ratio**

$$\frac{\text{Direct obstetric deaths only} * 100000}{\text{Total number of live births}}$$

63. **Pregnancy-related mortality ratio**

$$\frac{\text{Pregnancy-related deaths} * 100000}{\text{Total number of live births}}$$

64. **Estimated life expectancy** – Life expectancy is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates, generally the mortality conditions existing in the period mentioned. It is calculated by the analysis of life tables (also called a mortality table or actuarial table). Life expectancy may be determined by race, sex, or other characteristics using age-specific death rates for the population with that characteristic. In actuarial science, a life table is a table which shows, for each age, what the probability is that a person of that age will die before his next birthday. Life tables are usually constructed separately for men and for women because of their substantially different mortality rates. Other characteristics can also be used to distinguish different risks, such as smoking status, occupation, and socio-economic class. Two types of life tables are used to divide the life expectancy into life spent in various states: 1) multi-state life tables (also known as increment-decrement life tables) based on transition rates in and out of the different states and to death, and 2) prevalence-based life tables (also known as the Sullivan method) based on external information on the proportion in each state. Life tables can also be extended to show life expectancies in different labor force states or marital status states.
65. **Health Adjusted Life Expectancy - HALE** - an indicator of overall population health. It combines measures of both age- and sex-specific health status, and age- and sex-specific mortality into a single statistic. HALE represents the number of expected years of life equivalent to years lived in full health, based on the average experience in a population. HALE national assessments are based upon the life tables and population surveys, which reveal influence of factors upon the general health status and mental health, and upon the detailed and formation about the main conditions causing disability.
66. **Disability-adjusted life years - DALYs** - the sum of the years of life lost due to premature mortality in the population and the years lost due to disability for incident cases of the health condition. One DALY represents the loss of one year of equivalent full health. DALYs are based on the mortality information, which comprises causes of death for each WHO region and regional epidemiologic assessments of disadvantage circumstances.
67. **Quality adjusted life year (QALY)** - is a measure of disease burden, including both the quality and the quantity of life lived. It is used in assessing the value for money of a medical intervention as a parameter used to rationalize the benefit from different medical treatments or procedures, so as to calculate relative cost-benefit.
68. **Reproductive health** – according to the WHO, Reproductive health is defined as a state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life. Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this are the right of men and women to be informed and to have access to safe, effective, affordable, and acceptable methods of family planning of their choice, and the right to appropriate health-care services that enable women to safely go through pregnancy and childbirth.
69. **Breastfeeding** - the child has received breast milk direct from the breast or expressed.
70. **Exclusive breastfeeding** - **t**he infant has received only breast milk from the mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.
71. **Predominant breastfeeding** - the infant's predominant source of nourishment has been breast milk. However, the infant may also have received water and water-based drinks (sweetened and flavored water, teas, infusions, etc.), fruit juice; oral rehydration salts solution (ORS), drop and syrup forms of vitamins, minerals and medicines, and ritual fluids (in limited quantities). With the exception of fruit juice and sugar water, no food-based fluid is allowed under this definition.
72. **Complementary feeding** - the child has received both breast milk and solid or semi-solid food.

73. **Contraceptive prevalence rate**

$$\frac{\text{Women of reproductive age (15-49) who are married or in union and who are currently using any method of contraception} * 100000}{\text{Total number of women of reproductive age (15-49) who are married or in union}}$$

74. **Unmet need for contraception**

$$\frac{\text{Women who are married or in a consensual union who have an unmet need for family planning} * 100}{\text{Total number of women of reproductive age (15-49 years) who are married or in consensual union}}$$

75. **Adolescent pregnancy rate**

$$\frac{\text{The registered number of live-births to women 15 to 19 years of age during a given year + number of abortions in the same age} * 1000}{\text{Total number of women aged 15-19}}$$

76. **Abortion** – is the termination of a pregnancy by the removal or expulsion from the uterus of a fetus or embryo, resulting in or caused by its death. An abortion can occur spontaneously due to complications during pregnancy or can be induced. The term *abortion* most commonly refers to the induced abortion of a pregnancy, while spontaneous abortions are usually termed miscarriages. ***Spontaneous*** abortion is the expulsion of an embryo or fetus due to accidental trauma or natural causes. Most miscarriages are due to incorrect replication of chromosomes; they can also be caused by environmental factors. ***Induced*** abortion is the intentional termination of a pregnancy before the fetus can live independently. An abortion may be elective (based on a woman's personal choice) or therapeutic (to preserve the health or save the life of a pregnant woman). An abortion is considered to be elective if a woman chooses to end her pregnancy, and it is not for maternal or fetal health reasons.
77. **Crude abortion rate** – the number of abortions per 1000 women population of the age 15-49 per year. Is evaluated in ppm (i.e. per 1000 women).
78. **Abortion frequency rate** - the number of abortions per deliveries per year. Shows the number of abortions for 100 deliveries.
79. **Age-specific abortion rate** – the number of abortions of the women of specific age per the number of women of this age per year.
80. **Total induced abortion rate (TIAR)** - is an expected average number of induced abortions per woman in her lifetime if during the course of her childbearing years, she were to experience the age-specific abortion rates prevailing in a given year or period, for a given country or other specified area.
81. **Surgical activity rate per 100000 population**

$$\frac{\text{Total number of surgical operations} * 100000}{\text{Midyear population}}$$

82. **Percent of cesarean sections from all deliveries**

$$\frac{\text{Total number of caesarean sections} * 100}{\text{Total number of deliveries}}$$

83. **Cesarean sections rate per 1000 live births**

$$\frac{\text{Total number of caesarean sections} * 1000}{\text{Total number of live births}}$$

84. **Obligatory registration disease** – Diseases which in view of high severity, prevalence and transmission level, are considered socially dangerous. Each revealed case of such disease must be recorded to local or central public health services controls by medical employees.
85. **HIV incidence**

$$\frac{\text{Total number of new cases of HIV infection} * 100000}{\text{Midyear population}}$$

86. **HIV new cases distribution by ways of transmission (%)**

$$\frac{\text{Total number of new cases of HIV infection by the specific way of transmission} * 100}{\text{Total number of new cases of HIV infection}}$$

87. AIDS incidence

$$\frac{\text{Total number of new cases of AIDS} * 100000}{\text{Midyear population}}$$

88. HIV testing coverage rate among pregnant women

$$\frac{\text{Total number of HIV tested pregnant women} * 100}{\text{Total number of enrolled pregnancies}}$$

89. Percentage of HIV positive pregnant women among HIV tested pregnant women

$$\frac{\text{Total number of HIV positive pregnant women} * 100}{\text{Total number of HIV tested pregnant women}}$$

90. Antiretroviral prevention therapy coverage among HIV-infected pregnant women

$$\frac{\text{Number of HIV positive pregnant women who received any antiretroviral treatment to reduce the risk of mother-to-child transmission during 1 year} * 100}{\text{Total number of HIV positive pregnant women in a given year (including tested during delivery)}}$$

Percentage of HIV positive children, born by HIV infected mothers

where:

T = proportion of HIV-positive pregnant women provided with antiretroviral treatment;

v = mother-to-child transmission rate in the absence of any treatment;

e = efficacy of treatment provided.

Default values of 25% and 50%, respectively, can be used for *v* and *e*.

91. Percent of HIV infected donors

$$\frac{\text{Total number of HIV positive donors} * 100000}{\text{Total number of HIV tested donors}}$$

92. Percent of new HIV positive cases among tuberculosis patients

$$\frac{\text{Total number of new HIV positive cases among tuberculosis patients} * 100000}{\text{Total number of HIV tested tuberculosis patients}}$$

93. Incidence of syphilis

$$\frac{\text{Total number of new cases of syphilis} * 100000}{\text{Midyear population}}$$

94. Incidence of gonococcal infection

$$\frac{\text{Total number of new cases of gonococcal infection} * 100000}{\text{Midyear population}}$$

95. Incidence of syphilis among pregnant women

$$\frac{\text{Number of new cases of syphilis in pregnant women*} 100000}{\text{Total number of pregnant women tested for syphilis}}$$

96. Incidence of trichomoniasis

$$\frac{\text{Total number of new cases of trichomoniasis} * 100000}{\text{Midyear population}}$$

97. Incidence of trichomoniasis among women of reproductive age

$$\frac{\text{Number of new cases of trichomoniasis in women of reproductive age} * 100000}{\text{Total number of women aged 15-19}}$$

98. Incidence of chlamidiosis

$$\frac{\text{Total number of new cases of chlamidiosis} * 100000}{\text{Midyear population}}$$

99. Incidence of chlamidiosis among women of reproductive age

$$\frac{\text{Number of new cases of chlamidiosis in women of reproductive age} * 100000}{\text{Total number of women aged 15-19}}$$

100. Notification rate for new smear-positive cases

$$\frac{\text{Number of new smear-positive cases registered during a year} * 100000}{\text{Midyear population}}$$

101. Case detection ratio of new smear-positive cases - The case detection ratio is the number of new pulmonary smear-positive cases detected, expressed as a percentage of the estimate of new smear-positive cases. It provides a measure of case finding coverage. The target is to achieve a case detection ratio of more, than 70%. A very important indicator, which provides an indication of the effectiveness of national TB programs in finding and diagnosing people with TB.

$$\frac{\text{Number of new smear-positive cases registered during a year} * 100}{\text{Number of new smear-positive cases estimated to occur during the year in that population}}$$

102. TB vaccination coverage

$$\frac{\text{Number of children under 1 year of age, vaccinated against tuberculosis} * 100}{\text{Total number of children under 1 year of age}}$$

103. DPT3 vaccination coverage

$$\frac{\text{Number of children under 1 year of age, vaccinated with DPT-3} * 100}{\text{Total number of children under 1 year of age}}$$

104. Measles vaccination coverage

$$\frac{\text{Number of children under 2 years of age, vaccinated with measles vaccine} * 100}{\text{Total number of children under 2 years of age}}$$

105. Polio vaccination coverage

$$\frac{\text{Number of children under 1 year of age, vaccinated with Polio-3 vaccine} * 100}{\text{Total number of children under 1 year of age}}$$

106. HpB3 vaccination coverage

$$\frac{\text{Number of children under 1 year of age, vaccinated with HpB-3 vaccine} * 100}{\text{Total number of children under 1 year of age}}$$

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