MINISTRY OF LABOUR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

NATIONAL CENTRE FOR DISEASE CONTROL AND PUBLIC HEALTH

HEALTH CARE

STATISTICAL YEARBOOK

2012

GEORGIA

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2013

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” represents an 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. This type of periodical editions 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.

2006-2012 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.

This yearbook gives health indicators, 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 other.

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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.

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

In Georgia the assessment of the 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 the World Health Organization.

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

	Severe underweight	Moderate underweight	None (normal)
Total	**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*

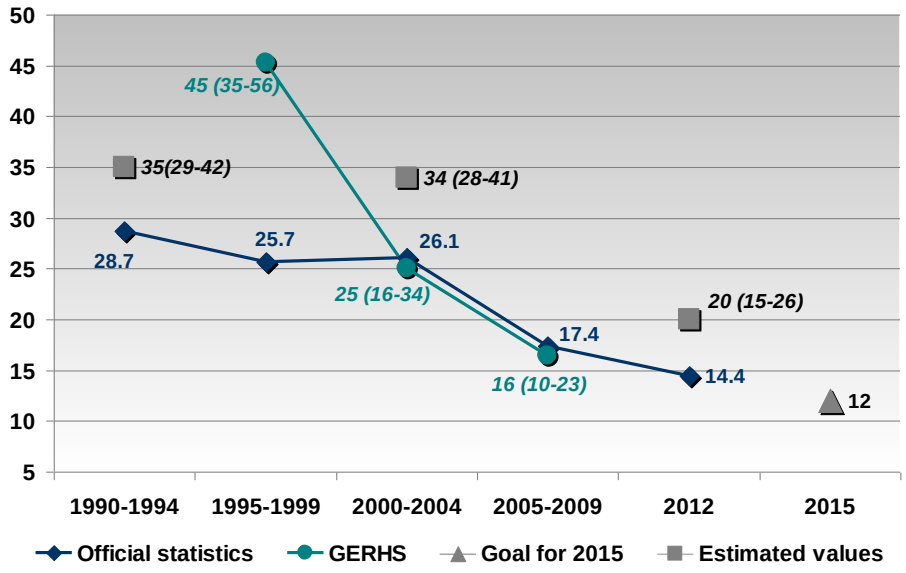
National statistics office is the main source of mortality data in Georgia. According to official data, the ***under-5 mortality rate*** per 1,000 life births has been declining since 2000 (Figure 1.1).

Every year UN inter agency group for child mortality estimates (IGME) evaluates under-5 and infant mortalities. Generally, these estimates are higher than the official statistics. The base-line level for under-5 mortality rate in 1990, according to the 2011 estimates (published in the 2012

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

report) for Georgia is 47; correspondingly, the goal for 2015 is defined as 16.0. In 2012, the IGME used a new methodology, which caused changes of the base-line indicators, for Georgia the under-5 mortality rate was reduced up to 35, correspondingly, the goal for 2015 came to 12 (published in the 2013 report) (Figure 1.1).

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

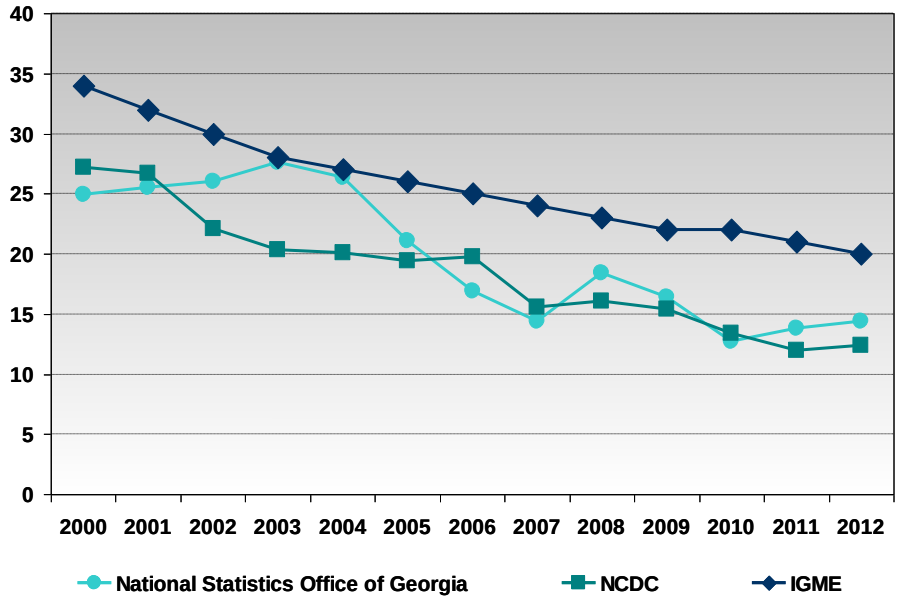


In Georgia, three rounds of the full-scale Reproductive Health Surveys (GERHS) were conducted with the 5-years intervals. The data collected during the first round of the survey (1995-1999) differed significantly from the official statistics; in 2000-2004 and 2005-2009 this discrepancy decreased. It should be underlined, that the under 5 mortality rate according to the GERHS was higher than that of official statistics (in 1995-1999, this difference was about 64%). In 2010-2012, the average indicator is 13.6 (Figure 1.1).

The National Centre for Disease Control and Public Health (NCDC&PH) routinely collects statistics on under-5 mortality from both in-patient (number of hospital deaths) and out-patient facilities (number of deaths at home). According to the health statistics in 2012, under-5 mortality rate per 1000 live births is lower, than that registered by the vital statistics (Figure 1.2).

According to the UN interagency group for mortality estimates (IGME), in 2012, the under-5 mortality estimate once more was higher, than the official statistics, although, the IGME estimates also have got a declining tendency (Figure 1.2).

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

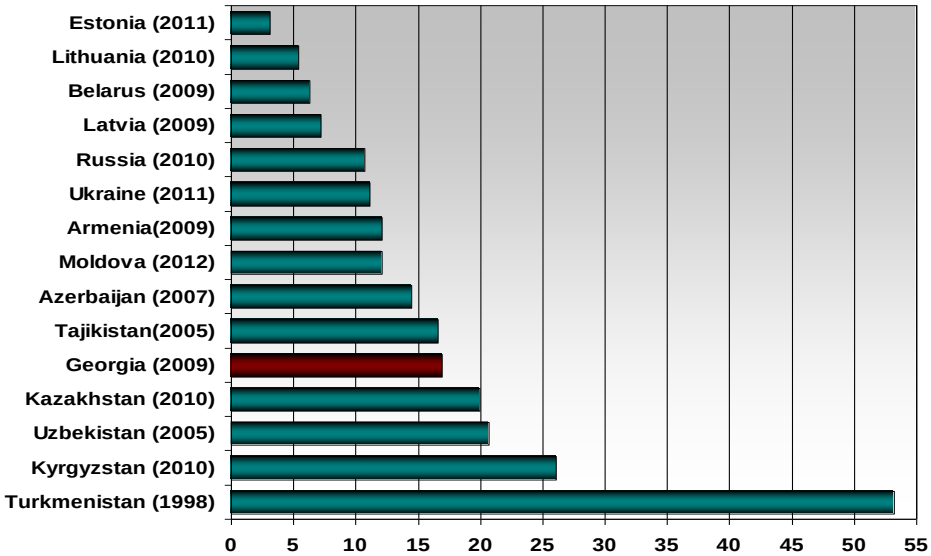


Under-five mortality rates per 1000 live births, Georgia, 2000-2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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	12.4
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	14.4
GERHS	45.8	-	-	-	-	25.1	-	-	-	-	16.4	-	-

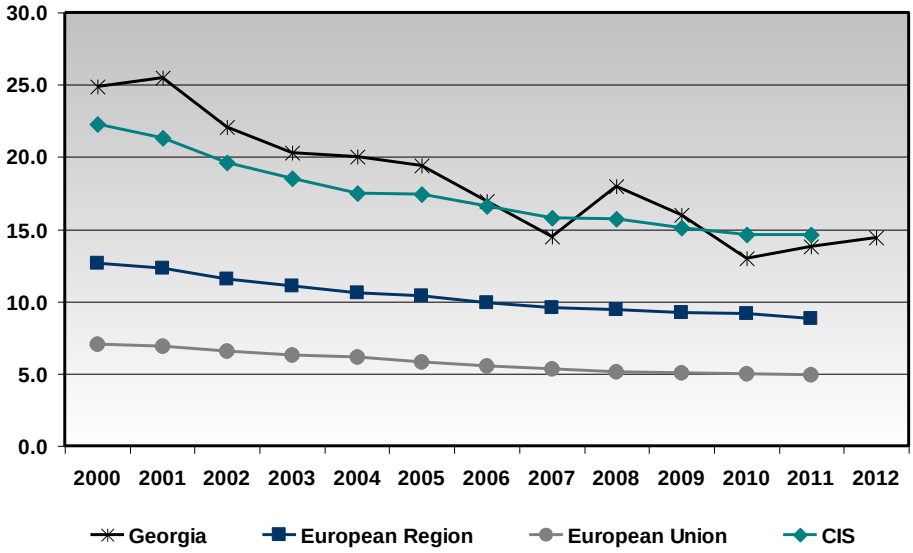
Despite the downward trend, the under-5 mortality rate in Georgia still maintains the higher value compared to the European and the former Soviet Union countries (Figures 1.3; 1.4).

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

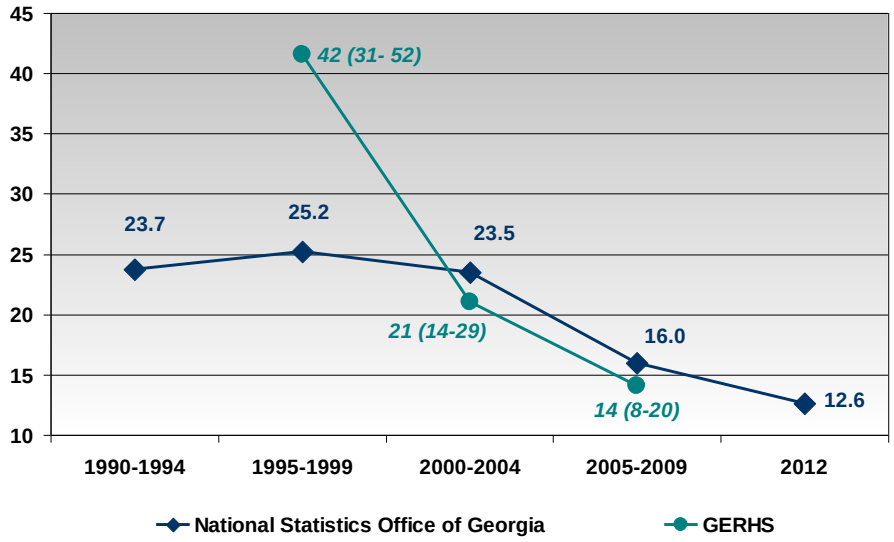


Source : WHO HFADB & NCDC Georgia

According to the WHO global data, almost 40% of all deaths in children aged under-5 occurred during the neonatal period. In 2012, this share in Georgia amounted to 86.8%.

Since 1995, according to official statistics and surveys data, there was a decline of ***infant mortality.*** 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 again decreased by 27.5% (Figures 1.5; 1.6).

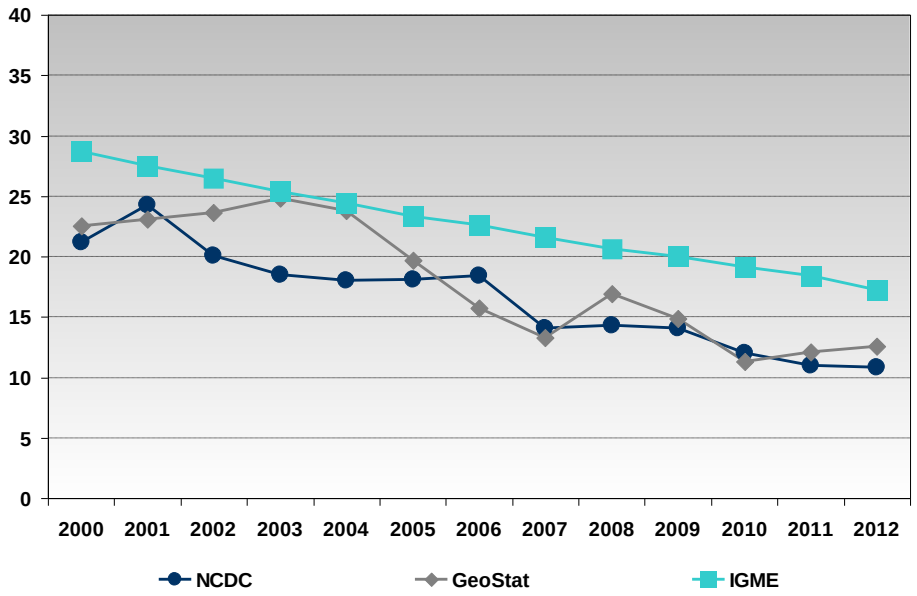
Figure 1.5 Infant mortality rate per 1000 live births, five years average, Georgia



Infant mortality rates by 1000 live births, Georgia

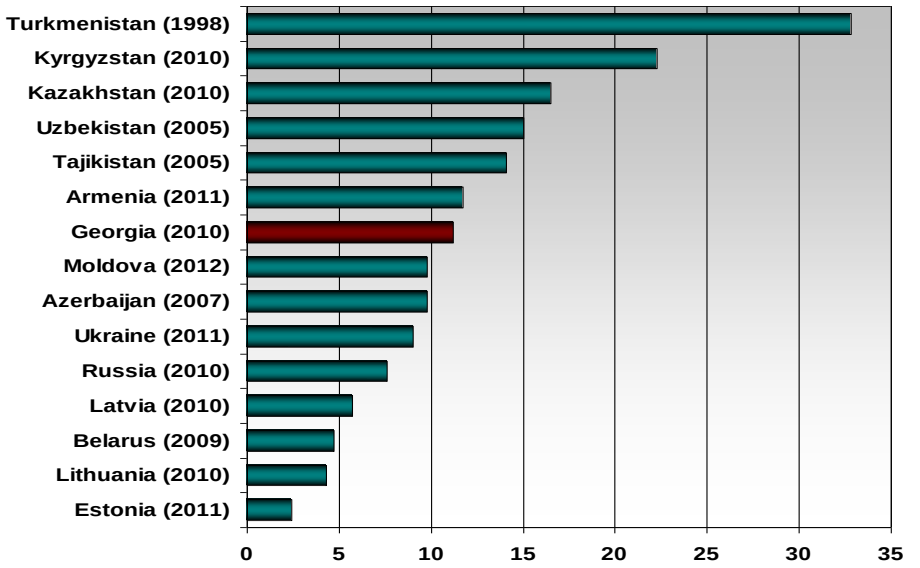
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Health statistics	21.2	24.3	20.1	18.5	18.0	18.1	18.4	14.1	14.3	14.1	12.0	11.0	10.8
Vital statistics	22.5	23.1	23.6	24.8	23.8	19.7	15.8	13.3	17.0	14.9	11.2	12.1	12.6
GERHS	41.6	-	-	-	-	21.1	-	-	-	-	14.1	-	-

Figure 1.6 Infant mortality rate per 1000 live births, Georgia



In Georgia infant mortality rate is significantly higher, than in some of the former Soviet Union countries (Figure 1.7).

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



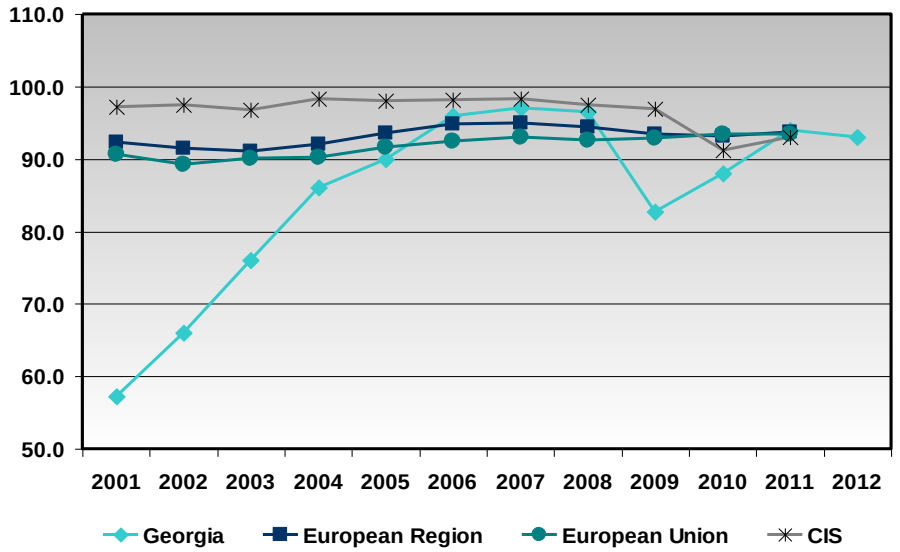
Source: WHO HFADB

Children aged 12-23 months immunized against measles*

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

During 2001-2008, there was a growth of the anti-measles immunization coverage in Georgia. After a decrease in 2009, this indicator again came closer to the level of the coverage in the European Union and the European region. In 2012, it achieved 93% (Figure 1.8).

Figure 1.8 Percent of 12 months-old 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*

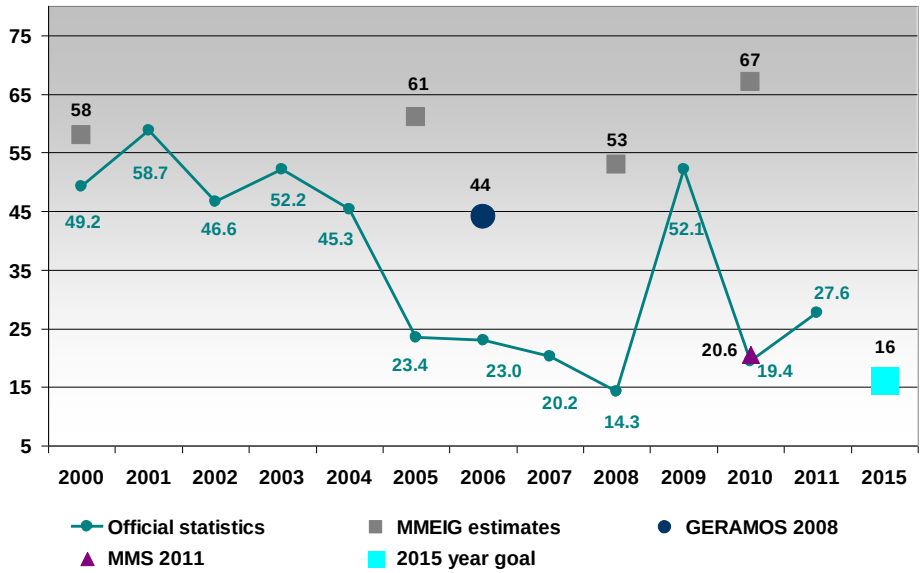
* *See additional information in the chapter "Population's health status" – Infectious diseases.*

Maternal mortality ratio *

In 1990, according to the UN Maternal Mortality Estimation Interagency Group (MMEIG), the estimate for Georgia of the ***maternal mortality ratio*** was 63 per 100000 live births. Thus, the goal for this indicator for 2015 was determined as 16.

According to the National statistics office of Georgia and NCDC reconciled data, the downward trend of maternal mortality ratio was noted in Georgia. In 2009, the ratio reached the maximum for the period; this was caused by generally improvement of the death registration and by the pandemic influenza (Figure 1.9).

Figure 1.9 Maternal mortality ratio per 100000 live births, Georgia



It is noteworthy 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 deaths, happened to women aged 15–49, in 2010 were checked. Results of MMS2011 are close to the official statistics (Figure 1.9).

Maternal mortality rate, Georgia

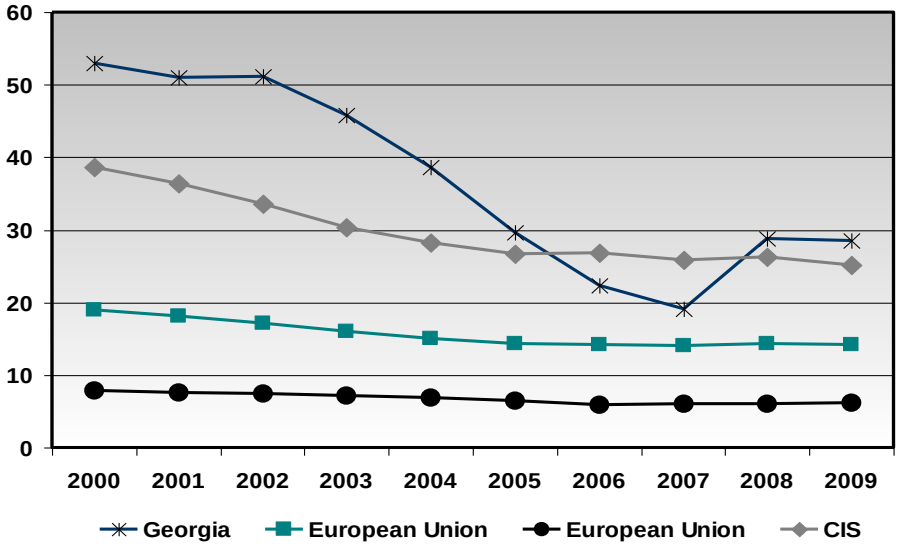
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009**	2010	2011	2012
Official statistics	49.2	58.7	42.2	49.9	43.1	23.4	23.0	20.2	14.3	52.1	19.4	27.6	22.9
GERAMOS	-	-	-	-	-	-	44.0	-	-	-	-	-	-
MMS2011	-	-	-	-	-	-	-	-	-	-	20.6	-	-

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

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

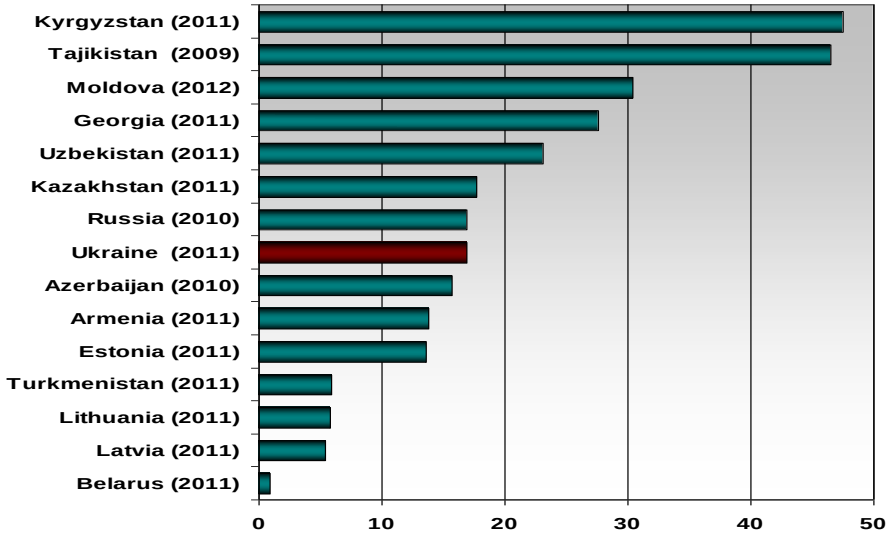
For Georgia, as well as for those countries where the number of cases of maternal deaths is relatively small, the spasmodic changes of indicator from year to year are typical. The WHO uses a method of moving averages for 3 or 5 years to compare maternal mortality ratios. According to the WHO data, three-year 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

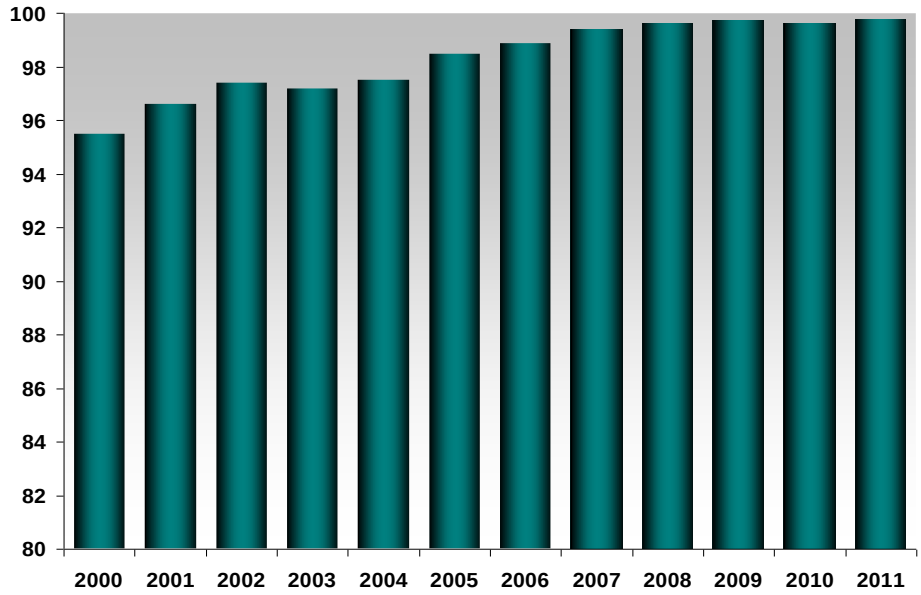
For better revealing the cases of maternal deaths, under the NCDC initiative, a maternal mortality surveillance system was developed. According to this system, each death of a woman of the reproductive age must be notified within 24 hours, and must be a subject of an epidemiological study, which must be conducted using the standard protocols. A verbal autopsy must be used, if necessary.

According to the order of the minister of MOLHSA, since February 1, 2013 each health facility must send an emergent notification about each case of maternal and under-5 mortality.

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 2012 (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 2005-2009, this indicator reduced to 1.2%. The difference of these data and official statistics is caused by incomplete registration of home deliveries. According to official statistics, in 2012 this indicator goes to 0,2%.

Proportion of births attended by skilled medical personnel (%)

	1995-1999	2000-2004	2005-2009	2012
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 a 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 of the use of modern methods (8.9%).

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

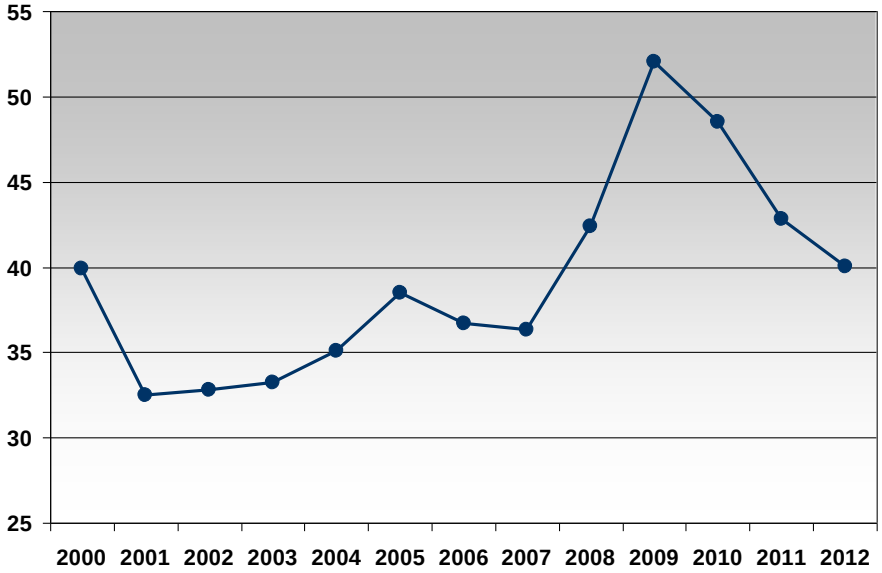
In 2012, according to the National Statistics Office, the decrease of the ***birth rate of women aged under-20***, continued. In 2012, the rate decreased by 6.9%, compared to the previous year (Figure 1.13).

Correspondingly the share of children born alive to women aged under-20 reduced and reached 9.2% from the total number, according to the official statistics.

Proportion of live births to women aged under-20 (% from the total number of live births)

	1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
Vital statistics	15.6	18.9	12.9	13.9	11.3
GERHS	-	14.6	14.6	13.7	-

Figure 1.13 Adolescent fertility rate per 1000 women aged under-20, Georgia



Antenatal care coverage

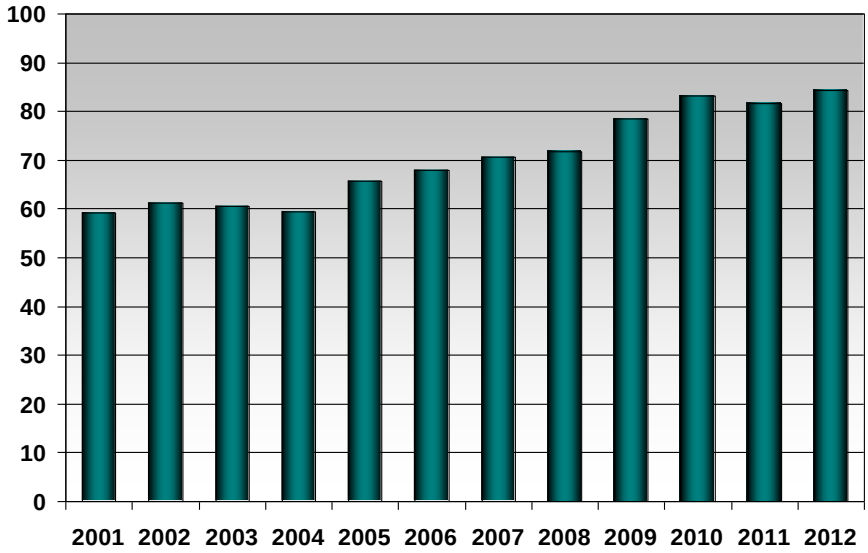
In 2000-2010, according to the WHO global data, 80% of pregnant women had at least one ***antenatal care*** visit; only 53% received the WHO-recommended minimum of four antenatal visits.

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.

The coverage with antenatal care in Georgia is substantially higher than the WHO global indicator.

In Georgia, information on antenatal care is collected from maternity homes/departments, women consulting centres. In 2000-2010, according to the official statistics, coverage with 4 complete antenatal visits has been increasing and in 2012 it totalled to 84.2% (Figure 1.14).

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



Using the GERHS data, it is possible to collect information about antenatal visits to any provider. Thus, coverage rates exceeded data of routine statistics: it was almost universal in the period of 2005-2009 and totalled to 98.4%.

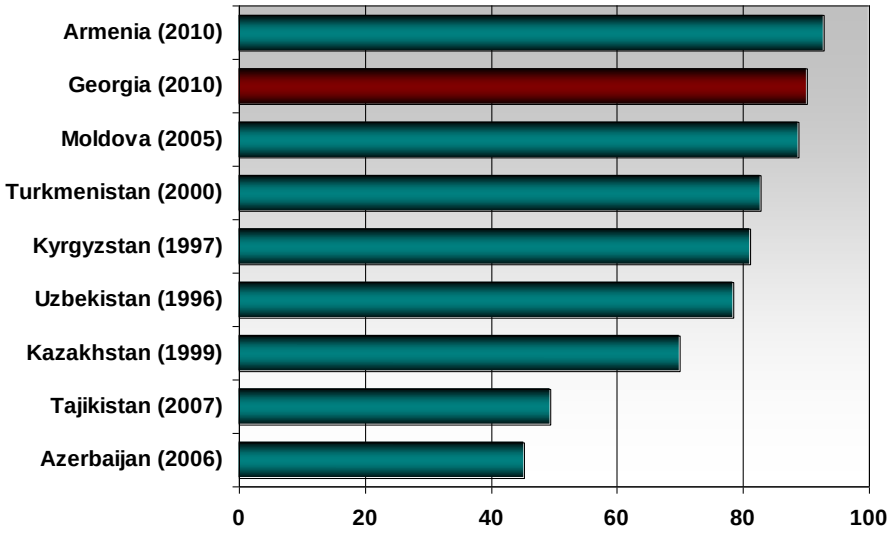
According to the MICS2005 data, antenatal care coverage was quite high in Georgia. During pregnancy almost all women (97.4%) visited antenatal care institutions at least once.

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, the antenatal care coverage in Georgia is higher, compared to other 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, in Georgia, the ***unmet need rate for family planning*** reduced throughout 1995-2009.

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

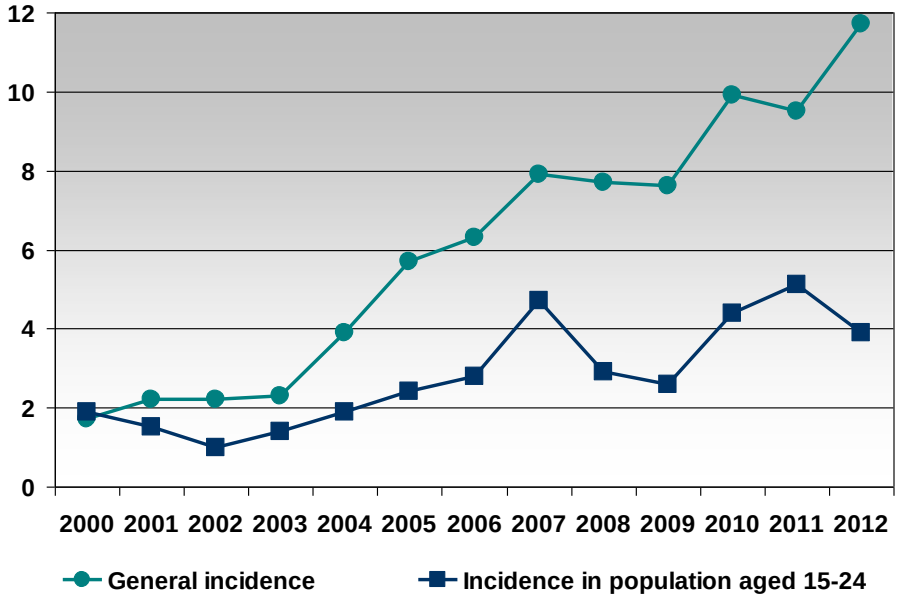
- *HIV prevalence among population aged 15-24 years*
- *Proportion of population with advanced HIV infection with access to antiretroviral drugs*
- *Use of condom during the last sexual intercourse*
- *Prevalence and death rates associated with malaria*
- *Incidence, prevalence and death rates associated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

HIV prevalence among population aged 15-24 years*

According to world statistics, Georgia is among the countries with a low ***prevalence of HIV/AIDS*** and holds one of the last places even among them. In 2011, compared to the previous year, HIV prevalence rate in Georgia decreased by 4%; although, in 2012, HIV prevalence rate increased by 23.2% (prevalence rate – 11.6).

Teenagers and youth represent high risk groups for HIV infection contraction. Young people represent 80 percent of all new HIV cases worldwide.

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

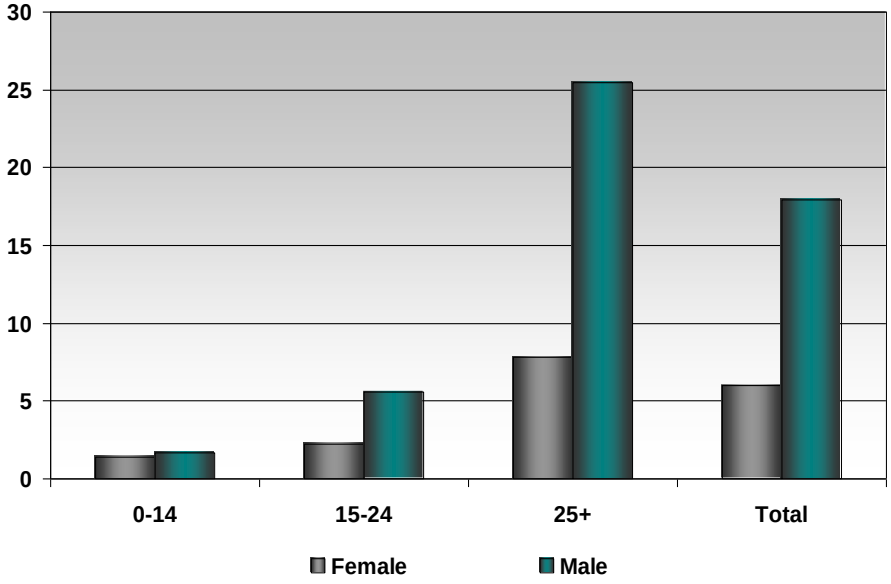


In Georgia, since 2010, the incidence of HIV-infection in people aged 15-24 has started to grow. In 2011, the HIV incidence in young people aged 15-24 grew by 15.9%. In 2012, this indicator decreased by 23.5% (Figure 1.16).

In 2012, the HIV incidence in the 15-24 age group in males was ~2.5 times higher than in females (Figure 1.17).

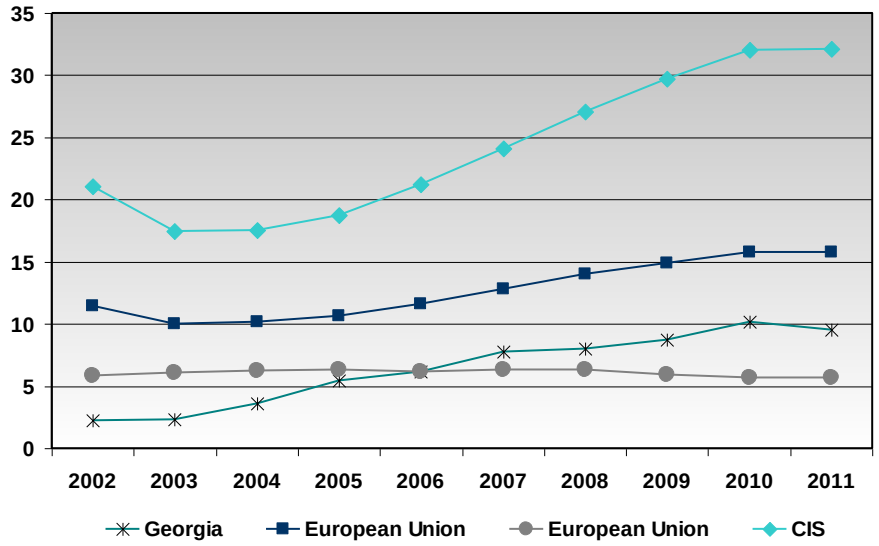
* *See additional information in the chapter "Population health status" – Infectious diseases.*

Figure 1.17 Incidence of HIV/AIDS per 100000 population by sex and age groups, Georgia, 2012



In Georgia, according to expert estimates, 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

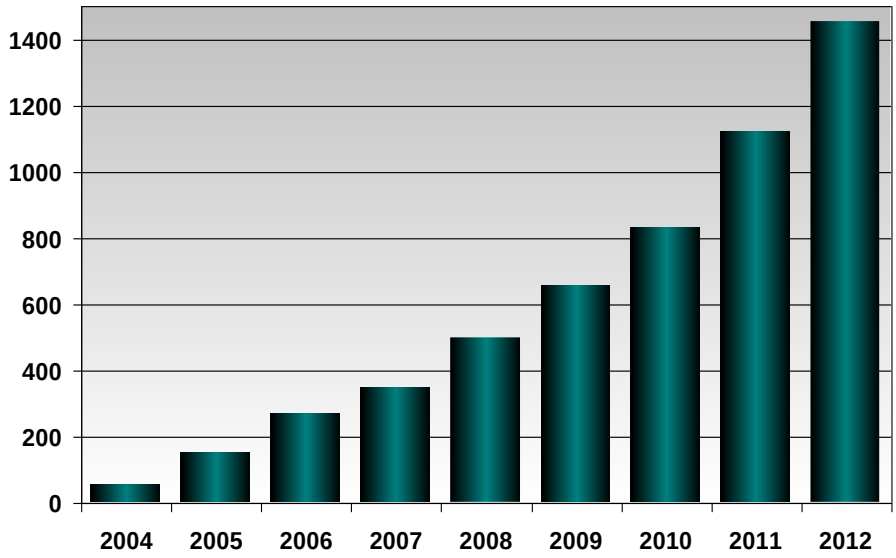


Source: WHO HFADB

Number of population receiving antiretroviral therapy

In Georgia, since 2004, the number of patients receiving the ***antiretroviral therapy*** has been growing. In 2012, 1,456 patients were receiving the antiretroviral therapy (Figure 1.19). In Georgia the access to antiretroviral therapy is universal.

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.

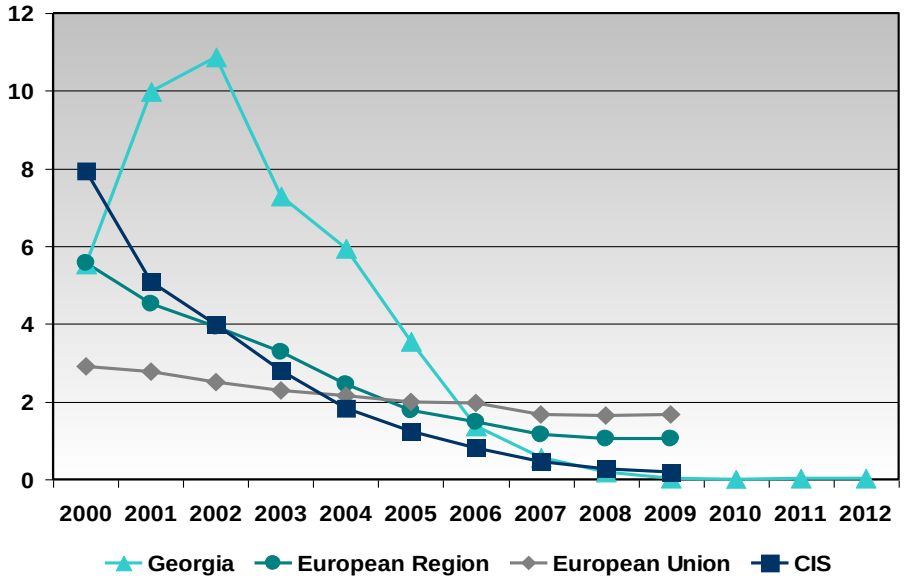
Use of condom during the last sexual intercourse, GERHS

	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 2012 it totalled to 0.02 (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*

According to the WHO recommendations, worldwide and in the concrete countries the three main indicators are used to measure the ***burden of tuberculosis***: 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 are implemented 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 full-scale expensive surveys cannot be proposed, the rate of registered cases per 100000 population can be used.

There are three ways to measure TB mortality:

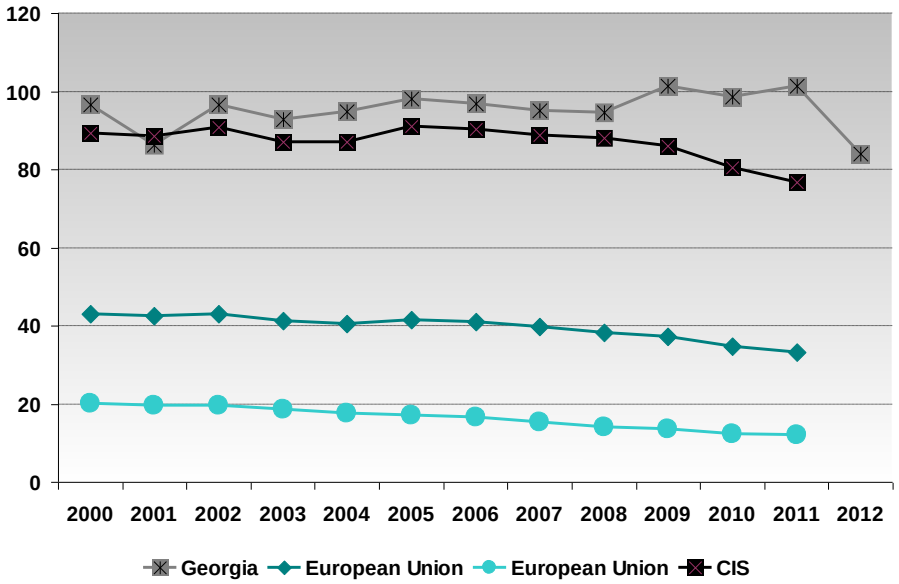
- Direct measurement using vital registration data. This is possible if the death registration data collected in vital registration systems are efficient;
- Direct measurement using verbal autopsy studies; such studies can be a part of a vital registration system or may be done in the frame of other 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.

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

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 2012, a detection rate of the new cases of all forms tuberculosis was 84.1 (Figure 1.21).

Figure 1.21 Incidence of tuberculosis per 100000 population



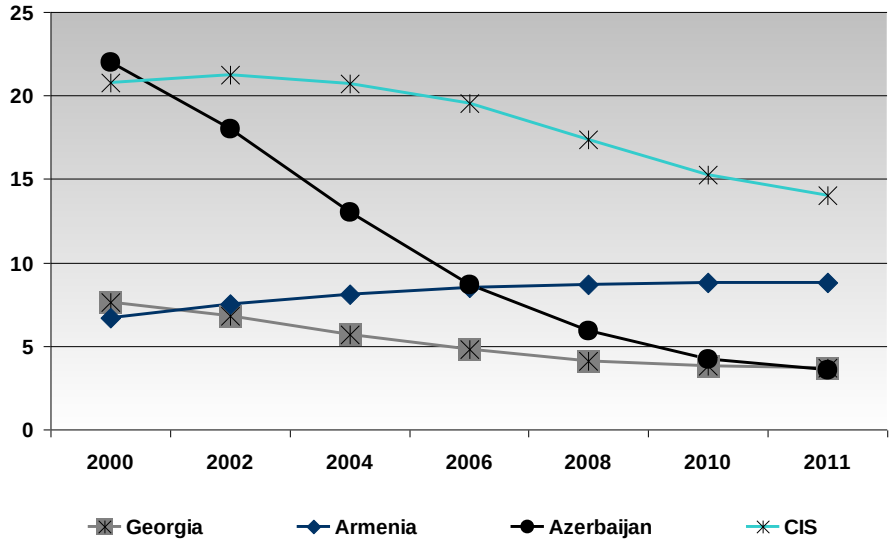
Source: WHO HFADB

Registered TB cases, Georgia

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Registered cases	5941	5707	6346	6208	6543	6696	6294	6450	5831	5993	5806	5533	4973
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	110.7

According to the WHO data, in Georgia in 2002-2010, the estimated TB incidence had got a tendency for decrease (Figure 1.22).

Figure 1.22 Tuberculosis, estimated incidence rates per 100000 population



Source: WHO HFADB

According to the National statistics office, in 2012, the mortality rate due to TB in Georgia was unchanged.

TB, official and estimated data, Georgia

	Official statistics		WHO 2010	
	2011	2012	2011	2012
Number of registered cases of tuberculosis	5533	4973	6900	6900
Prevalence per 100000 population	123.4	110.7	159	158
New cases of tuberculosis	4223	3778	5400	5000
Incidence rate per 100000 population	94.2	84.1	125	116
Tuberculosis death rate per 100000 population	3.5	3.9	3.7	4.5

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%.

CHAPTER 2.

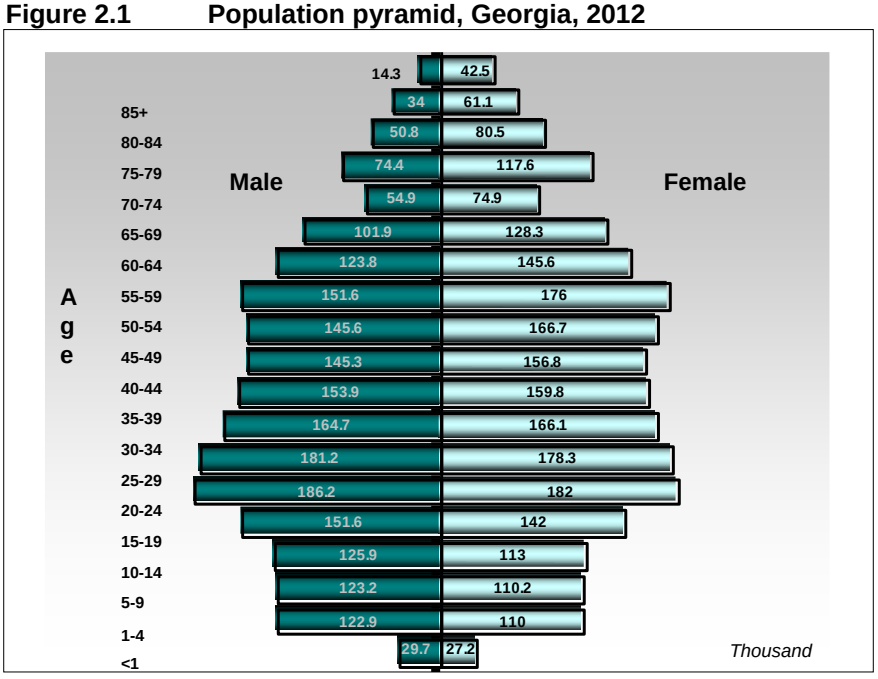
DEMOGRAPHY*

Population

In 2012, the ***mid-year population*** number totaled to 4,490,700, which is 0.2 percent more, compared to 2011.

Female population constituted 52.3% of total number; males - 47.7% (Figure 2.1). Urban population totaled to 53.5%. The shares of live births by birth order were as follow: 1st - 46,2%, 2nd – 38,1%, 3rd – 12,1%.

Figure 2.1 Population pyramid, Georgia, 2012

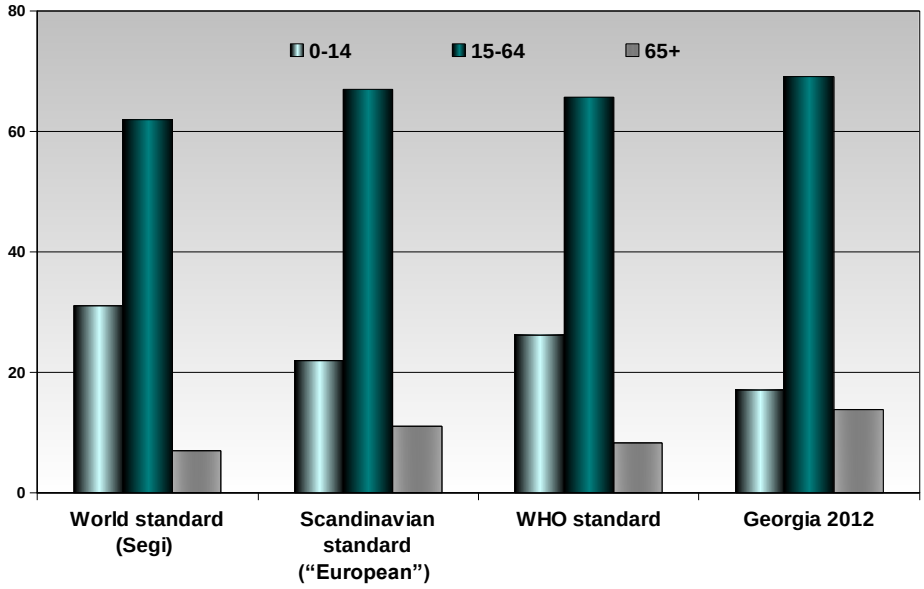


The share of children under-15 amounted to 17.0%, which is lower, compared to the World and European standards (Figure 2.2).

Percentage of 65 year-old and older population slightly increased, compared to the previous year (from 13.7% to 13.8%).

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

Figure 2.2 Population by age and sex (percent)

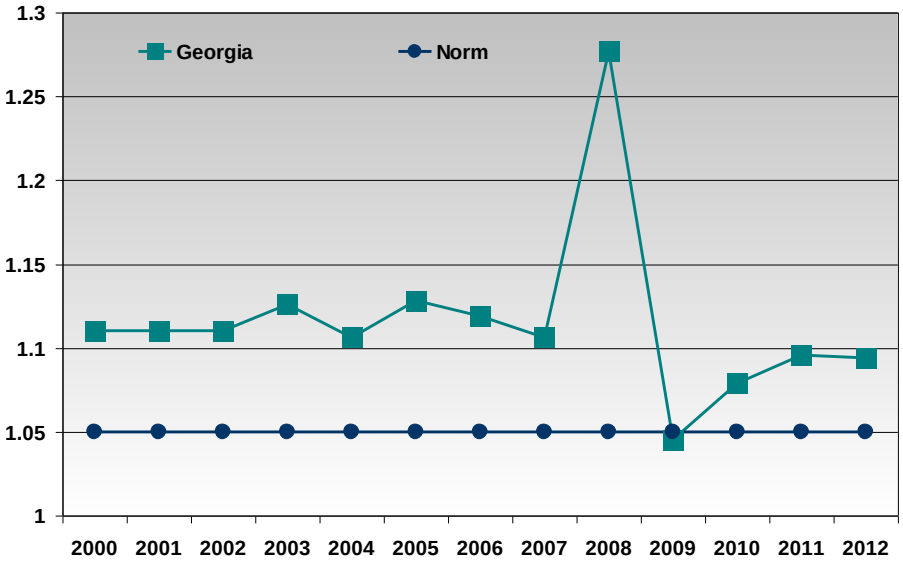


Birth rate

In 2007-2010, there was an increase of the number of registered ***live births***. In 2011, the number of live births reduced by 7.3%, compared to 2010, and in 2012 it reduced by 1.75%, compared to 2011. The birth rate decreased by 0.6%. 57.0% of the total number of newborns was born to urban, while 43.0% - rural inhabitants.

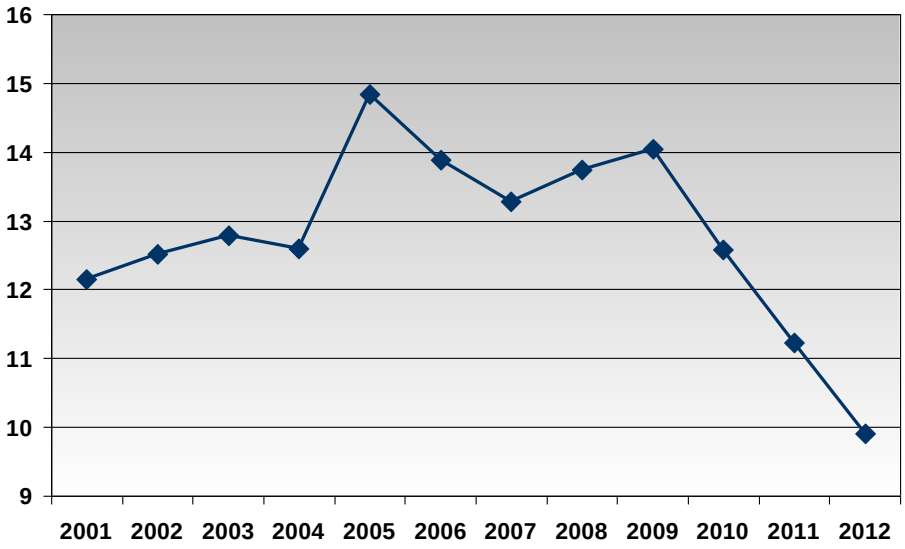
During the last decade, slight deviation of the numerical determinant of the secondary sex ratio from the norm had been noted in Georgia. In 2008 it reached 1.28. Since 2009, the secondary sex ratio has approached the norm. In 2012, according to the data, this ratio is slightly decreased compared to previous year (Figure 2.3).

Figure 2.3 Secondary sex ratio, Georgia



Throughout 2001-2009 the share of live births to mothers aged under-20 has fluctuated between 12%-15%. Since 2010, mentioned share decreased, and in 2012, totaled to 9.9% (Figure 2.4). 80.9% of liveborns were delivered to women of 20-34 years of age.

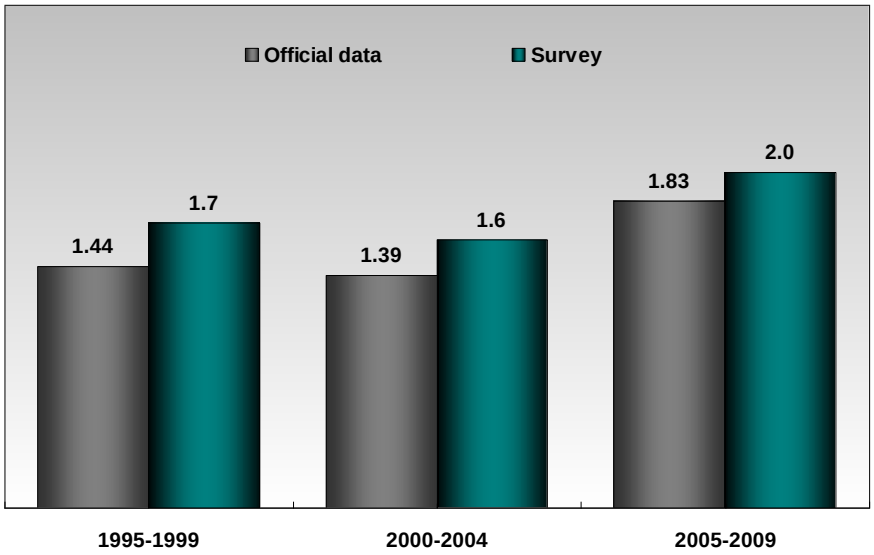
Figure 2.4 Share of live births to women aged under 20, Georgia (percent)



According to official statistics, the ***total fertility rate*** amounted to 1.67 in 2012.

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



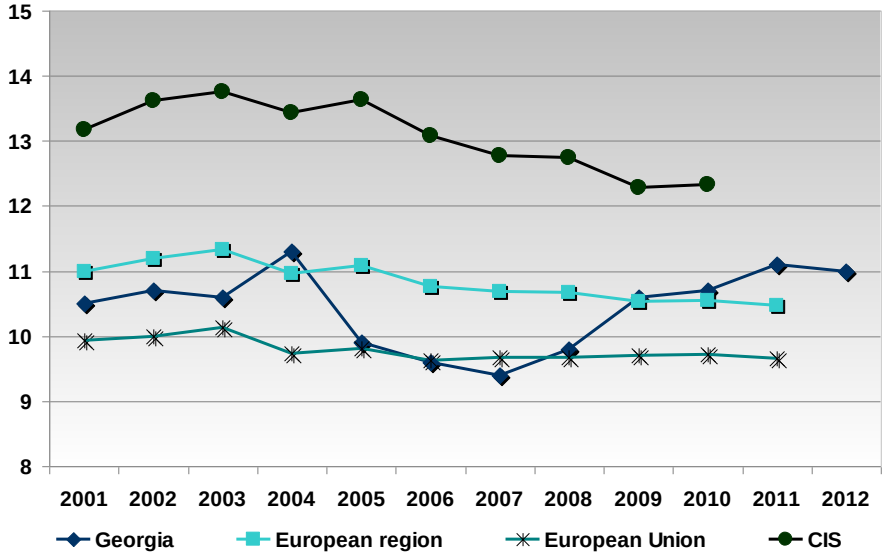
Mortality

Since April 2011, after introduction of the electronic reporting of death, mortality registration practices were significantly improved.

In 2012, ***mortality rate*** totaled to 11.0. Among the deceased, there were 51.6% males and 48.4% females; there were 52.3% urban and 47.7% rural inhabitants.

Mortality rate in Georgia was lower, compared to 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

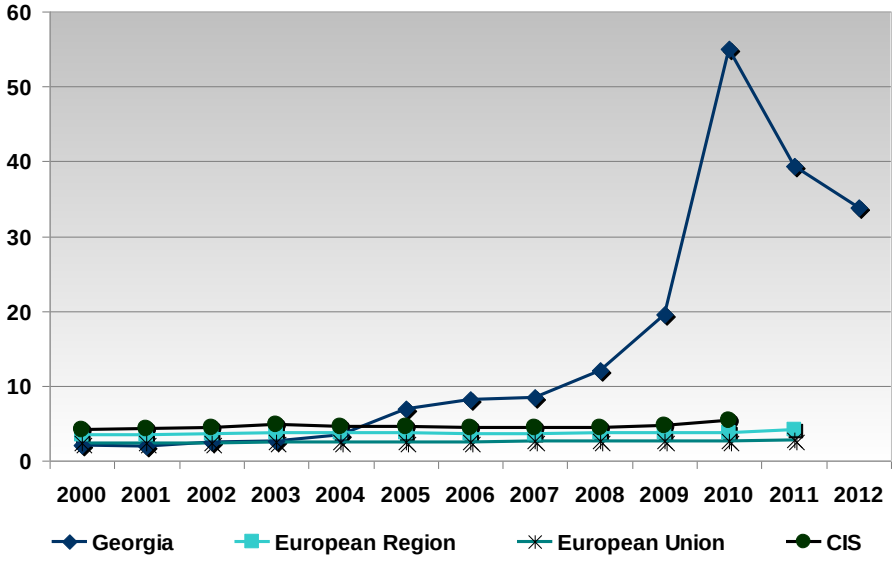


Source: WHO HFADB

According to 2012 data, the top three classes in the mortality structure, were 'Circulatory system diseases' – 40.5%, 'Symptoms, signs and abnormal clinical and laboratory findings' – 33.8%; and 'Neoplasms' – 10.6%. Injuries as underline cause of death constituted only 3.5%.

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%; and in 2012, it reduced to 33.8%.

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



Source WHO HFADB & GEOSTAT

Children under-15 comprised 1.9% of the total number of deaths; 76.2% among them were infants. 62.0% of infants deaths were due to certain conditions originating in the perinatal period, 12.4% due to congenital malformations, deformations and chromosomal abnormalities, and 10.1% due to 'Symptoms, signs and abnormal clinical and laboratory findings'. These last include sudden infant deaths and unknown causes deaths.

Natural population growth

In 2012, the ***natural population growth*** rate in Georgia totaled to 1.7 per 1000 population.

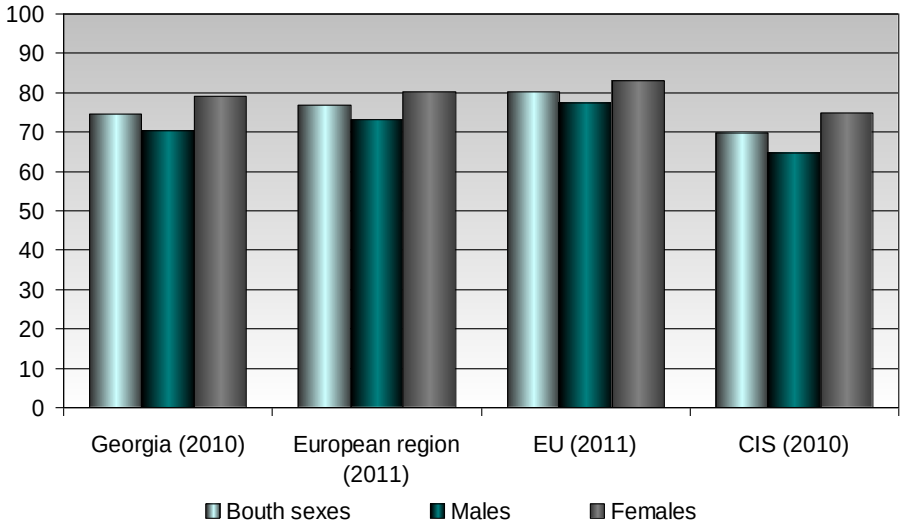
The negative natural growth rate was identified in most regions of Georgia: Kakheti, Imereti, Samegrelo-Zemo Svaneti, Guria, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti.

Life expectancy

In Georgia, in 2012, ***life expectancy at birth*** increased to 74.7 years (in females – 79.0; in males – 70.2).

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

Figure 2.8 Life expectancy at birth (in years), Georgia, European Region, European Union, last available year



Source WHO HFADB & GEOSTAT

Basic demographic indicators, Georgia

	2011		2012	
	Total	Rate	Total	Rate
Number of live births and birth rate per 1000 population	58014	12.9	57031	12.7
Natural population growth and rate per 1000 populations	8196	1.8	7683	1.7
Number of deaths and mortality rate per 1000 population	49 818	11.1	49348	11.0
Including: Infant deaths and infant mortality rate per 1000 live births	703	12.1	715	12.5
Number of stillbirths and rate per 1000 births	563	9.6	664	11.5
Number of marriages and rate per 1000 population	30863	6.9	30412	6.8
Number of divorces and rate per 1000 population	5850	1.3	7136	1.6
Migration dynamics and rate per 1000 populations	20200	4.5	-21500	-4.8

CHAPTER 3.

HEALTH CARE

Health workforce

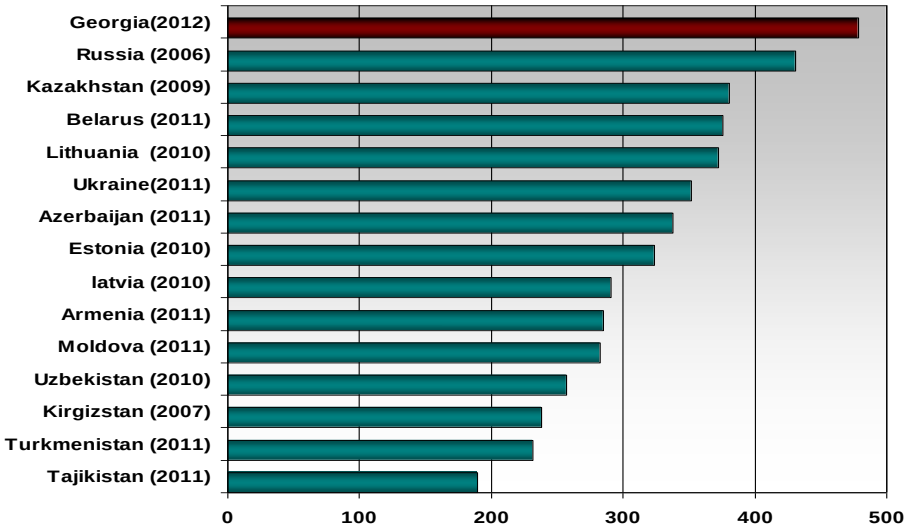
Health systems and services depend critically on the size, skills and commitment of the health workforce. It is now evident that in many low- and middle-income countries, meeting key Millennium Development Goal targets, specifically those relating to health, requires a significant increase in the numbers 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 2012 data, this indicator in Georgia was 7.9.

The WHO also worked out guidances for assessing the density level of human resources in health from different standpoints, for instance provision with active practitioners and administrative personnel and their adequate ratio. In 2012, the ratio of administration to active practitioners in Georgia was ~1:6.

During reporting period the number of ***physicians*** per 100000 population (478.8) increased by 9.9%. According to this indicator Georgia is the first among the post Soviet Union countries (Figure 3.1).

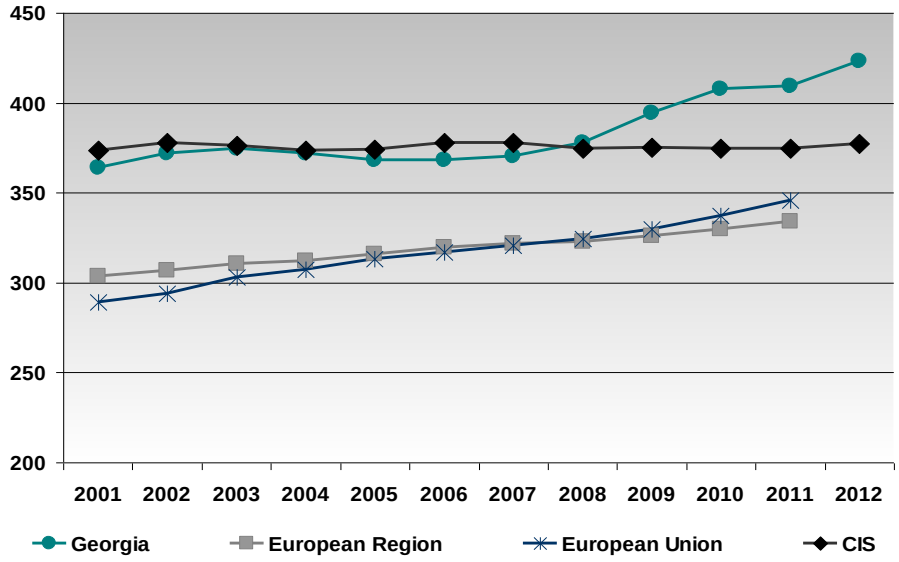
Figure 3.1 Number of physicians per 100000 population, former Soviet Union countries, last available year



Source: WHO HFADB

During 2001-2012, the number of ***general practitioners*** per 100000 population increased nearly 2-folds. According to WHO HFA data base, the number of ***physician-specialists*** in Georgia has increased by 18% since 2010, this indicator in the EU, the European Region and the CIS did not change much during the same period (Figure 3.2).

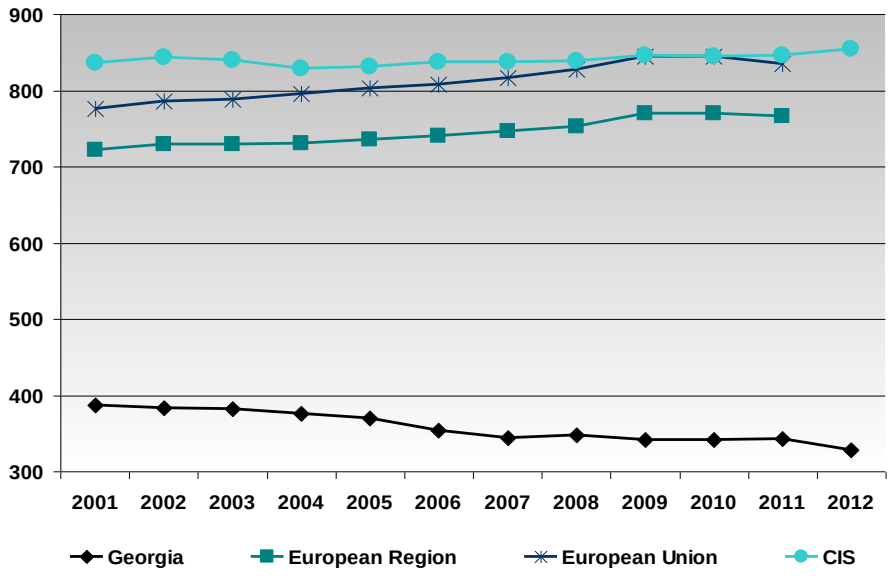
Figure 3.2 Number of physicians per 100000 population



Source: WHO HFADB

Since 2004, the number of ***nurses*** per 100000 population has been decreasing; in 2012, this indicator was 300.3. According to the WHO data, this indicator in the European Region, the European Union and the CIS was significantly higher, than in Georgia (Figure 3.3).

Figure 3.3 Number of nurses per 100000 population



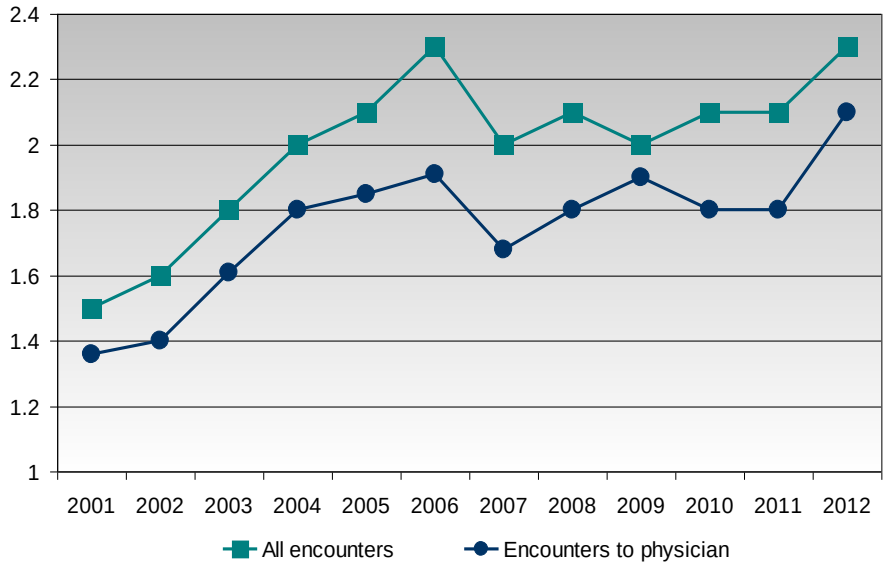
Source: WHO HFADB

Ratio of the number of nurses to the number of physicians is a very significant indicator for providing health care services. The World Health Organization recommends the ratio of 4:1. In 2012, in Georgia, this ratio was ~1:1.6 (in hospital sector - 1.02:1).

Health network

In 2012, the number of ***outpatient encounters*** per capita was 2.3. During the last 7 years, this indicator fluctuated between 2.0 and 2.3 (Figure 3.4).

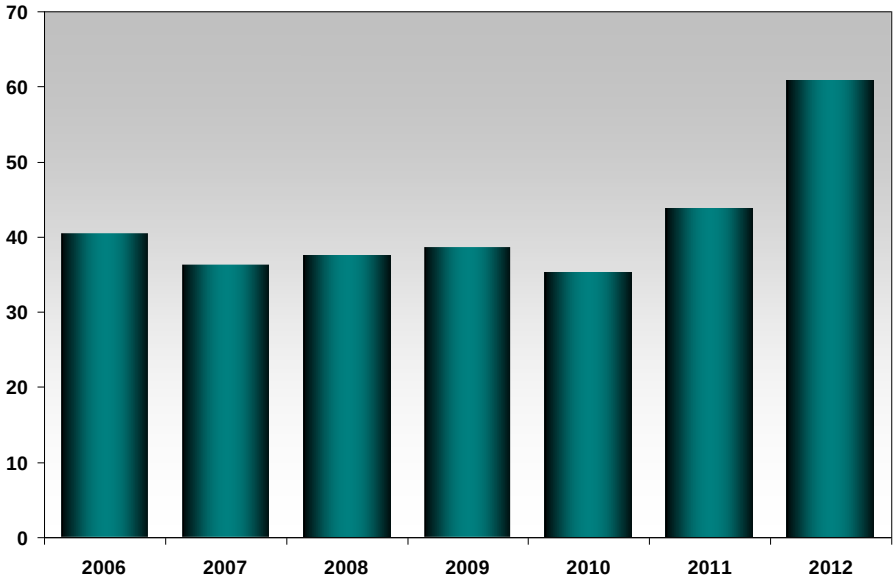
Figure 3.4 Number of outpatient encounters per capita, Georgia



This indicator is low, compared to the CIS and the European Region. According to the WHO data, the average number of outpatient encounters per capita for the CIS countries in 2011 was 8.8, for the European Region countries in 2010 (last available year) - 7.5.

In 2012, the utilization rate of the outpatient network has achieved its maximum of 60.8% (Figure 3.5).

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

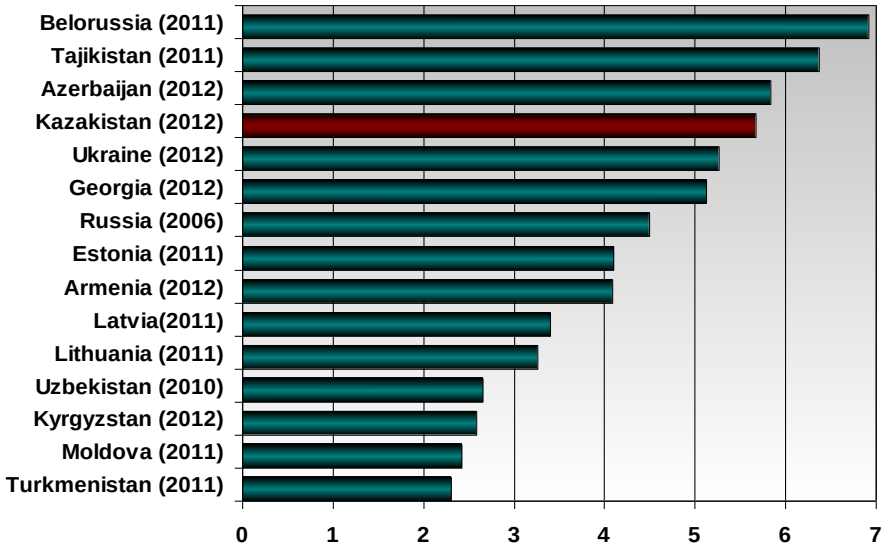


In 2012, compared to the previous years, the number of ***outpatient surgical operations*** has increased by 43.9%.

During 2005-2012, the number of ***emergency calls of an ambulance*** was increasing. Throughout 2012 the 93.5% of the ambulance care, provided to the population, was covered by the State programs.

In 2012, statistical reports were submitted to the National Centre for Disease Control and Public Health by 221 ***in-patient facilities*** (coverage rate with hospitals per 100000 population – 4.9) (Figure 3.6).

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

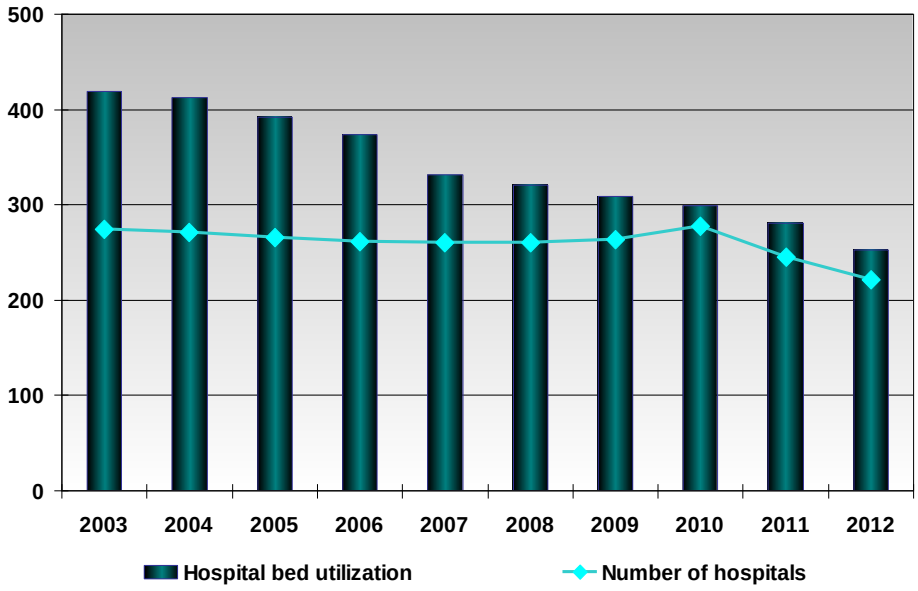


Source: WHO HFADB

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

In comparison to the last years, the ***number of hospital beds*** decreased by 9.9% in Georgia (coverage rate with hospital beds per 100000 population – 252.7) (Figure 3.7). ***Bed occupancy rate*** was 228.9.

Figure 3.7 Hospital beds per 100000 population, Georgia



In 2012, 357,828 patients were hospitalized (***hospitalization rate*** – 7,968.2). An average 45 patients were encountered to the in-patients facilities per one physician in year (3.8 patient per month) – more than 2 times lower, compared to developed countries.

The largest shares in all hospitalizations had pregnancy, delivery and puerperium related diseases (20.7%) and diseases of the respiratory system (18.3%). In 2012, as in the previous year, hospital case fatality rate was 2.0% (in children under-15 – 0.9%).

In 2012, in inpatient facilities, there were 165,679 surgical operations performed (rate per 1000 population – 36.9; ***postoperative case fatality rate*** – 0.4%); including 19,679 operations performed in children under-15 (rate per 1000 children – 25.8; case fatality rate – 0.4%).

Percentage of urgent operations from all operations performed insignificantly declined, compared to the previous year.

The three top in the structure of inpatient operations were as follows: operations on the genitourinary system – 41.3%; operations on abdominal cavity organs – 18.9%; operations on the musculoskeletal system – 7.1%.

About one-fourth (23.5%) of all operations, performed on the musculoskeletal system, consisted of replacements of hip and knee joints. The number the above mentioned operations declined by 14.6%, compared to the previous year.

In 2012, the total number of heart operations performed was 8,249, including 539 operations in children. In 2012, 11.9% of all heart operations were open-heart. Two of open-heart surgeries were entailed by death (case fatality rate – 0.2%). 4% of heart surgeries was performed due to congenital heart defects, 7.3% - endovascular balloon dilatation, 3.7% - implantation of cardio stimulator.

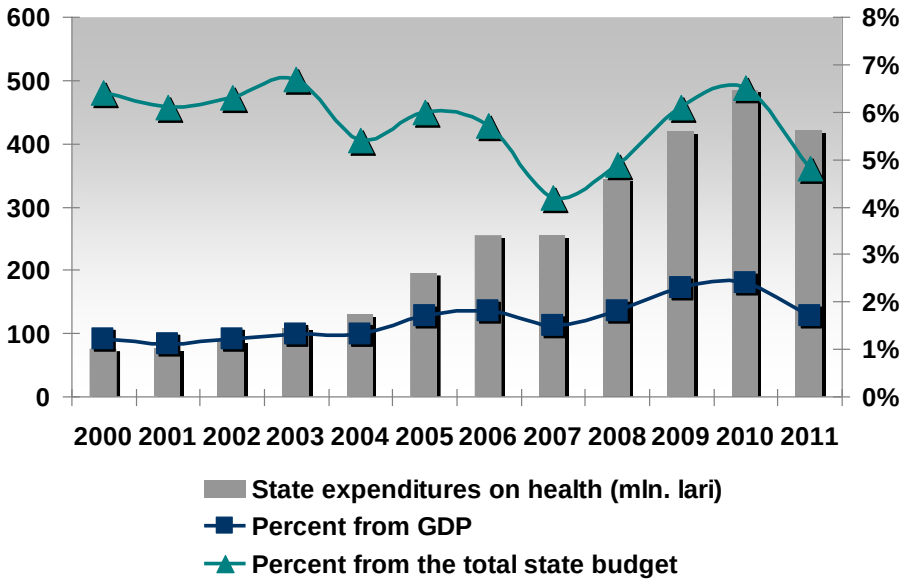
Health expenditures

According to the ***National Health Accounts,*** in the period of 2001-2011, the total health expenditures per capita increased from 115 to 511 lari, state health expenditures per capita increased from 17 to 94 lari and private expenditures – from 88 lari to 403 lari.

In 2011 the total state health expenditures increased, the percentage of state health expenditures from the GDP became 1.7% and from state budget – 4.8%, this level is quiet low and corresponds to the poorest countries of Europe.

In Georgia private expenditures make up to 78.8% of the overall health care funding. Percentage of out-of-pocket expenditures from the total health expenditures is more than 70%.

Figure 3.8 State expenditures on health, Georgia



Source: NHA

CHAPTER 4.

POPULATION HEALTH STATUS

In 2012, prevalence and incidence rates were increased both in general population and in children.

General prevalence and incidence rates, Georgia, 2007-2012

	Registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
2007	1733925	39511.5	767837	17497.0
2008	1809208	41270.3	807497	18420.0
2009	2216203	50243.8	1169546	26514.9
2010	2206535	49553.9	1161137	26076.6
2011	2549198	56858.6	1276437	28470.3
2012	**2878314**	**64095.0**	**1662851**	**37028.8**

Top 10 incident diseases, incidence rate per 100000 population, Georgia, 2012

		New cases	Incidence per 100000 population
1	Acute upper respiratory infections	337639	7518.6
2	Diseases of the digestive system	280122	6237.8
3	Diseases of the genitourinary system	127148	2831.4
4	Infectious and parasitic diseases	83014	1848.6
5	Diseases of the eye and adnexa	77822	1733.0
6	Diseases of the nervous system	68169	1518.0
7	Injury, poisoning and other certain consequences of external causes	67898	1512.0
8	Hypertensive diseases	65504	1458.7
9	Endocrine, nutritional and metabolic diseases	60284	1342.4
10	Lower respiratory tract diseases	60268	1342.1

Top 10 prevalent diseases, prevalence rate per 100000 population, Georgia, 2012

		Registered cases	Prevalence per 100000 population
1	Acute upper respiratory infections	355837	7923.9
2	Hypertensive diseases	261145	5815.2
3	Diseases of the genitourinary system	198555	4421.5
4	Endocrine, nutritional and metabolic diseases	186867	4161.2
5	Diseases of the eye and adnexa	159139	3543.7
6	Diseases of the nervous system	156826	3492.2
7	Diseases of the musculoskeletal system	127162	2831.7
8	Ischaemic heart diseases	115913	2581.2
9	Infectious and parasitic diseases	99732	2220.9
10	Diabetes mellitus	92504	2059.9

Infectious diseases

In 2012, the number of new cases of ***infectious and parasitic diseases*** increased: incidence rate in the whole population increased by 28.7%, while in children by 33.9% (Figures 4.1; 4.2).

During the reporting period the general hospital admission rate increased by about 19%; while in children – by about 38% (Figures 4.1; 4.2).

Figure 4.1 **Infectious and parasitic diseases, general incidence and hospital admissions rates per 100000 population, Georgia**

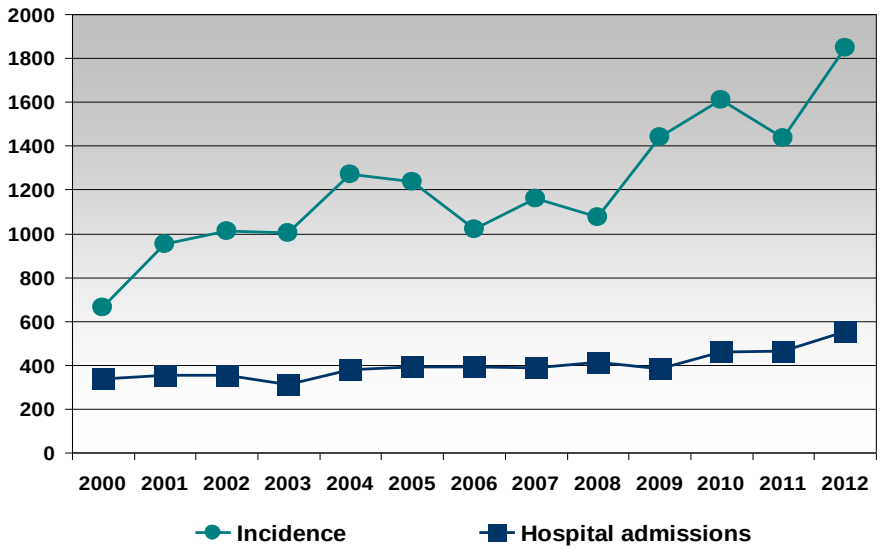
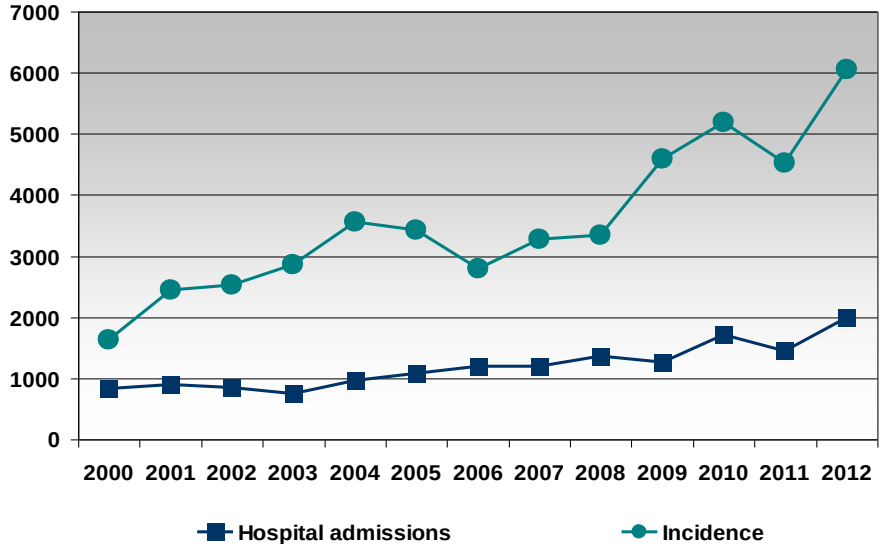


Figure 4.2 **Infectious and parasitic diseases, incidence and hospital admissions rates in children (per 100000 children), Georgia**

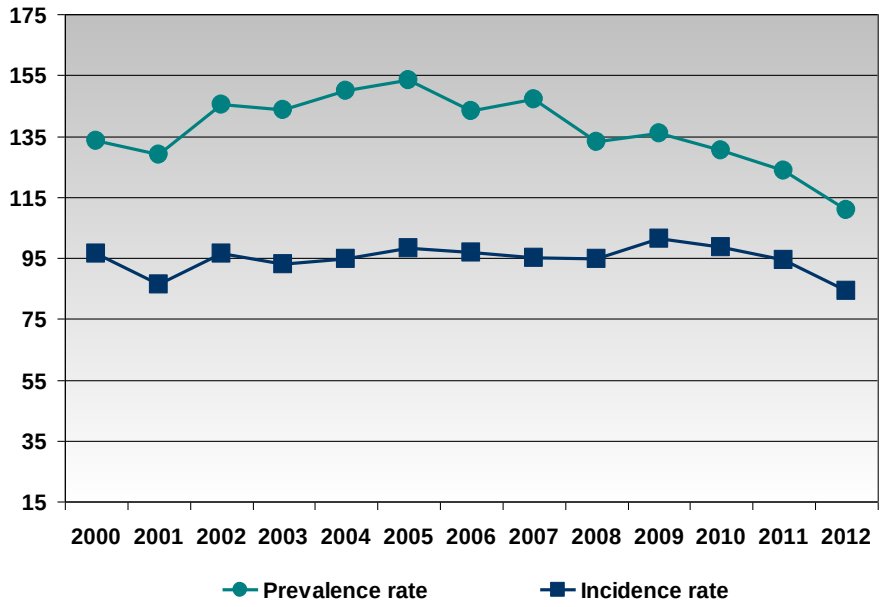


Intestinal infections constituted the main cause of hospitalization of children under-15 and infants: in children under-15 - 75.8%; in infants - 84.2%.

Pulmonary and extrapulmonary tuberculosis *

In 2012, there were registered 4,973 cases of all types of ***tuberculosis,*** including 3,778 new cases. The decrease of TB morbidity has been registered since 2009: prevalence rate per 100000 population decreased by 18.5%, incidence per 100000 population - by 17.2% (Figure 4.3).

Figure 4.3 TB morbidity per 100000 population, Georgia

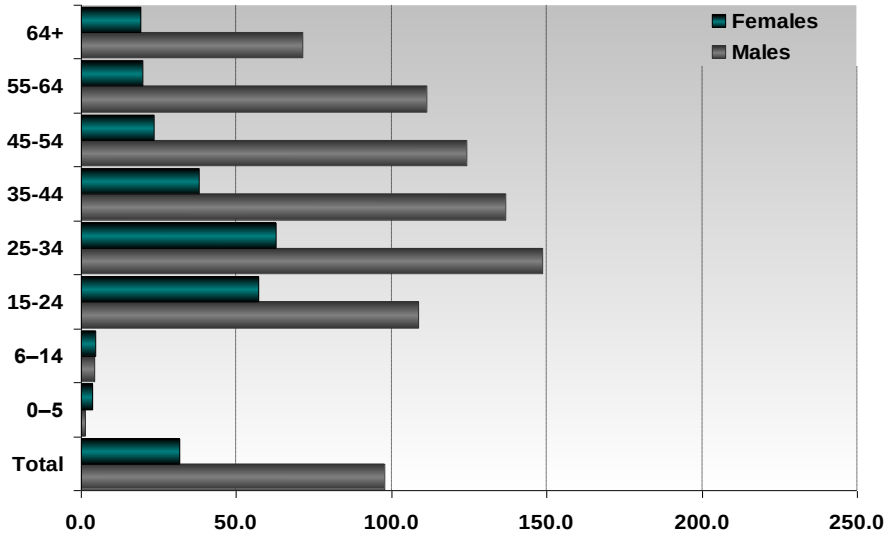


New cases of pulmonary tuberculosis comprised 75% of the new cases of all types of tuberculosis.

73.7% of new pulmonary TB cases were registered in males; incidence rate in males was 3.1 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 4.4).

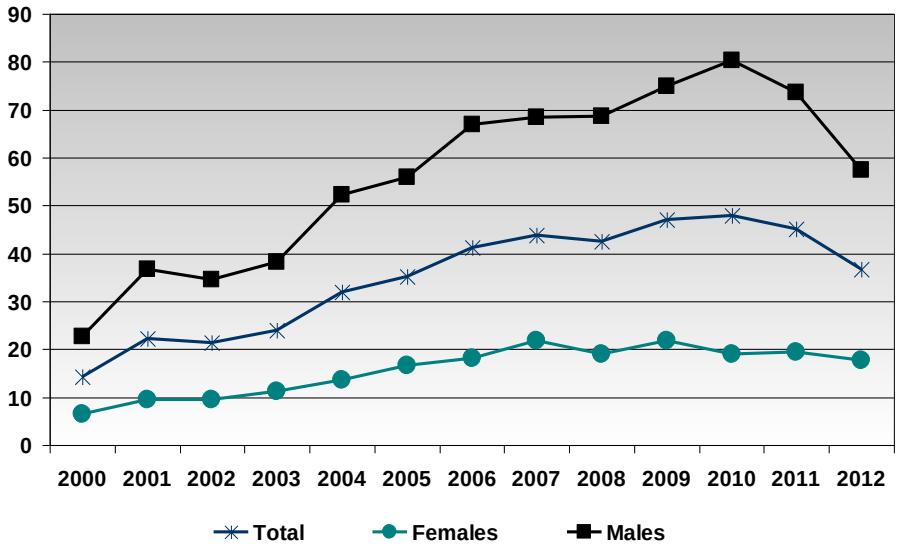
* *See additional information in the chapter "Health-related Millennium Development Goals".*

Figure 4.4 **Incidence rate of pulmonary tuberculosis by sex and age groups per 100000 population of the corresponding age and sex, Georgia, 2012**



The share of smear positive cases of TB has been increasing since 2008 (from 61% in 2008 to 68% in 2011). In 2012, the share of smear positive cases of TB has been decreased by 58%. In males the incidence of smear positive tuberculosis was 3.2 times higher than in females (Figure 4.5).

Figure 4.5 **Incidence of smear positive pulmonary tuberculosis per 100000 population, Georgia, 2000-2012**



Tuberculosis treatment success rate is one of the indicators for assessing the National Tb programme. Tuberculosis treatment success is calculated on the basis of the number of new smear-positive pulmonary TB cases registered in a given year that were cured, plus the number of cases that completed a course of treatment, without bacteriological confirmation of cure. By 2005, the World Health Organization 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 2012, it increased upto 76.0%.

Results of DOTS treatment of new cases of smear positive pulmonary tuberculosis registered 12 months ago, Georgia, 2008 – 2012

	2007	2008	2009	2010	2011	2012
Number of registered cases	**1580**	**1860**	**1868**	**2055**	**2143**	**2028**
% ***from the total number***						
Recovered	63.9	63.2	60.3	63.7	67.0	68.3
Completed treatment	11.6	13.9	13.2	11.6	9.5	7.7
Treatment failure	6.1	6.2	4.4	3.5	1.9	3.1
Died	3.0	2.5	2.8	3.1	2.9	2.3
Interrupted treatment	8.9	8.8	8.8	7.3	6.7	5.1
Transferred to other institutions	5.5	3.1	2.4	1.4	0.8	0.5
Unevaluated cases	1.0	2.4	1.6	1.3	1.4	1.2
Assigned category IV (chronic)	0	0	6.6	8.1	9.8	11.7

Tuberculosis pleurisy has the largest share (38.0%) in the structure of the registered extrapulmonary TB cases.

Extrapulmonary tuberculosis, Georgia, 2012

	Registered cases		Including new cases	
	Total number	%	Total number	%
Extrapulmonary TB	**1068**	**100**	**944**	**100**
Including				
TB meningitis	42	3.9	35	3.7
Bone and joint tuberculosis	114	10.7	87	9.2
Urogenital TB	126	11.8	97	10.3
Tuberculous pleurisy	406	38.0	383	40.6
Lymph node tuberculosis	260	24.3	245	26.0
TB of other organs	120	11.2	97	10.3

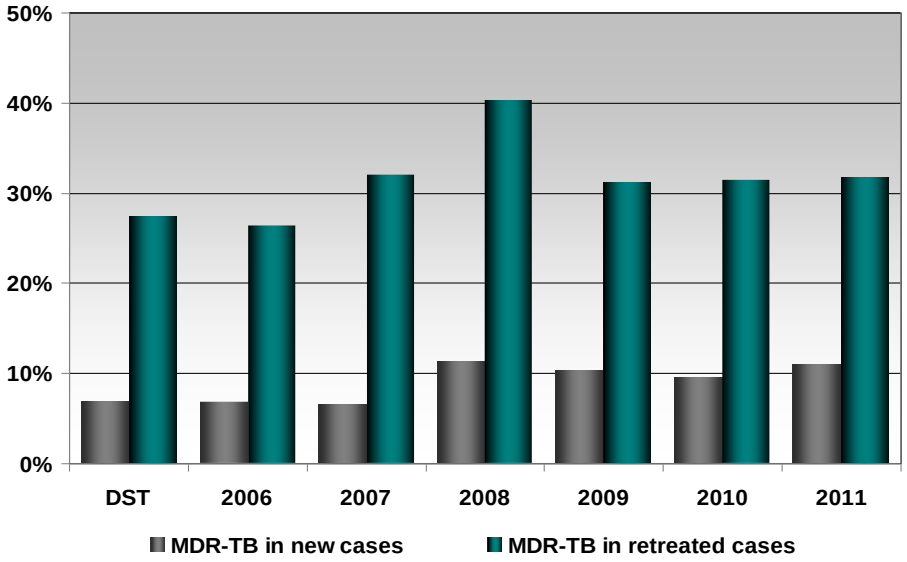
Out of 35 cases of tuberculous meningitis, 14% of cases were registered in children.

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

According to the WHO estimates, in 2011-2015, about 1000,000 MDR-TB cases will be acquired. Global plan of **STOP TB Partnership** is aimed to success treatment of 75% of such cases.

In 2004-2006, the first-line anti-tuberculosis drug resistance survey (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, multidrug-resistant form of tuberculosis was found in 3.7% of new cases and in 20% of retreated cases (Figure 4.6).

Figure 4.6 Multi-drug resistant form of tuberculosis (MDR-TB) (%)



HIV-AIDS*

In 2012, there were 526 newly detected HIV cases in Georgia (incidence rate – 11.7).

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Registered cases (cumulative)	281	377	475	635	874	1152	1497	1835	2170	2609	3033	3715
New cases	95	96	98	160	239	278	345	338	335	439	424	526
Number of deaths (cumulative)	41	52	69	108	161	204	261	300	366	456	572	682
Number of deaths during the reporting year	14	11	17	39	53	43	57	39	66	90	116	110

In 2012, the incidence rate of ***HIV infection*** was 2-folds higher than the same indicator for the European Union, and was 2.7 times lower, compared to the CIS countries.

During the reporting year, 73% of cases were registered in males. According to the modes of transmission of new cases, injecting drug use (43%) and sexual contacts (53.6%) constituted a significant share; heterosexual contacts made up 44.3% from all sexually transmitted cases. There were registered 9 cases of vertical transmission (from mother to child).

In 2012, 43% of the late detected cases of AIDS were transmitted through injecting drug use and 54% through sexual contacts.

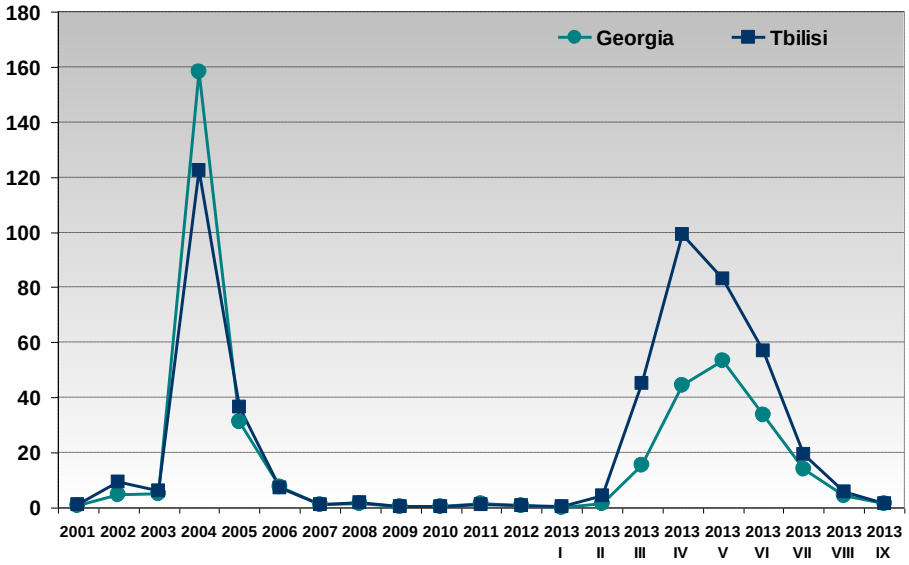
In 2012, there were registered 110 death cases among HIV-infected population; the cause of death in 65.5% of such cases was HIV-infection.

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

Measles*

Measles registration and epidemiological surveillance in Georgia are obligatory, like in all other countries. In 2004 and 2013 peaks of morbidity were registered. The 2013 peak was caused by the failure of the mass immunization campaign in 2008, resulting in the accumulation of a nonimmune layer of the population, which provided a basis for a measles epidemic (Figure 4.7).

Figure 4.7 Measles incidence per 100000 populations, Georgia



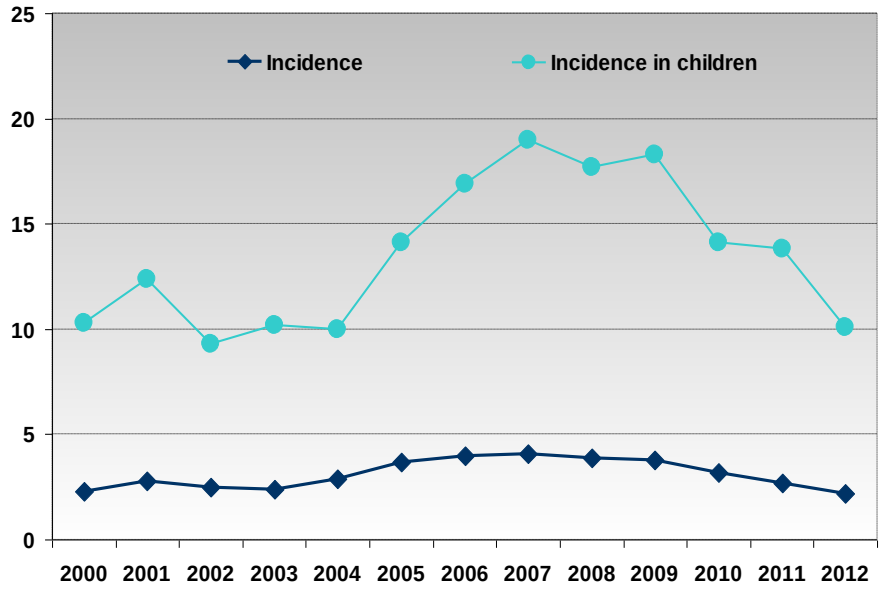
Achievement / maintanance of 95% coverage of the population with two doses of vaccinations and the establishment of supervision for each case (including lab testing) are necessary for elimination of measles. To prevent a spreding of measles immunizations of under-7 incompletely vaccinated children, persons in contact with them and some other groups of the population are being administered in Georgia since March 2013. This campaign is financed from the state budget. As a result of the campaign the incidence of measles as in country, so in Tbilisi has been significantly decreased.

Visceral leishmaniasis

In 2012, in Georgia, the number of registered cases of ***leishmaniasis*** decreased; this rate decreased by 46%, compared to 2007. In children the incidence rate decreased by 46.8% (Figure 4.8).

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

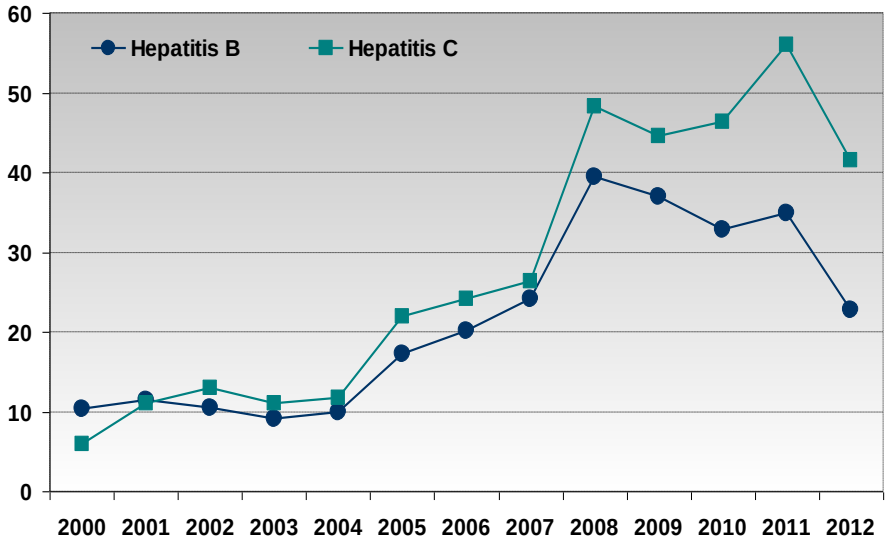
Figure 4.8 Leishmaniasis, incidence rate per 100000 population, Georgia



Viral hepatitis B and C

In 2012, in Georgia the incidence rate of viral ***hepatitis B*** decreased by about 35%, it was almost 2.5 times higher, compared to the average rate for the European region. Incidence rate of viral ***hepatitis C*** decreased by 26% (Figure 4.9).

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



Acute hepatitis B made up 15.9% of the registered new cases of hepatitis B. The incidence rate reached the maximum in the 30-59 years age group.

Among new cases of hepatitis C 9.4% was acute and 90.6% - newly registered chronic cases.

Non-communicable diseases

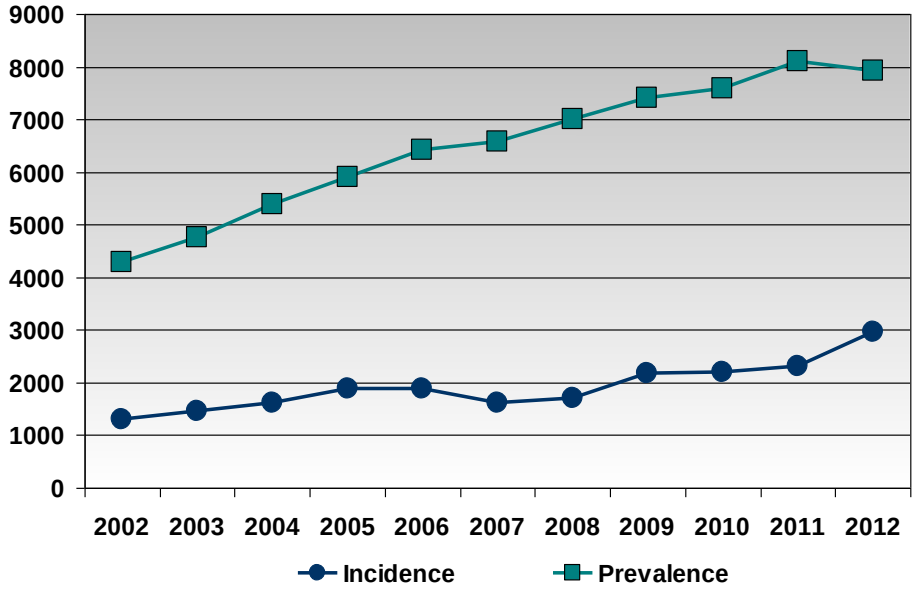
Non-communicable diseases place an increasingly heavy burden on people's health, from the viewpoint of morbidity and mortality. 80% of death caused by non-communicable diseases fixed in low- and middle income countries.

The WHO Global NCD Action Plan 2013-2020 provides a road map and a menu of policy options for Member States, WHO, international partners and private sector entities which, when implemented collectively, attain 9 voluntary global targets, including that of a 25% relative reduction in premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 2025.

Diseases of the circulatory system

In Georgia, in 2012 the tendency of increasing the prevalence of the ***circulatory system diseases*** was broken, although number of new cases of circulatory system diseases increased (Figure 4.10).

Figure 4.10 Diseases of the circulatory system, morbidity rates, Georgia

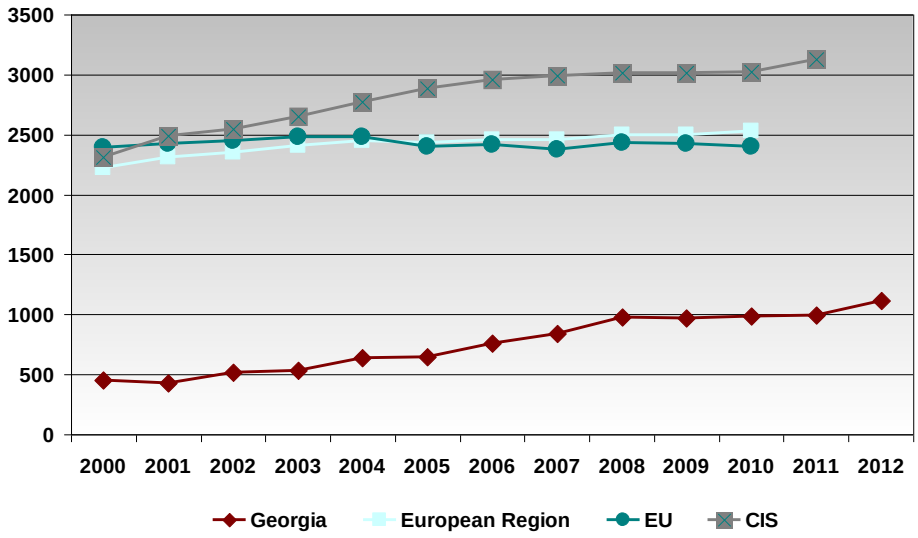


In the structure of the circulatory system diseases a share of hypertensive diseases is 58.8% (prevalence – 4658.7, incidence – 1458.7), ischemic heart diseases – 24.6% (prevalence – 1947.5, incidence – 662.1) and cerebrovascular diseases – 4.3% (prevalence – 338.1, incidence – 220.7).

Compared to the last year, the number of hospitalizations due to the circulatory system diseases have increased by 12%, while the general case fatality rate reduced (5.8%). The same time the case fatality rate in children increased (7.3%) The largest proportion of the case fatality due to circulatory system diseases is related to the cases of pulmonary heart disease (25.7%), diseases of pulmonary circulation (22.1%), and cerebrovascular diseases (18.1%).

The hospitalization rate per 100000 population reached 1116.3; this is almost 3-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 admissions rates per 100000 population

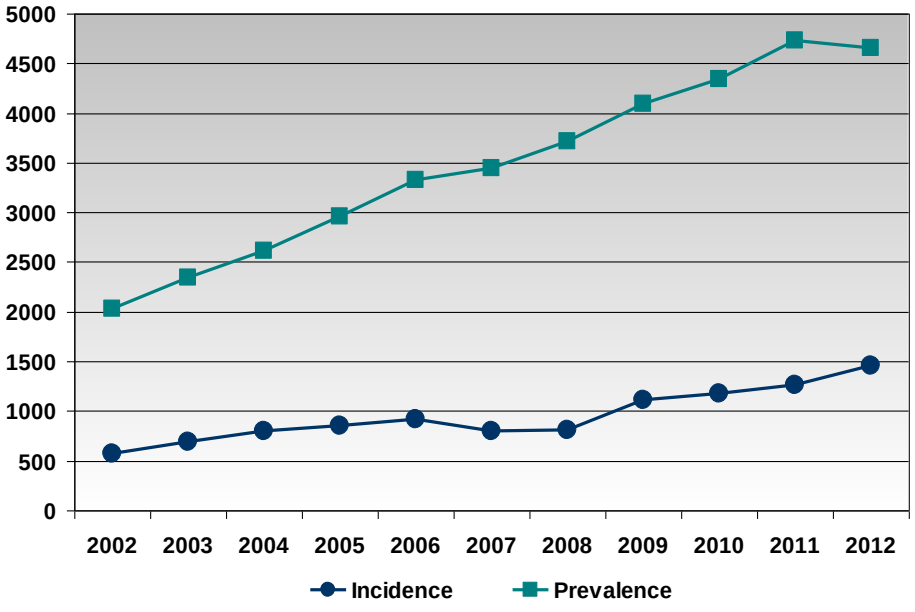


Source: WHO HFADB & NCDC

Hypertensive diseases

Compared to 2011, the prevalence rate of ***hypertensive diseases*** slightly decreased; although, the incidence rate increased (Figure 4.12).

Figure 4.12 Hypertensive diseases, morbidity rates, Georgia



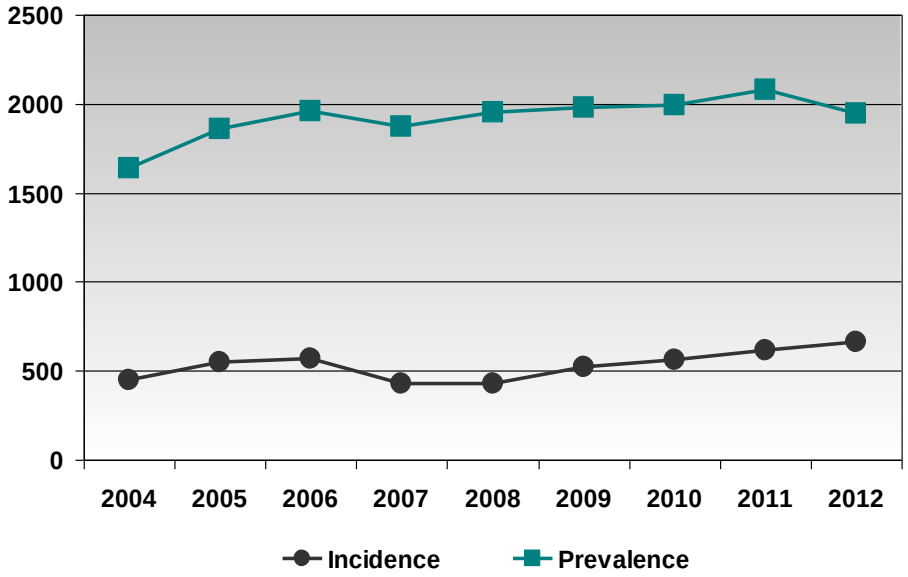
Among the circulatory system diseases (both in chronic and acute) the share of hypertensive diseases accounts for more than a half.

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.

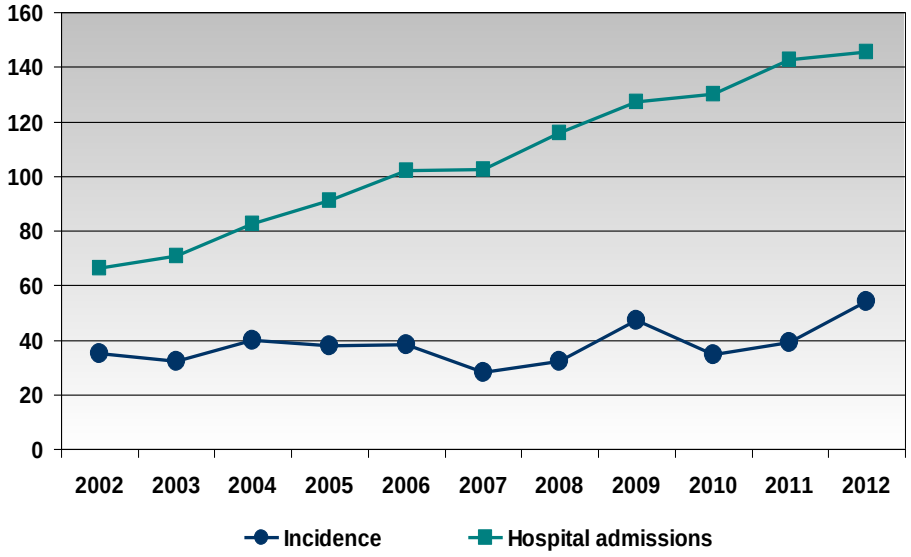
The prevalence rate of ischaemic heart diseases has decreased (by the end of the year, the prevalence rate of ischaemic heart diseases stood at 1947.2) (Figure 4.13).

Figure 4.13 Ischaemic heart diseases morbidity rates, Georgia



In the group of ischaemic heart diseases the number of cases of ***stenocardia*** accounts to ~1/4 of all cases, the share of acute myocardial infarction – 4.1%. In 2012, the incidence rate of ***acute myocardial infarction*** has increased by 39.3%, compared to the previous year (incidence – 54.2) (Figure 4.14).

Figure 4.14 Acute myocardial infarction, incidence and hospital admissions rates per 100000 population, Georgia



The number of hospital admissions due to acute myocardial infarction was 6523, of which 45.3% was hospitalized within first 24 hours after onset of the disease. The case fatality rate for

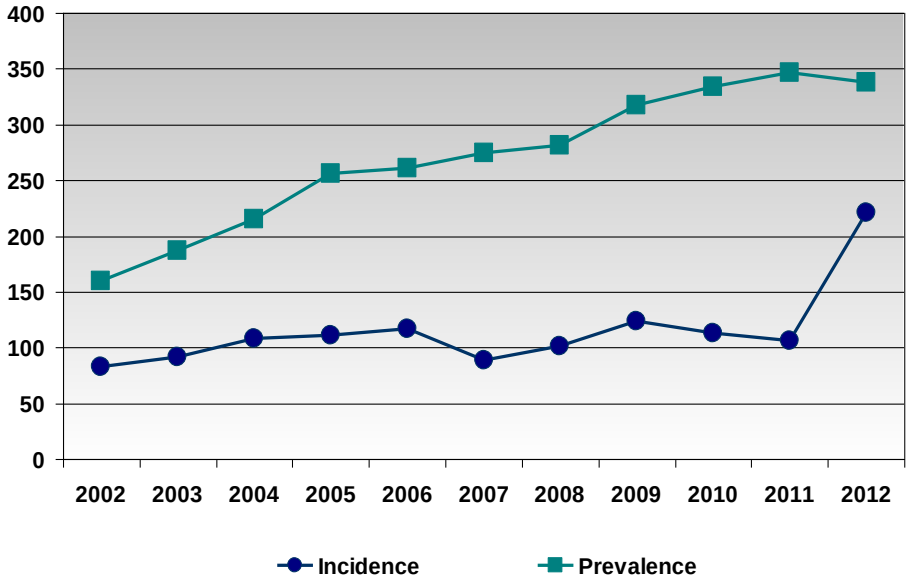
acute myocardial infarction cases decreased by 11.2% and was 7.9%, while for repeated myocardial infarction cases – 4.3%.

Among the total number of hospital deaths (513), 220 patients died within the first 24 hours after admission, 80 patients - within 30 days after admission.

Cerebrovascular diseases

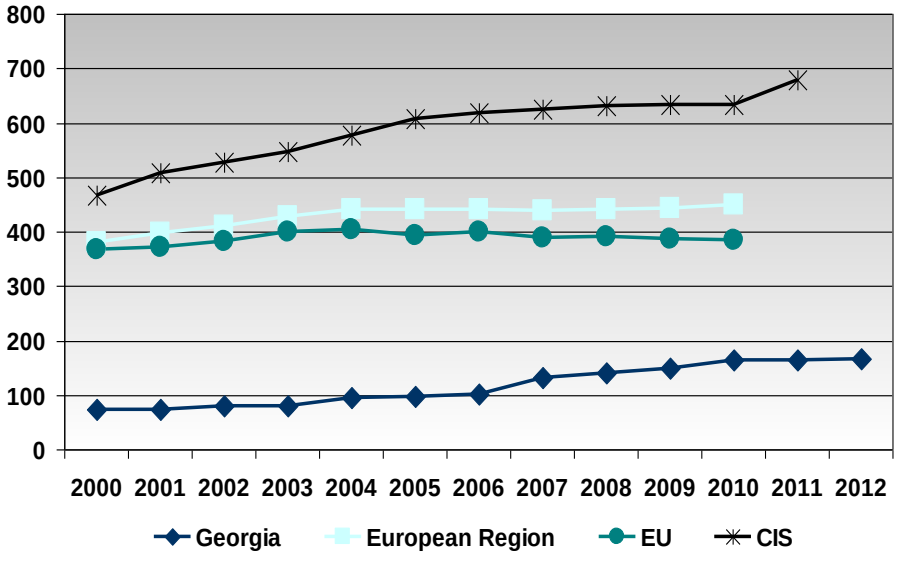
In 2012, the prevalence of ***cerebrovascular diseases*** slightly increased, compared to 2011, while the incidence rate has increased two folds (Figure 4.15).

Figure 4.15 Cerebrovascular diseases, morbidity rates, Georgia



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

Figure 4.16 Cerebrovascular diseases, hospital admissions rate per 100000 population



Source: WHO HFADB & NCDC

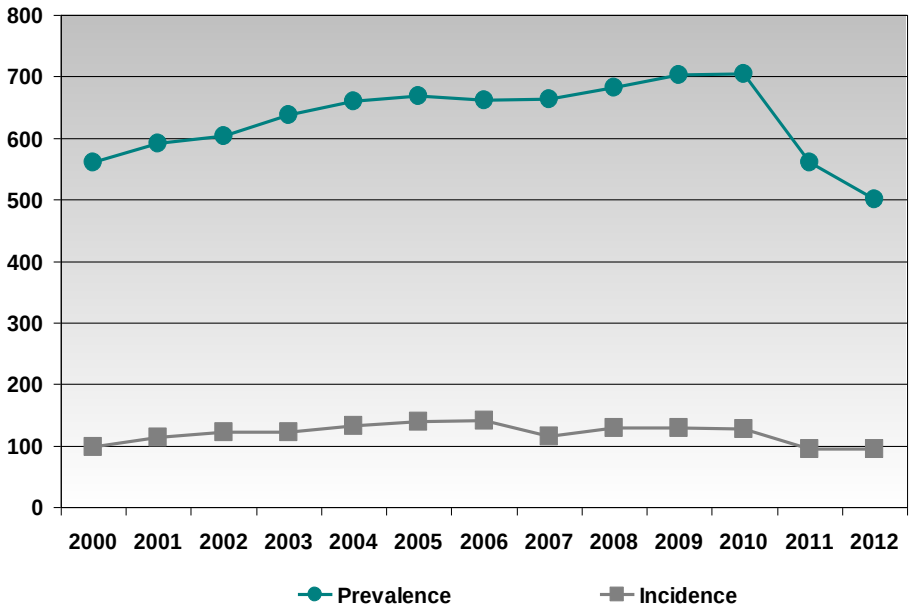
Last years morbidity indicators of stroke continued to grow; in 2012 the prevalence rate is 1.5-time larger than in the previous year.

Malignant neoplasms

The demolishing of the system of oncological dispenceries caused a distortion of the statistical data about the ***malignant neoplasms*** morbidity. Last years, due to above the morbidity of malignant neoplasms has been significantly decresed.

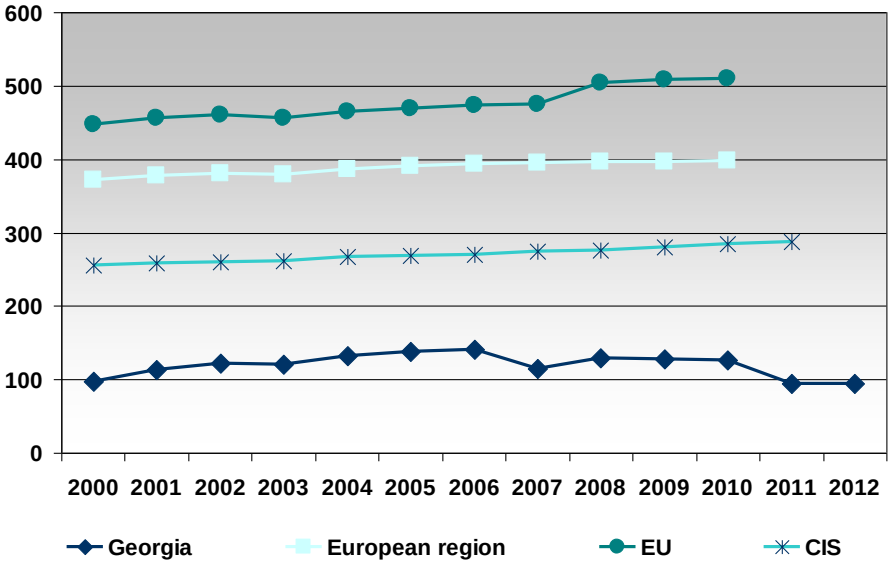
In 2012, 94 new cases of malignant neoplasms per 100000 population were registered; as it was during the previous year, the prevalence rate of malignant neoplasms decreased by 10.9% (Figure 4.17). 51.7% of new cases were registered in women.

Firuge 4.17 Malignant neoplasms, morbidity rates, Georgia



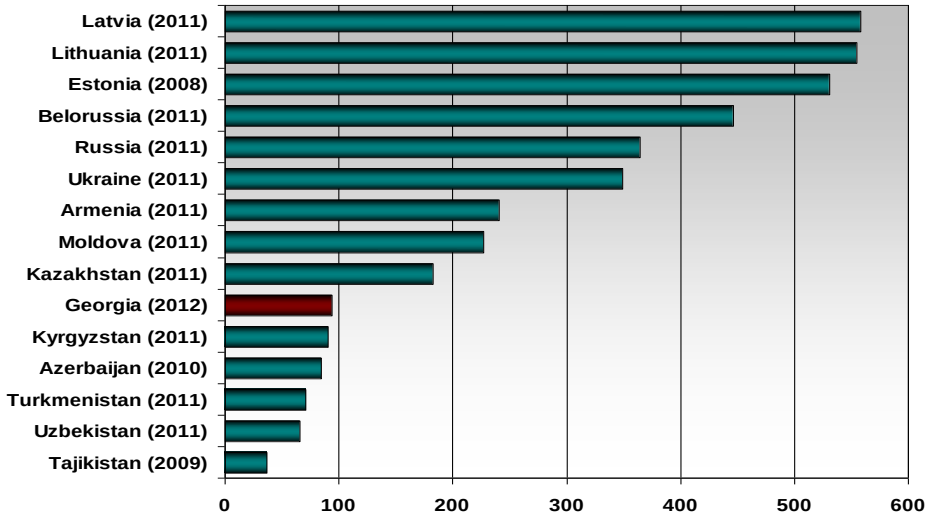
According to the WHO data, malignant neoplasms incidence rate in Georgia was sufficiently lower than in the European and CIS countries (Figure 4.18, Figure 4.19).

Figure 4.18 Malignant neoplasms, incidence rate per 100000 population



Source: WHO HFADB & NCDC

Figure 4.19 Malignant neoplasms, incidence rate per 100000 population, former Soviet Union countries, last available year



Source: WHO HFADB

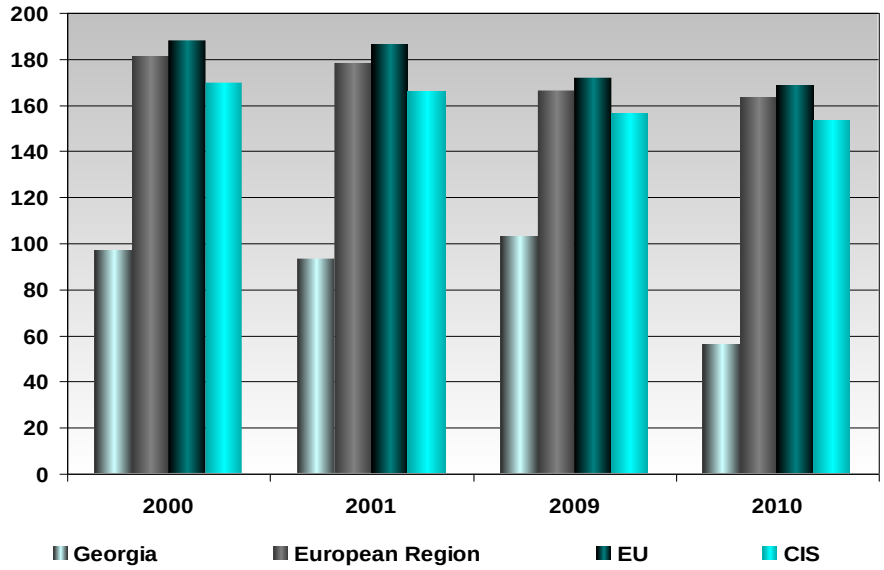
In 2012, in Georgia, there were hospitalized 17661 patients (including 817 children) diagnosed with neoplasms; from this number 8825 patients (297 children) were diagnosed with malignant neoplasms. Malignant neoplasms hospitalization rate accounted to 393.3 per 100000 population; the rate is 2.8 times lower, compared to the CIS countries and the European Union rates. The general case fatality rate was 2.8, in children the case fatality rate was 1.8.

Neoplasms, hospitalization rate per 100000 population

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Georgia	197.3	200.5	198.5	217.7	214.5	235.5	254.7	297.3	337.2	323.3	393.3
Europe	1214.3	1256.9	1292.9	1313.6	1310.1	1329.5	1337.6	1355.5	1356.5	1351.4	N/A
European union	1584.2	1610.9	1650.8	1657.5	1641.6	1649.9	1640.1	1661.0	N/A	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	N/A

According to the WHO data, the mortality rate from malignant neoplasms in Georgia in 2010 was 3-folds lower than the relevant rates in the European and CIS countries (Figure 4.20).

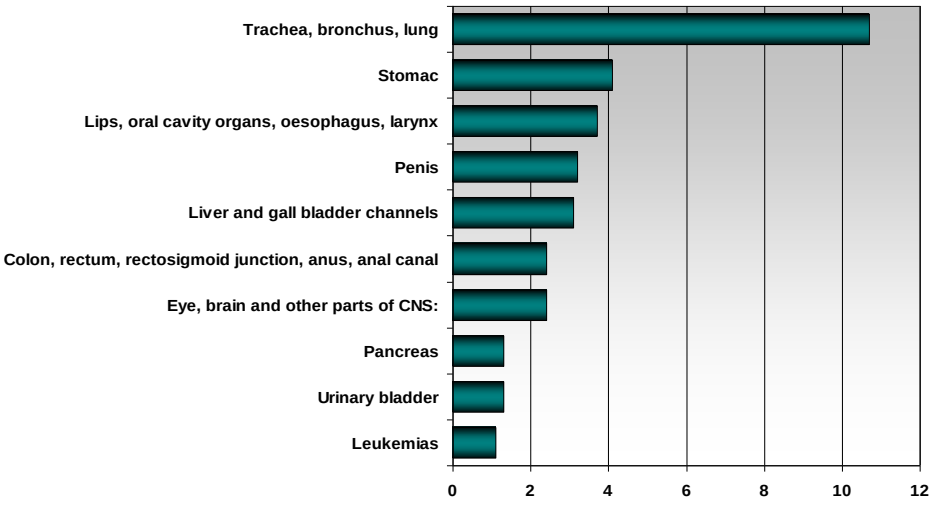
Figure 4.20 Malignant neoplasms, standardized death rate



Source: WHO HFADB

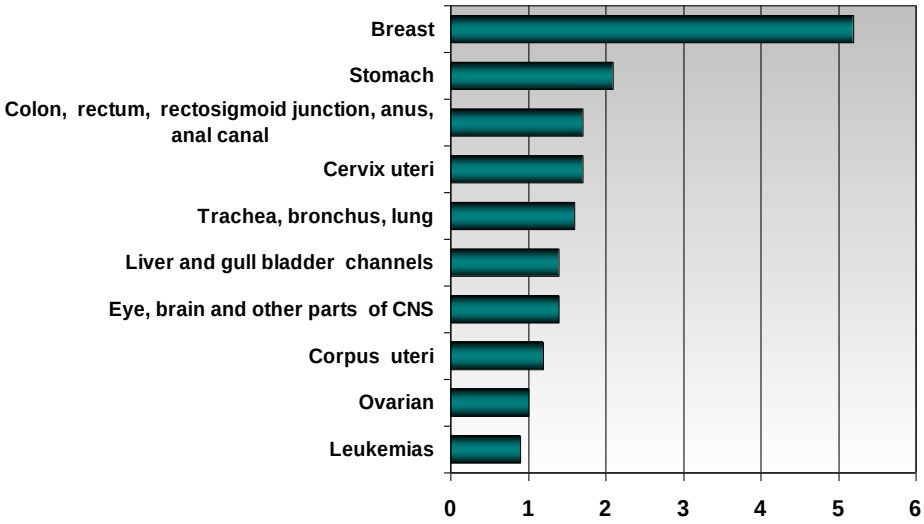
In 2010, in Georgia, according to the WHO cancer mortality database, the trachea, bronchus and lung, and stomach malignant neoplasms were leading causes among malignant neoplasms related deaths in males (Figure 4.21); whereas breast and uterine neoplasms were leading in females (Figure 4.22).

Figure 4.21 Ten leading causes in malignant neoplasms related deaths, males, age adjusted rate, Georgia, 2010



Source: WHO, cancer mortality data base

Figure 4.22 Ten leading causes in malignant neoplasms related deaths related deaths, females, age adjusted rate, Georgia, 2010



Source: WHO, cancer mortality data base

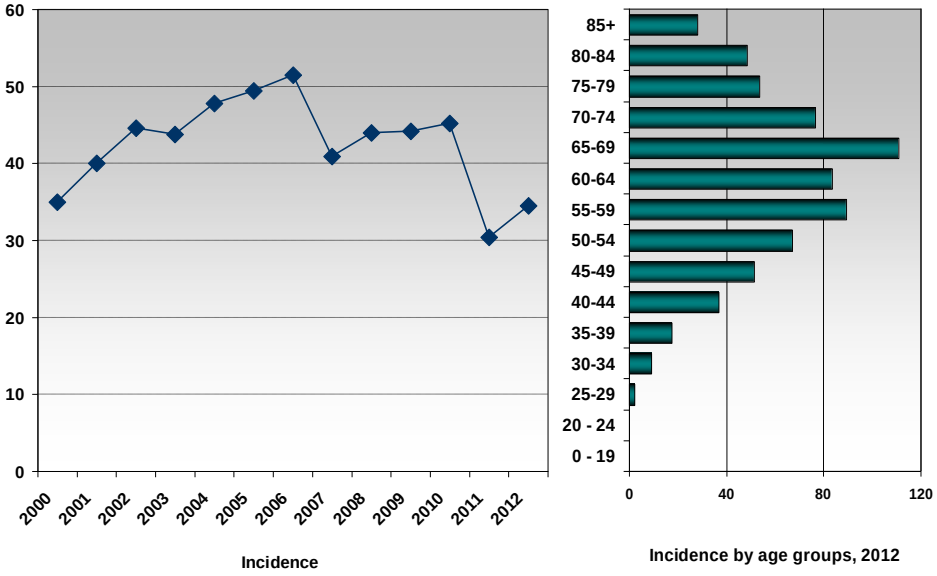
During the reporting year, 11.1% of cancer diagnosed patients died. This rate did not change much compared to the last year. 38.8% of patients died within the first year after being diagnosed.

Breast cancer

By the end of the reporting year, 6153 patients diagnosed with ***breast cancer*** were registered (prevalence - 337.0); 821 new cases were registered in both genders (incidence – 18.3).

In 2012, the share of breast cancer in the total number of new cases of malignant neoplasms in females was 37.1%, incidence rate increased by 13.5%, compared to 2011 that may be explained by the improved registration due to the growing insurance coverage (Figure 4.23).

Figure 4.23 Breast cancer in females, incidence per 100000 females, Georgia

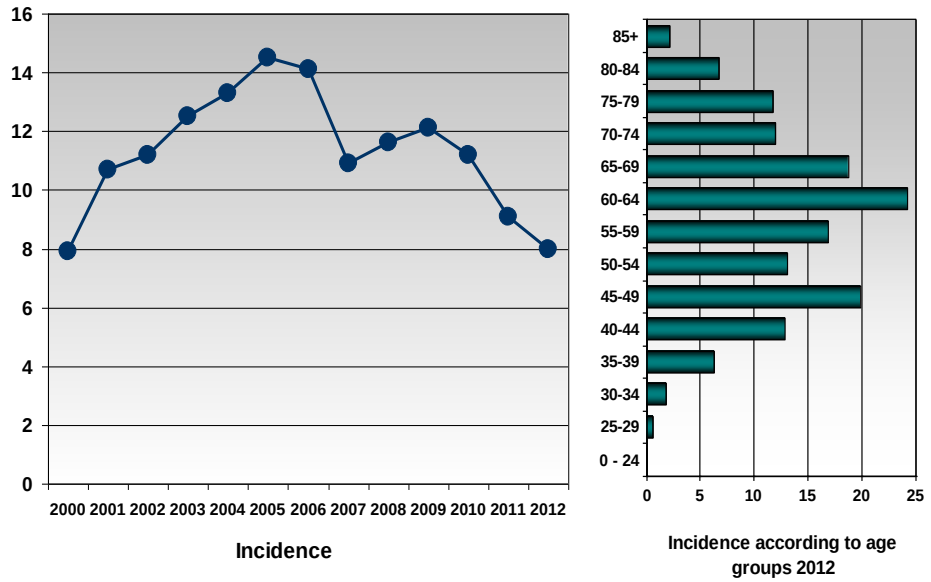


In 2012, the share of new registered cases of breast cancers, diagnosed at III and IV stages, increased, compared to the previous year and grew up to 55.5% from the total number of all new cases of breast cancer. 22.9% of patients died within the first year after being diagnosed.

Cervical cancer

By the end of reporting year, 1673 patients diagnosed with ***cervical cancer*** were registered (prevalence – 71.2), including 189 new cases; the incidence rate decreased by 36.5%, compared to 2009 (Figure 4.24).

Figure 4.24 Cervical cancer, incidence per 100000 females, Georgia



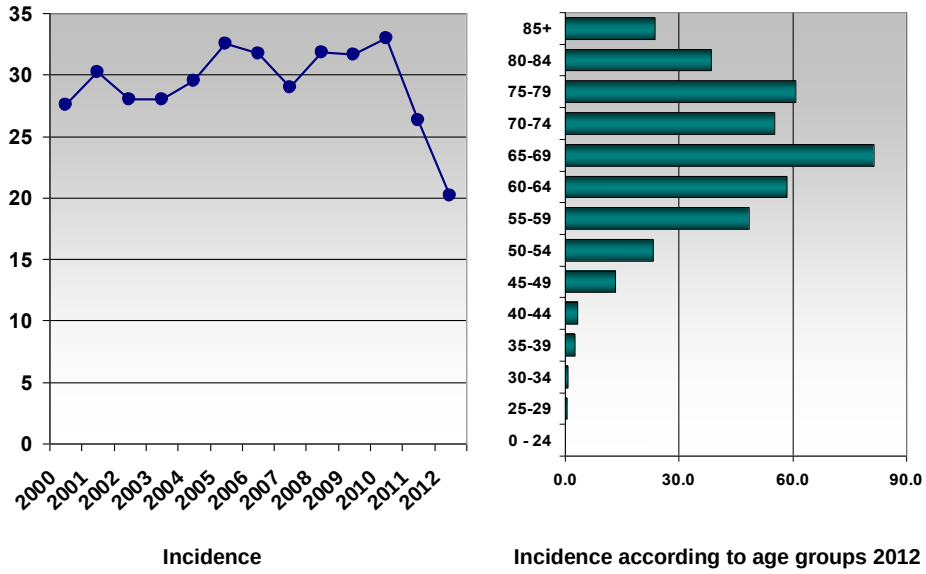
In 2012, the share of new cases of cervical cancer, diagnosed at the III and IV stages,

increased from 53.0% in 2011 up to 56.6%. The total number of 31 women died within the first year after being diagnosed; this constitutes 3.4% of patients in this group.

Trachea, bronchus and lung cancers

In 2012, 1156 cases of ***trachea, bronchus and lung cancers*** were registered (prevalence – 25.7). In the total number of new cases, 86.4% were males (incidence in males – 20.2). The incidence rate decreased by 23.2% compared to the previous year (Figure 4.25). Trachea, bronchus and lung tumours comprised the largest share (21.2%) in the new cases of cancers in males.

Figure 4.25 Trachea, bronchus and lung cancer in males, incidence per 100000 males



Incidence **Incidence according to age groups 2012**

In 2012, the share of new cases of trachea, bronchus and lung cancers, diagnosed at the III and IV stages, slightly increased and constituted 83.9% from total number of new cases of cancers in this group. 22.2% of patients died within the first year after being diagnosed with these cancers.

Malignant neoplasms of prostate

By the end of 2012, 517 patients diagnosed with ***prostate malignant neoplasms*** were registered (prevalence – 24.1). The number of newly diagnosed cases amounted to 187; incidence rate – 8.7 (Figure 4.26).

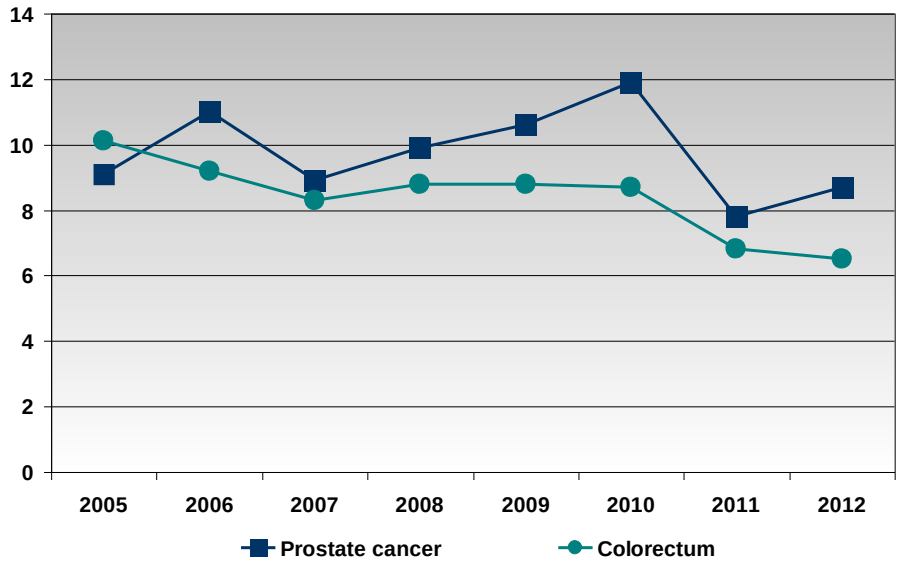
In 2012, the share of new cases of prostate cancers, diagnosed at the III and IV stages constituted 71.7% from total number of new cases of cancers in this group. 22.2% of patients died within the first year after being diagnosed with the cancer.

Colorectal cancer

By the end of 2012, 1.142 patients diagnosed with ***malignant neoplasms of rectum, rectosigmoid junction, anus and anal canal*** were registered (prevalence – 25.4). During the year 290 new cases were registered (incidence – 6.5) (Figure 4.26). No gender difference was revealed among the patients with colorectal cancers.

In 2012, the share of new cases of malignant neoplasms of rectum, rectosigmoid junction, anus and anal canal, diagnosed at the III and IV stages, constituted 87.3% from total number of new cases of cancers in this group. 8.8% of patients died within the first year after being diagnosed with these cancers.

Figure 4.26 Malignant neoplasm of prostate and colorectal cancer, incidence rates per 100000 population, Georgia

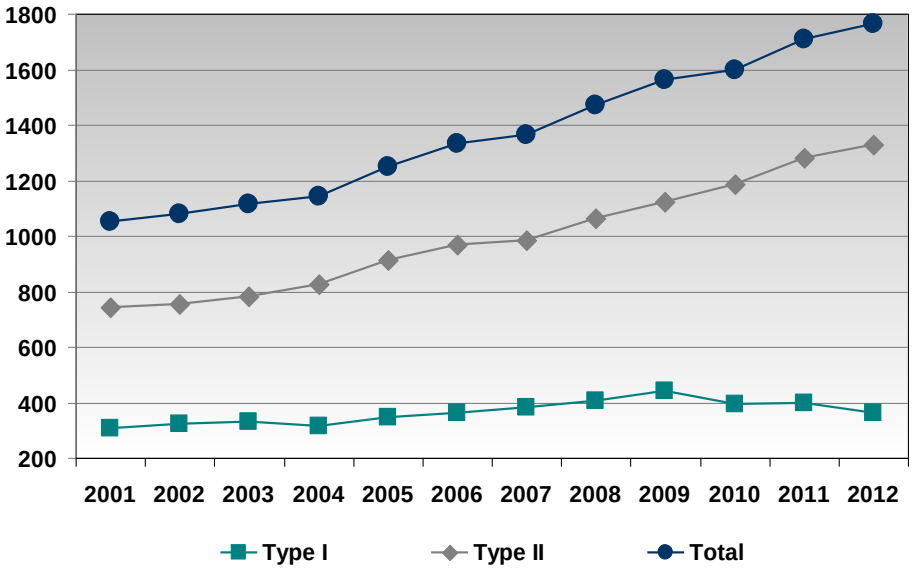


Endocrine system diseases

Diabetes

Last years, the number of registered cases of ***diabetes*** increased. The rates of prevalence and incidence grew by 3.2% and 32.4% respectively, compared to 2011 (Figure 4.27). The prevalence rate of insulin-dependent diabetes mellitus (IDDM - type I) decreased by 9.4%, compared to 2011; 1.8% of the newly registered cases of Type 1 diabetes mellitus were registered in children under 15.

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

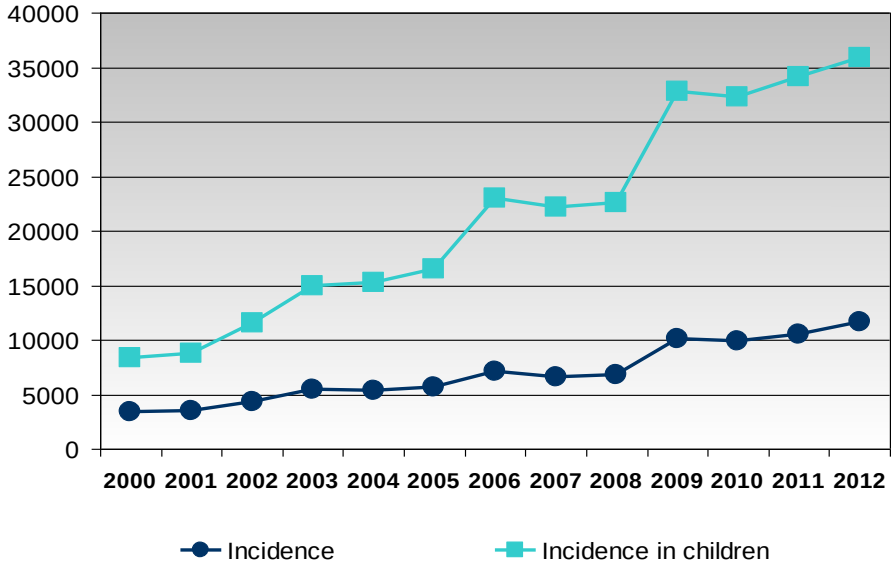


In 2012, 2084 patients, including 177 children, with diagnosis of diabetes mellitus were discharged from in-patient facilities of Georgia (hospitalization rate - 38.8); general case fatality rate – 2.6%. There were no fatal cases registered in children.

Diseases of the respiratory system

In 2012, 52.4% of the new cases of the ***respiratory system diseases*** were registered in children. Compared to the previous year, there was a 10.7% increase of the incidence (Figure 4.28).

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



In 2012, 61.7% of discharges of patients diagnosed with the respiratory system diseases were registered in children. The general case fatality rate was 1.4%, in children <15 - 0.1%, in children <1 – 0.2%. The case fatality rate in children significantly decreased 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.

In 2012, during the year there were registered 48080 cases of chronic lower respiratory diseases. By the end of the year 33652 patients, including 3404 children, were under medical supervision.

Chronic Obstructive Pulmonary Diseases (COPD)

During the reporting year, the share of ***chronic obstructive pulmonary diseases*** accounted to 59.1% of chronic lower respiratory diseases registered in the population of Georgia. In children the share of COPD was 69.2%.

In the group of chronic obstructive pulmonary diseases chronic and unspecified bronchitis

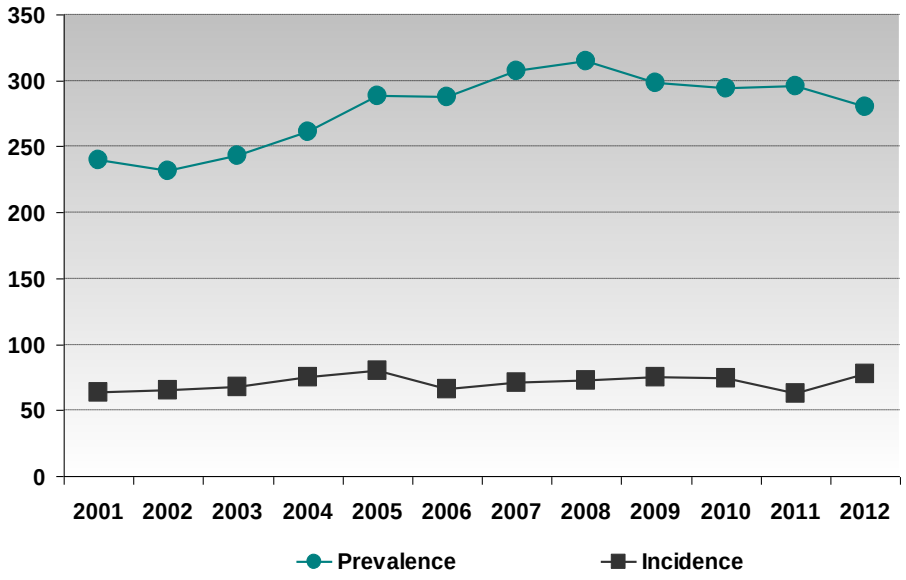
comprised 73% in general population, in children it equalled to 70%. Compared to 2011, these rates decreased.

Asthma

In 2012, compared to 2011, prevalence rate of ***asthma*** and ***status asthmaticus*** decreased by 3.2% in the total population; at the same time, the incidence rate increased by 24.3% (Figure 4.29). The incidence rate of asthma in children decreased by 8.3%.

The share of asthma comprises 2.1% of the class of the respiratory system diseases; although, in the group of lower respiratory diseases – 33.0%.

Figure 4.29 Asthma and status asthmaticus, morbidity rates per 100.000 population, Georgia



Injury, poisoning and certain other consequences of external causes

In 2012, the number of newly registered cases of ***injuries, poisonings and certain other consequences of external causes*** was 2-folds higher than in 2011.

During the reporting period 8,861 cases of accidents were registered by in-patient facilities, including 3211 cases of injuries (36%) due to traffic incidents; 1111 cases (12.5%) due to other external causes; in 24.1% a self injury was registered.

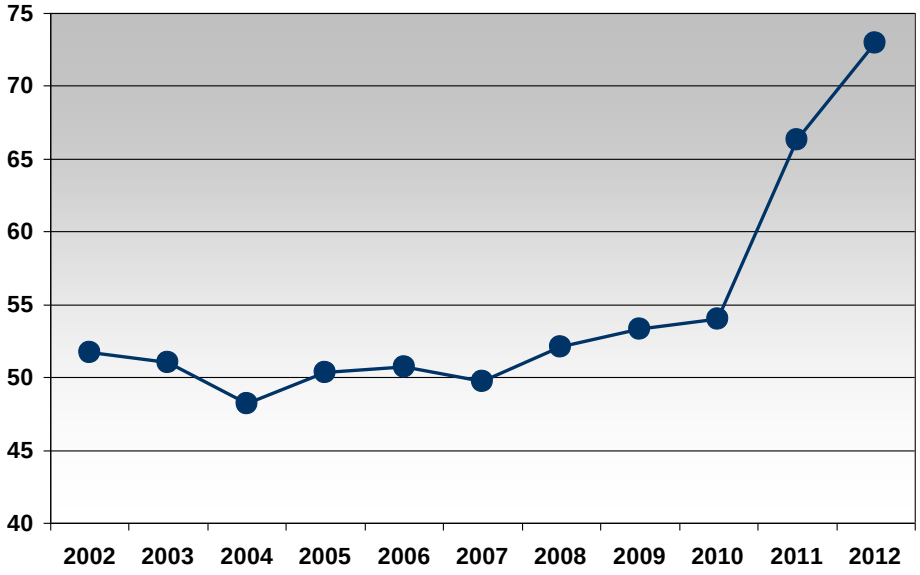
CHAPTER 5.

MATERNAL AND CHILD HEALTH

In 2012, about 43% 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 centres, 79381 ***pregnant women*** were registered in Georgia in 2012. A growth of the timely application for the antenatal care was indicated during last years. In 2012, 72.9% of these women were enrolled timely - before the 12th week of pregnancy (Figure 5.1). During the year, 50720 pregnant women were taken from the enrolment lists, out of which, 89.6% carried the pregnancies to the end, in 2.8% of cases spontaneous abortions were registered (gestation age less than 22 weeks); 96.5% of women had term deliveries.

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



In 2012, 84.1% (81.6% - in 2011) of enrolled pregnant women, which had carried their pregnancies to the end, had at least 4 antenatal care visits. During these visits 89.2% of the pregnant women were tested for Rh-factor, 87.7% - for syphilis and 85.7% - for HIV infection. Additionally, 8.8% was referred for Hepatitis C testing. Antenatal screening for congenital malformations was provided to 2805 (5.1%).

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 2012, 46,232 pregnant women were screened using HBs immune-ferment test systems. 1,088 HBsAg positive cases were sent for confirmation to the NCDC laboratories in Tbilisi, Kutaisi and Batumi. 1,040 pregnant women (2.2%) were detected as antigen-positive after laboratory confirmation.

In 2012, 1,380 infants born of antigen-positive mothers were vaccinated with anti-hepatitis B virus (HBIG) immunoglobulin.

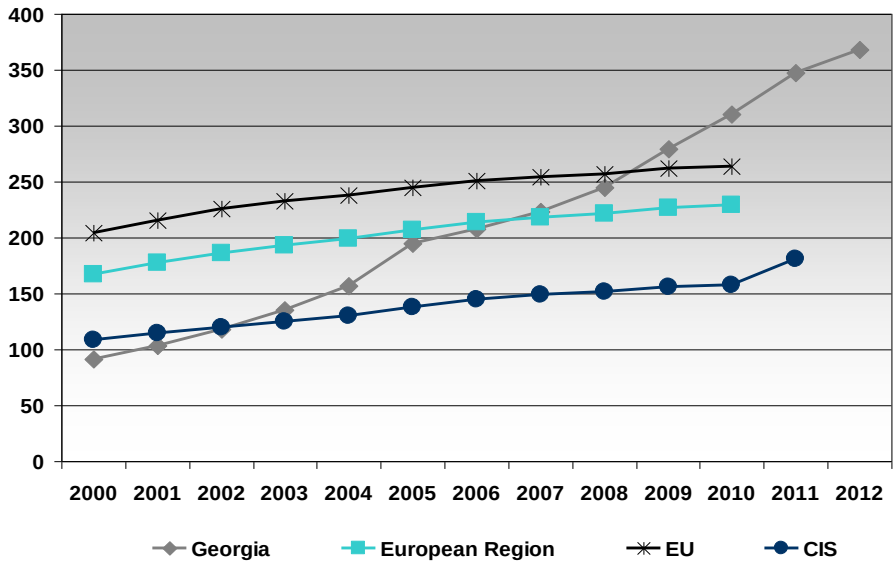
According to the data from women consultation centres, 8.0% of pregnant women were diagnosed with anaemia during the first trimester; 4.6% - with genitourinary system diseases

and 2.7% - with thyroid gland pathologies. During the reporting year, 3,571 (4.5%) women were hospitalized due to pregnancy related pathologies.

In 2012, 56746 ***deliveries*** were registered by health facilities, of which 58.6% were physiological and 41.4% - pathological.

In 2012, 20930 ***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).

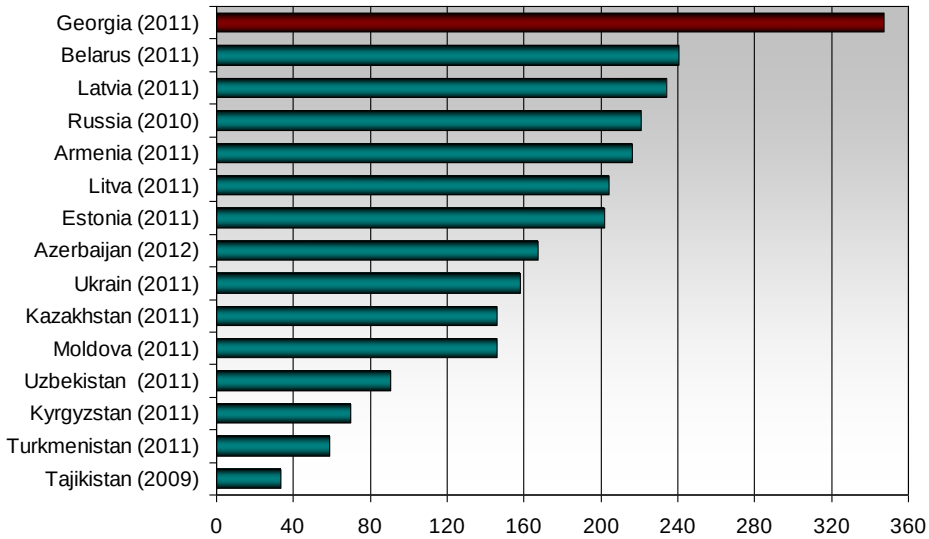
Figure 5.2 Cesarean sections rate per 1000 live births



Source: HFADB & NCDC

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 recommendations the “normal share” of caesarean sections is 10% to 15% both for the whole country and for individual facilities. Use of caesarean sections in less

than 10% from the total deliveries is considered as under use; in the case of more than 15% – as hipper use.

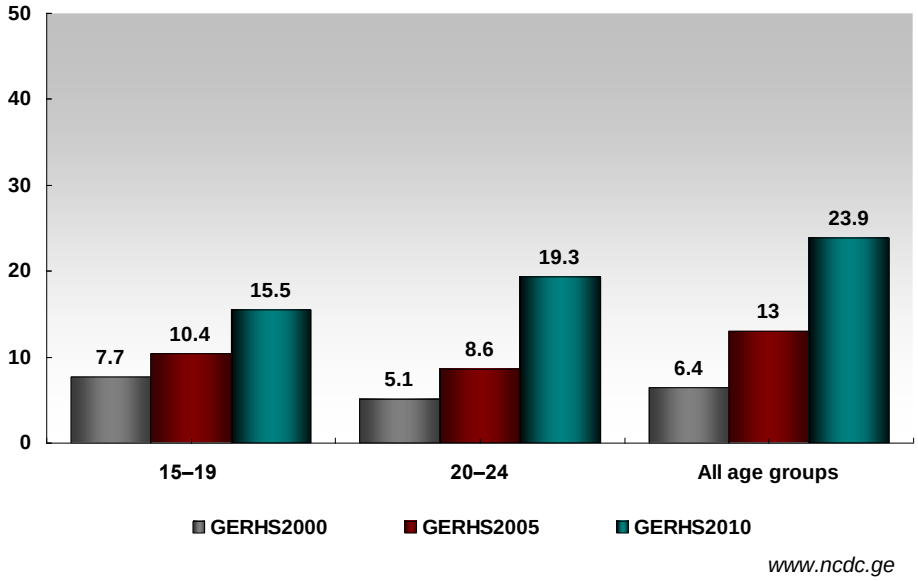
The WHO analysis of the data, collected from 137 countries, confirmed, that unnecessary caesarean sections demanded disproportionate excessive resources, and this would create obstacles for universal health care coverage, while the “additional” caesarean sections had negative reflections upon the equal coverage with health care services as in the case of concrete countries, as in the case of the World.

Correlations between caesarean sections use and maternal and infant morbidity and mortality were studied. If the caesarean sections use is more than 15%, a reduction of the maternal and infant morbidity and mortality is not observed. Although, if the use is less than 5%, than there is mentioned a negative effect upon the maternal health.

According to the above mentioned study, Georgia is among countries where the share of caesarean sections is excessive. In 2012, the number of caesarean sections performed in Georgia reached the 36.9% of the total number of deliveries; since 2000, the number of caesarean sections has being increased 3.8 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).

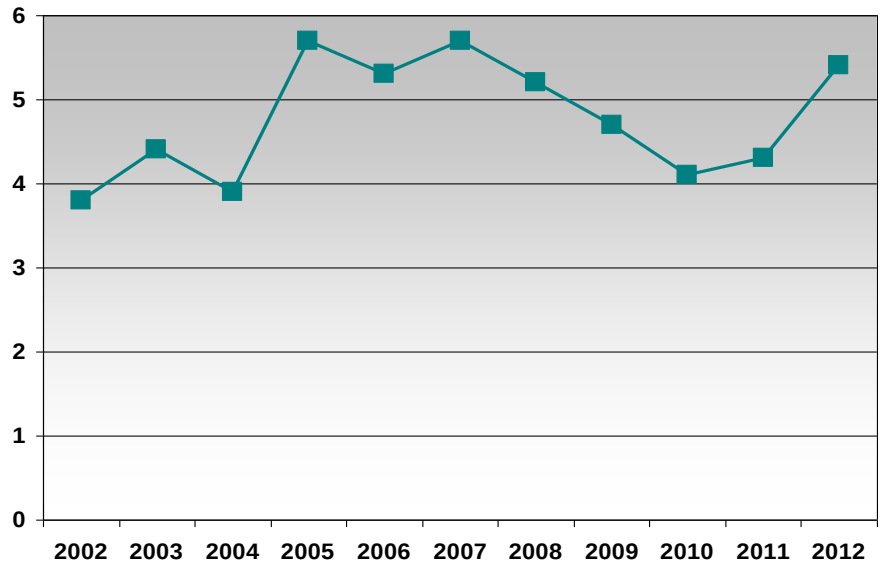
Figure 5.4 Percent of cesarean sections from all deliveries, RHS, Georgia



www.ncdc.ge

According to the data from maternity clinics the cases of ***intrapartum and postpartum complications included:*** perinatal laceration (5.4%), anaemia (4.8%), complications due to malpresentation and malposition of fetus (3.0%), pre-eclampsia and eclampsia (2.7%), and abnormalities of forces of labour (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%, though in 2012, it achieved 5.4% (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% (0.07% in 2012).

During the reporting year, 39,225 ***abortions*** were registered. The total induced abortions rate (TIAR) equalled to 0.9. The TIAR was high among 20 - 29 (52.3 per 1000 women) and 30-34 age groups (62.1 per 1000 women). The vacuum extraction was used in 40.6% (in 2011 - 42.3%), while medication abortions - in 10.1% (in 2011 - 7.6%).The number of abortions done during the first pregnancy is less that 1%.

In 1999 and 2005, the total induced abortions rates calculated using the official statistics and surveys differed by 80%. In 2007-2010, the improvement of the official statistics decreased the gap between the above mentioned TIARs up to 44% (Figure 5.6, 5.7).

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

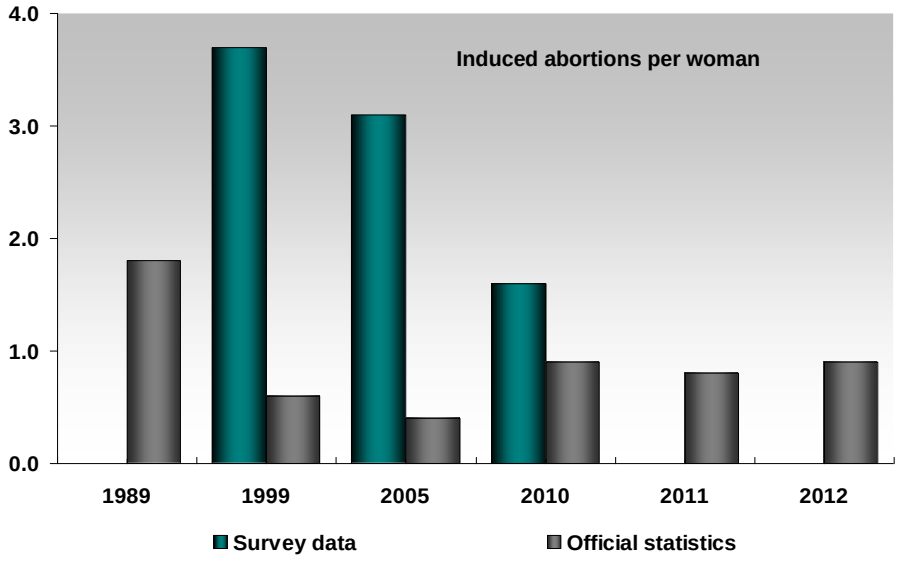
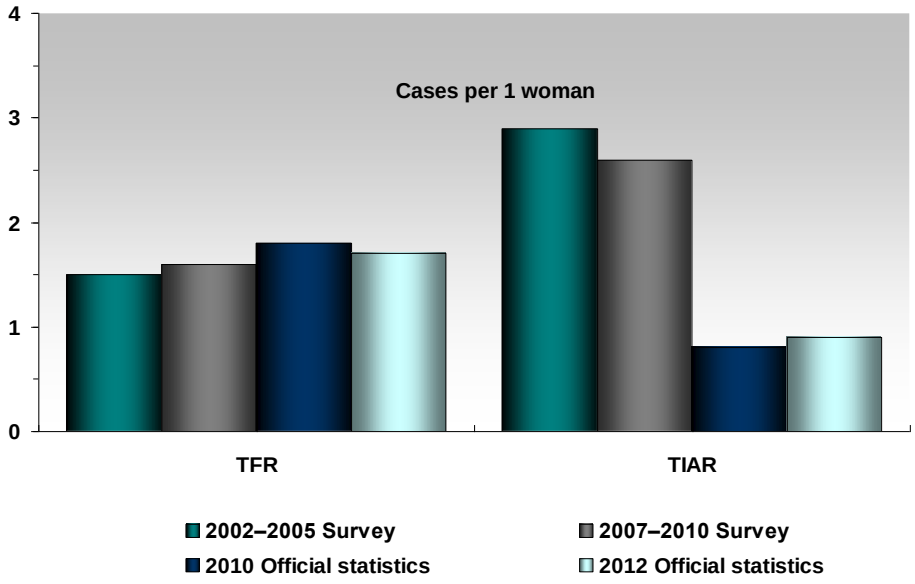
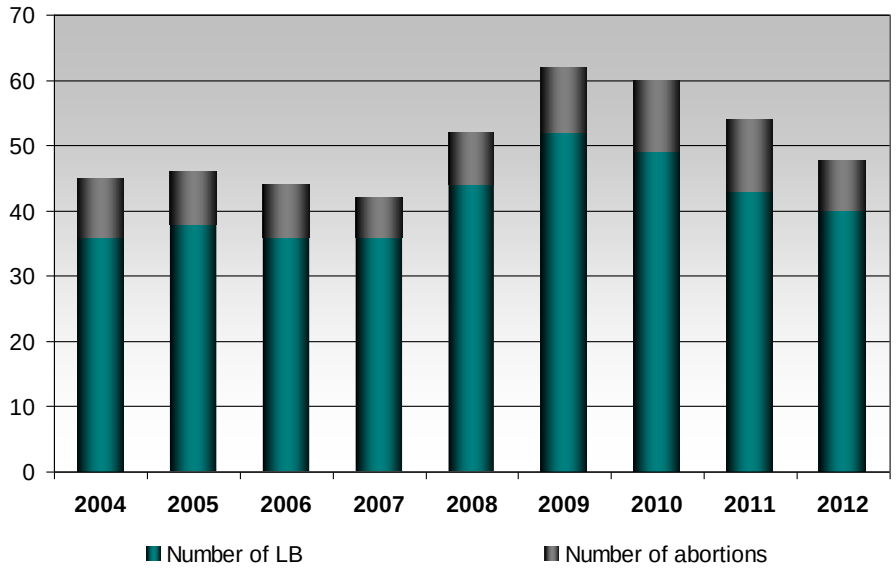


Figure 5.7 Total Fertility and Total Abortion Rates, Survey Estimates and Official Statistics, Georgia



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 – 2012



In 2012, 13 cases of maternal deaths were reported; ***maternal mortality rate**** - 22.8. During the reporting period one case of a late maternal death was registered.

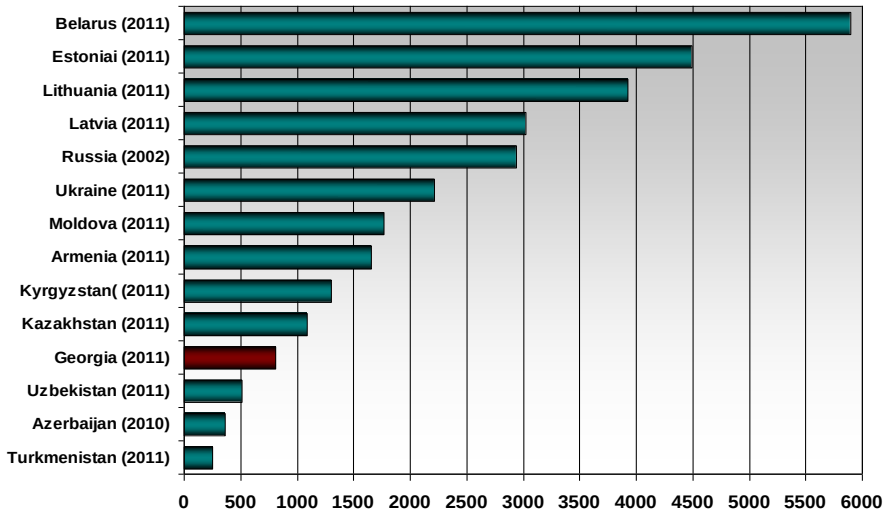
The State Services Development Agency and National Statistics Office of Georgia are involved in the birth registration in Georgia. According to their data, in 2012, there were 57,031 ***live births*** registered. Total fertility rate was 1.7.

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

National Centre 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 2012, there were 56,890 ***live births***, including 101 at home. 6.5% of infants born in inpatient facilities were underweight and 8.5% weighed more than 4,000gr.

According to the data from maternity clinics, 9.7% of infants were born sick or got sick after the birth. 89% of such cases were caused by certain conditions originating in the perinatal period and 9.3% of cases - by congenital abnormalities. Prevalence of congenital abnormalities in live-born babies 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).

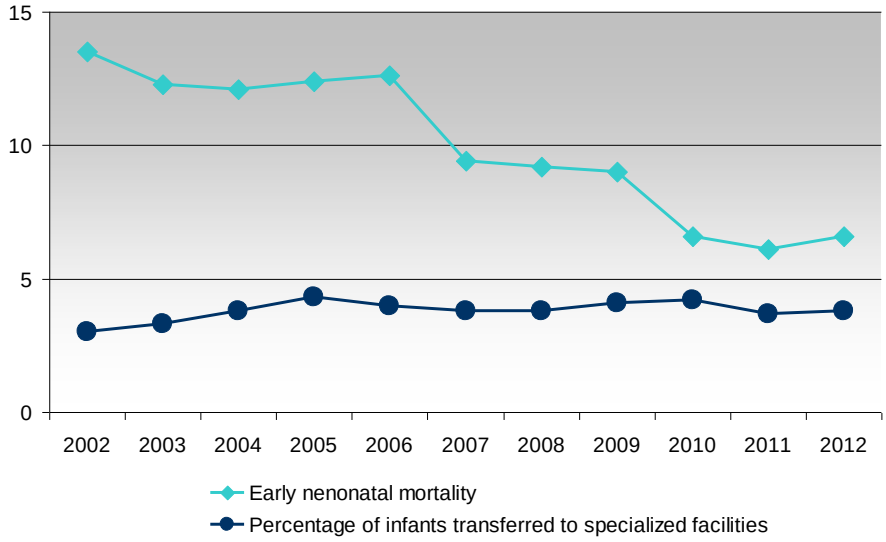
Figure 5.9 Congenital malformations, incidence rate per 100000 live births, former Soviet Union, last available year



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 2012, 3.8% 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



41,513 newborns were in ***skin to skin contact*** within the first hour after delivery.

According to the data of maternity homes, ***breastfeeding*** was initiated within the first hour of life for 70.7% of live-born babies; 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 the infant mortality.

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

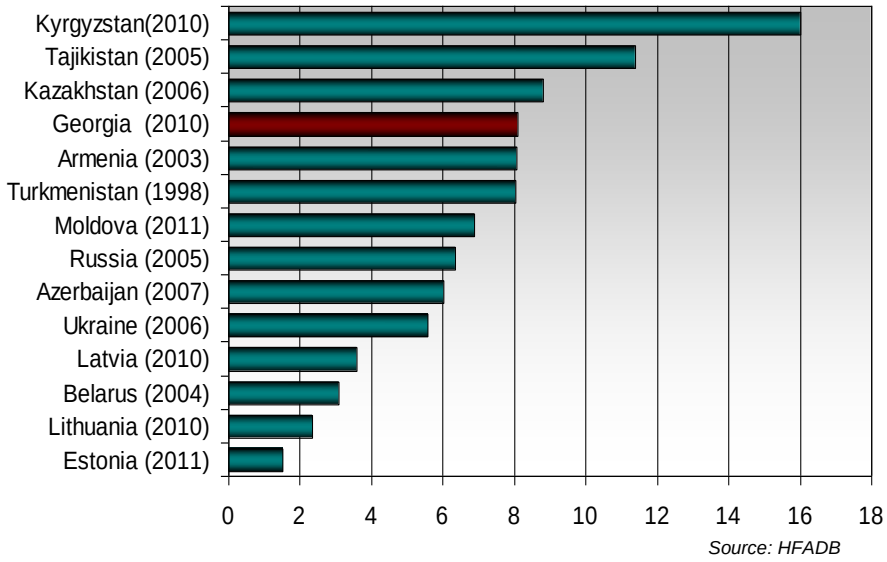
According to official statistics and survey data, there was a decline of the infant mortality rate. Since 2006 infant mortality rate dropped by 45.9%.

Neonatal mortality, Georgia

	Neonatal mortality rate per 1000 live births	Neonatal mortality share in under- 5 mortality, %	Neonatal mortality share in infant mortality, %	Early neonatal mortality share in neonatal mortality, %
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
2012	9.2	74	85	71

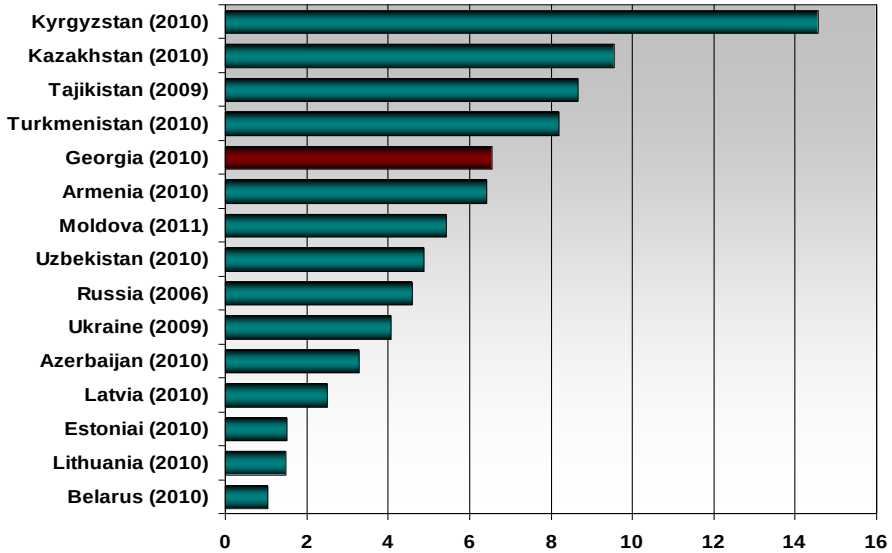
Despite of decline of the neonatal mortality rate, the rates of neonatal and early neonatal mortality in Georgia are high, compared to the European and the CIS countries (Figures 5.11, 5.12).

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



Source: HFADB

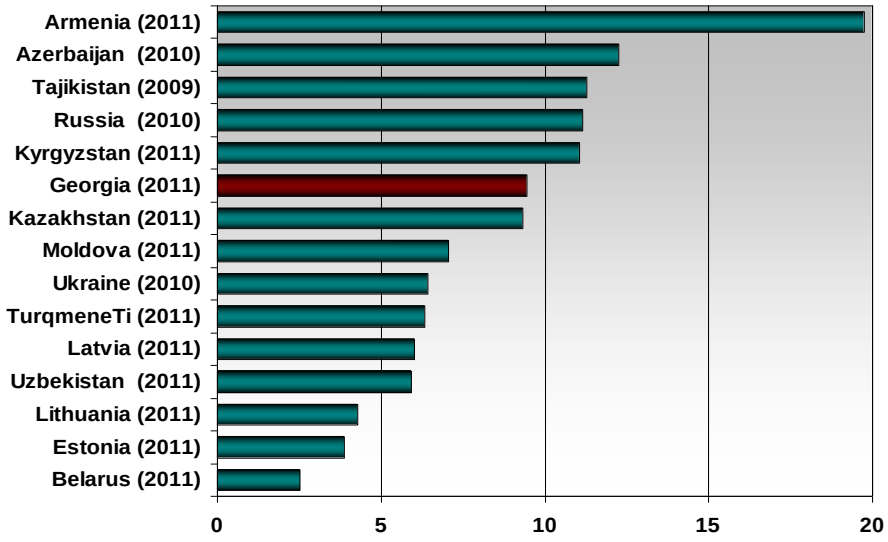
Figure 5.12 Early neonatal mortality rate, Former Soviet Union, last available year



Source: HFADB

During last years, there was noticed a ***stillbirth ratio*** reduction. Since 2006, the stillbirth rate decreased by 43.5%. In 2012, the stillbirth rate (11.2/1000) was 2-folds higher, compared to the European Union and CIS; among the post-Soviet countries Georgia occupies the sixth position according to this indicator (Figure 5.13).

Figure 5.13 Stillbirth ratio per 100000 births, former Soviet Union, last available year

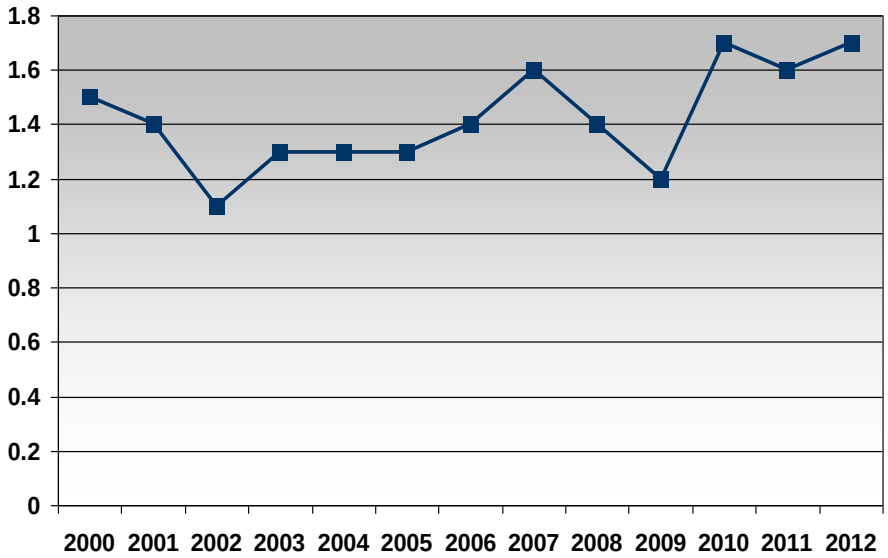


Source: HFADB

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; although, an adequate ratio of the components of the perinatal mortality is essential.

By the mentioned estimates the ratio of the stillbirths to early neonatal deaths for Georgia should not exceed 1.2, which was the case only in 2009 and 2012. In 2010-2011, the ratio of the stillbirths to early neonatal deaths significantly exceeded the recommended level (Figure 5.14).

Figure 5.14 Ratio of stillbirths to early neonatal deaths, Georgia, 2000–2012



Globally one third of foetal deaths happen intrapartum. According to the WHO estimates, this share in developed countries amounts to about 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 foetal mortality during delivery is 4.5%.

In 2012, in Georgia, according to the data, provided by medical institutions, 768 children ***died*** at the age under-15 years. The majority of the cases (92%) were registered at hospitals.

Infant deaths account to 80% of the total number of under-15 children deaths. ***Infant mortality*** rate was 10.8 per 1000 live births. Main causes of the infant mortality belong to the following classes:

- certain conditions originating in the perinatal period (76.8%);
- congenital malformations, deformations and chromosomal abnormalities (8.8%);
- certain infectious and parasitic diseases (4.7%);
- diseases of the respiratory system (4.2%).

In 2012, according to the data, collected from out-patient facilities, 449,203 ***new cases of diseases*** (incidence – 58,942.9) in children aged under-15 were registered. The highest incidence was registered in the class diseases of the respiratory system (35,900.5 per 100000).

During the reporting year, there were 80,621 cases of ***hospital discharges*** registered in children under-15. Hospitalization rate was 10,578.8 per 100000 children. Hospitalization rates were high in the following classes:

- respiratory system diseases – 5,277.3;
- certain infectious and parasitic diseases – 1,993.7;
- certain conditions originating in the perinatal period – 1,012.9.

The share of hospitalizations of infants in the total number of children hospitalizations was 30%; hospitalization rate in infants was 42,520.2 per 100000 infants. Infant hospitalization rates were high in the following classes of diseases:

- respiratory system diseases – 17,168.7;
- certain conditions originating in the perinatal period – 13,565.9;
- certain infectious and parasitic diseases – 7,049.2.

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 behavioural 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)

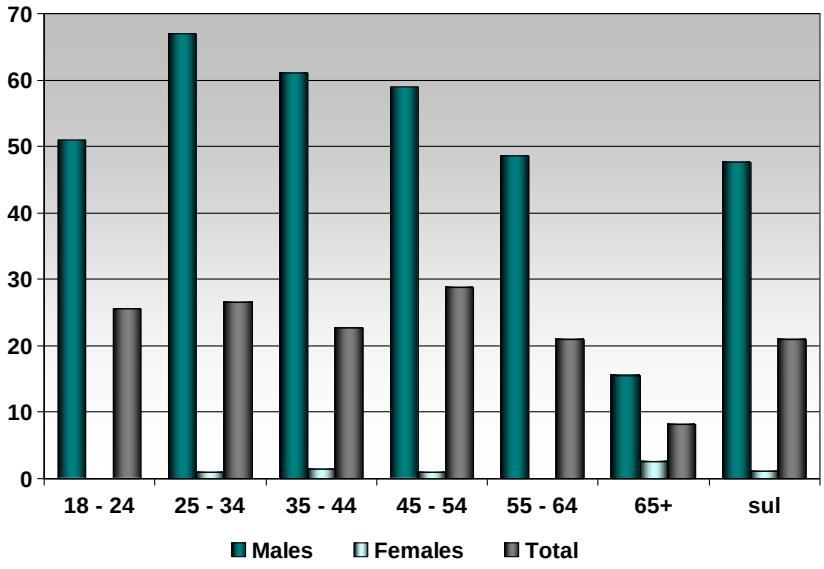
In 2011-2012, Migrant Health Survey was conducted in Georgia with involvement more than 1400 people over 18, including 1185 internally displaced persons, which were force to migrate by the August 2008 Georgia-Russia war. The survey identified the following:

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).

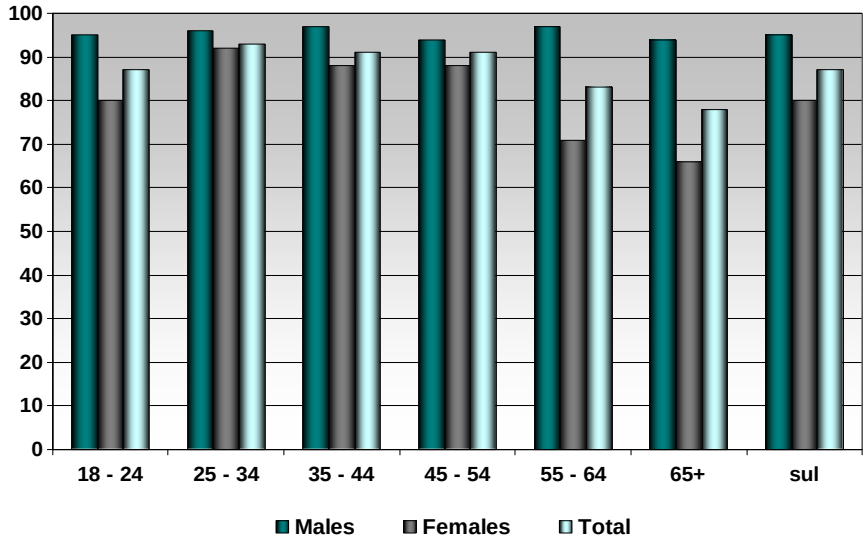
Figure 6.1 Current smokers (%) by sex and age groups, MHS



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).

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.

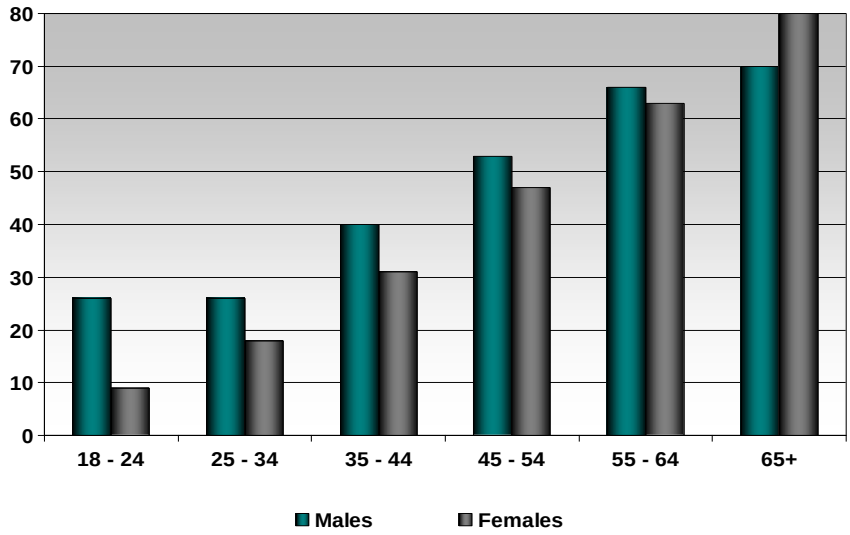
Consumption of bread and cereals occupied the first place in food types consumed among interviewed; 7 days a week and 5 servings a day. Level of intake of sweets and products containing sugar takes the second place and follows bread and cereal products consumption.

The results of the Survey showed that all respondents (100%) are under diet related risk.

History of raised blood pressure

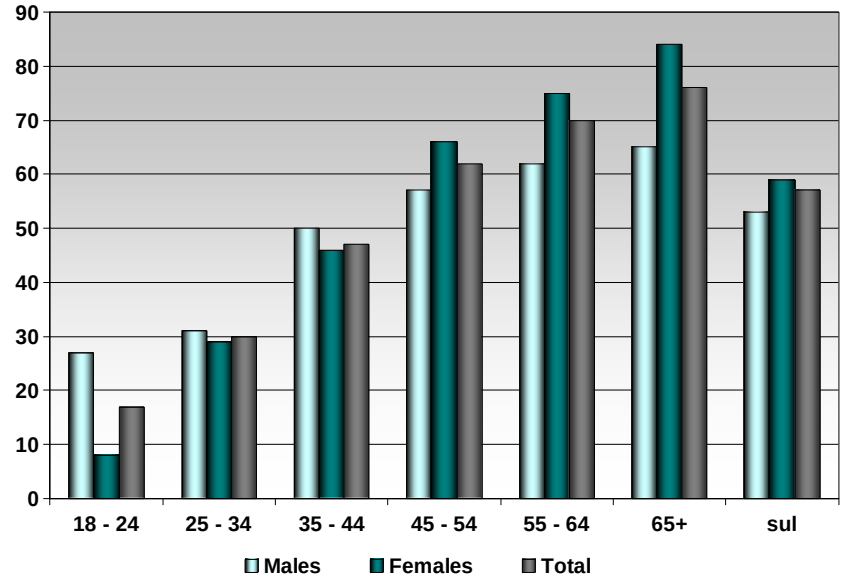
The majority of respondents (78.6%) reported as having ever measured the blood pressure by medical personnel. The most significant is the prevalence of not checking the blood pressure among men of 45-54 age group. While estimating the cardiovascular risks, the age of 45 years and higher among men was considered as one of the risk factors. Hypertension was reported by 56.6 % of respondents. Hypertension prevalence increases with the age (Figure 6.3).

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).

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 hyperglycaemia was reported.

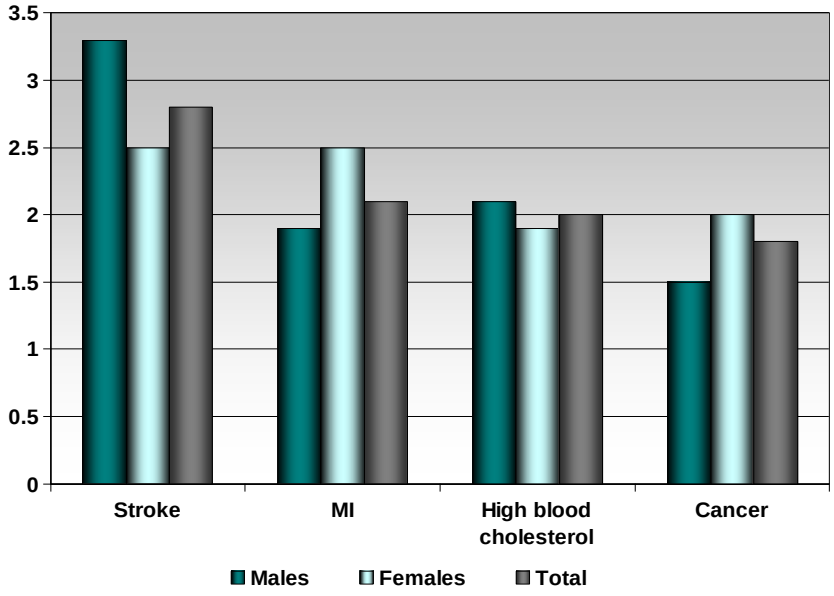
History of other diseases

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).

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 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.

CHAPTER 1.

Health-related Millennium Development Goals

Table 1.1 **Under-five mortality rate per 1000 live births, Georgia, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	22.9	21.0	21.9	25.1	21.1	20.9	15.5	12.8	10.2	11.9	10.0
Tbilisi	35.4	31.9	28	28.4	29.6	21.1	24.6	21.5	16.9	15.7	17.4
Kakheti	17.7	9.7	13.5	8.2	9.1	7.8	7.4	9.5	8.8	6.5	4.1
Imereti	17.8	17.2	21.6	20.0	19.9	19.4	17.0	19.1	19.6	17.1	18.6
Samegrelo	8.1	9.1	6.9	6.8	6.7	5.9	2.7	4.0	3.9	4.5	3.6
Shida Kartli	13.5	17.6	14.1	8.5	8.2	5.8	3.1	9.1	9.1	3.6	3.4
Kvemo Kartli	9.1	5.7	8.0	5.5	5.9	5.4	3.7	5.5	7.7	5.2	4.8
Guria	10.2	10.3	12.3	5.6	12.4	7.9	3.1	1.8	1.8	4.2	8.7
Samtskhe-Javakheti	7.2	8.5	9.0	7.5	7.2	3.9	5.9	7.8	8.2	3.1	2.1
Mtskheta-Mtianeti	10.8	6.6	11.7	7.1	9.1	6.6	6.3	5.7	2.3	0	0
Racha-Lechkhumi and Kvemo Svaneti	14.0	8.4	10.8	0	0	8.1	0	0	13.3	13.0	17.5
Georgia	**22.1**	**20.3**	**20.1**	**19.4**	**19.7**	**15.6**	**16.0**	**15.4**	**13.4**	**12.0**	**12.4**

Table 1.2 **Under-five mortality rate per 1000 live births, Georgia, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	29.5	30.1	27.3	20.8	16.9	15.2	19.0	18.0	14.3	15.8	16.3
Female	22.2	24.8	25.4	21.4	17.0	13.6	18.0	15.0	11.0	11.5	12.4
Both sexes	**26.0**	**27.6**	**26.4**	**21.1**	**16.9**	**14.4**	**18.0**	**16.0**	**13.0**	**13.8**	**14.4**

Source: National Statistics Office of Georgia

Table 1.3 **Infant mortality rate per 1000 live births, Georgia, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	20.4	18.0	21.4	23.0	20.7	19.1	15.0	12.0	9.0	10.6	8.4
Tbilisi	32.4	28.8	24.7	26.5	27.6	18.6	22.0	20.0	15.0	14.7	15.2
Kakheti	16.0	9.7	11.8	7.2	8.4	7.9	7.4	8.7	7.5	4.5	3.6
Imereti	16.4	17.2	19.7	19.7	18.8	18.8	15.0	19.0	19.0	16.4	17.4
Samegrelo	7.0	9.1	5.7	6.5	6.5	5.7	2.2	3.6	3.7	4.0	2.3
Shida Kartli	12.1	16.5	13.4	8.6	7.1	5.4	3.1	8.7	8.0	3.6	3.1
Kvemo Kartli	8.6	4.8	7.3	5.2	5.2	4.9	2.8	3.3	4.1	3.7	3.3
Guria	10.2	8.5	7.8	5.6	10.1	10.1	2.1	1.8	1.8	4.2	7.6
Samtskhe-Javakheti	6.3	6.6	8.6	6.6	6.3	2.9	5.9	7.3	6.4	2.6	1.6
Mtskheta-Mtianeti	10.8	6.6	10.0	7.1	9.1	2.2	6.3	5.7	2.3	0.0	0
Racha-Lechkhumi and Kvemo Svaneti	14.0	8.4	10.8	0.0	0.0	8.1	0.0	0.0	13.0	13.0	17.5
Georgia	**20.1**	**18.5**	**18.0**	**18.1**	**18.4**	**14.1**	**14.3**	**14.1**	**12.0**	**11.0**	**10.8**

Table 1.4 **Infant mortality rate per 1000 live births, Georgia, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	26.6	26.8	24.4	19.5	15.6	14.4	17.0	17.0	12.5	13.9	14.1
Female	20.3	22.4	23.0	19.8	15.9	12.1	17.0	13.0	9.8	10.2	10.9
Both sexes	**23.6**	**24.8**	**23.8**	**19 .7**	**15 .8**	**13 .3**	**17 .0**	**14.9**	**11 .2**	**12 .1**	**12.6**

Source: National Statistics Office of Georgia

Table 1.5 Measles immunization coverage in children ages 12-23 months (%), Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	93.5	91.4	93.5	94.0	92.2	93.8	86.7	68.9	98.5	98.1	90.8
Tbilisi	93.8	97.5	91.1	85.5	86.9	97.5	98.8	98.4	85.4	85.6	99.4
Kakheti	96.7	83.5	90.9	97.0	96.2	93.2	97.5	77.6	98.8	92.9	97.2
Imereti	100.0	89.5	86.0	96.2	96.9	97.8	98.9	89.5	93.4	89.5	86.9
Samegrelo	89.4	72.9	83.5	95.8	91.9	97.9	96.5	82.7	91.8	93.0	89.0
Shida Kartli	80.0	77.5	81.9	98.6	92.7	100.0	98.8	82.0	100.0	89.6	88.3
Kvemo Kartli	82.9	61.9	76.0	85.0	96.7	96.3	96.9	80.8	83.7	93.7	90.1
Guria	100.0	86.9	81.0	93.1	93.5	96.2	98.9	91.1	99.7	95.2	89.0
Samtskhe-Javakheti	94.2	84.0	100.0	95.1	98.0	90.6	92.5	81.8	95.3	98.3	95.2
Mtskheta-Mtianeti	83.7	73.9	93.4	92.9	94.4	94.5	94.2	93.3	95.8	93.4	90.1
Racha-Lechkhumi and Kvemo Svaneti	85.3	86.1	94.2	93.8	86.8	96.6	93.2	93.8	96.4	92.4	94.7
Georgia	**92.9**	**82.2**	**86.5**	**91.2**	**95.1**	**97.0**	**96.5**	**82.7**	**94.3**	**90.7**	**93.0**

Table 1.6 Maternal mortality ratio per 100000 live births, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009*	2010	2011	2012
Ratio per 100000 live births	42.2	49.9	43.13	23.4	23.0	20.2	14.3	52.1	19.4	27.6	22.9

Table 1.7 Proportion of births attended by skilled medical personnel (%), Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	94.5	93.8	95.8	97.4	97.8	98.6	98.7	99.3	99.3	99.3	99.6
Tbilisi	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kakheti	90.6	85.2	81.8	89.7	88.3	98.1	96.6	97.7	95.8	99.2	98.7
Imereti	98.8	99.4	99.5	100.0	99.9	100.0	100.0	100.0	99.9	100.0	100.0
Samegrelo	98.4	99.2	99.6	99.6	100	99.8	99.9	99.9	99.5	100.0	99.9
Shida Kartli	99.7	99.9	98.5	99.9	99.6	99.9	100.0	99.9	99.9	99.9	99.9
Kvemo Kartli	91.5	91.7	93.1	96.8	98.2	96.2	99.1	99.0	99.8	99.8	99.6
Guria	96.0	92.7	96.6	99.1	100.0	100.0	100.0	99.3	99.8	100.0	99.6
Samtskhe-Javakheti	94.9	99.8	99.7	96.8	98.8	99.2	99.6	99.1	98.8	99.5	99.8
Mtskheta-Mtianeti	98.6	89.7	98.5	93.7	99.5	100.0	100.0	100.0	100.0	99.7	100.0
Racha-Lechkhumi and Kvemo Svaneti	100.0	96.2	82.6	96.4	95.6	100.0	96.2	98.9	100.0	98.7	100.0
Georgia	**97.4**	**97.2**	**97.5**	**98.5**	**98.9**	**99.4**	**99.6**	**99.7**	**99.6**	**99.8**	**99.8**

Table 1.8 Adolescent fertility rate, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Per 1000 women aged under 20	32.8	33.2	35.1	38.5	36.7	36.3	42.4	52.0	48.5	42.8	39.9

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, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Abkhazia	NA	NA	12.5	NA	78.2	81.6	NA	NA	77.2	68.5	81,2
Ajara	81.0	73.1	77.2	80.8	82.8	86.2	85.2	86.4	88.9	91.3	92.4
Tbilisi	58.2	60.1	60.4	65.4	66.8	70.8	73.9	79.7	80.8	78.0	82.5
Kakheti	72.8	66.2	56.6	63.8	61.4	61.0	61.4	75.7	86.5	87.7	87.7
Imereti	57.2	53.7	54.8	62.5	69.2	69.9	70.3	80.5	86.0	84.8	88.1
Samegrelo	57.5	60.1	52.5	61.2	71.0	77.8	80.3	87.7	91.6	87.5	86.4
Shida Kartli	61.9	67.0	84.4	93.0	93.4	96.7	96.2	95.3	97.9	96.8	96.2
Kvemo Kartli	54.6	53.3	43.6	50.6	45.0	40.5	39.6	47.9	63.4	55.9	56.9
Guria	55.8	54.9	51.8	57.8	61.3	55.0	56.2	69.7	75.9	79.0	77.4
Samtskhe- Javakheti	52.7	61.6	59.9	67.2	64.9	75.6	79.4	83.7	85.8	90.2	93.7
Mtskheta-Mtianeti	52.9	59.6	43.9	54.5	45.2	51.3	65.4	79.3	71.5	86.2	92.9
Racha-Lechkhumi and Kvemo Svaneti	58.4	64.2	51.3	66.8	55.2	71.0	49.0	55.3	77.9	79.3	74.7
Georgia	**61.3**	**60.6**	**59.4**	**65.8**	**68.0**	**70.7**	**71.8**	**78.5**	**83.1**	**81.6**	**84.2**

Table 1.10 Incidence of HIV infection per 100000 populations, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	3.2	3.8	6.2	7.5	11.1	14.0	8.4	9.7	9.1	9.4	10.2
Tbilisi	4.7	3.6	6.7	7.9	7.9	9.5	11.8	11.7	14.1	12.7	13.5
Kakheti	0.3	0.7	0.8	2.5	4.2	3.5	2.7	6.0	5.2	3.9	6.4
Imereti	1.4	1.3	3.5	4.4	6.4	8.7	6.3	5.2	10.4	6.8	10.2
Samegrelo	2.8	5.0	4.6	11.5	8.3	12.6	12.0	9.8	13.5	12.3	16.5
Shida Kartli	1.0	0.3	0.7	1.6	2.6	3.5	3.8	3.8	5.2	4.1	6.4
Kvemo Kartli	0.4	0.6	0.2	1.6	3.6	3.3	2.8	2.5	4.0	6.7	7.0
Guria	2.8	0.7	1.4	7.9	7.2	4.3	2.9	4.3	7.9	5.0	8.6
Samtskhe- Javakheti	0.0	0.0	5.4	3.9	2.9	1.0	0.0	1.4	1.9	2.8	0.9
Mtskheta-Mtianeti	0.0	0.8	0.8	1.6	1.6	3.2	2.5	0.0	3.7	0.0	4.6
Racha-Lechkhumi and Kvemo Svaneti	0.0	0.0	4.1	4.1	2.0	0.0	0.0	0.0	2.1	2.1	6.4
Georgia	**2.2**	**2.3**	**3.9**	**5.7**	**6.3**	**7.9**	**7.7**	**7.6**	**9.9**	**9.5**	**11.7**

Table 1.11 Incidence of HIV infection per 100000 populations by age and sex, Georgia, 2006-2012

	2006	2007	2008	2009	2010	2011	2012
Males	9.7	11.8	11.4	11.2	14.8	14 .0	17.9
Females	3.6	4.8	4.9	4.9	6.0	5 .3	6.0

Table 1.12[*] Incidence of malaria per 100000 populations, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	0	0	0	0	0	0	0	0	0	0	0
Tbilisi	0.7	0.7	0.1	0.1	0.1	0	0	0	0	0	0
Kakheti	104.9	66.6	29.1	14.0	5.9	3.4	0.7	0.2	0	0	0
Imereti	0	0	0	0	0	0	0	0	0	0	0
Samegrelo	0	0	0	0	0	0	0	0	0	0	0
Shida Kartli	0	0	0	0	0	0	0.3	0	0	0	0
Kvemo Kartli	7.2	6.6	23.8	19.4	6.3	1.7	0.6	0	0	0.2	0.2
Guria	1.4	0	0	0.7	0.2	0.7	0	0	0	0	0
Samtskhe- Javakheti	0	0	0	0	0	0	0	0	0	0	0
Mtskheta-Mtianeti	0.8	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	0
Georgia	**10.9**	**7.2**	**5.4**	**3.6**	**1.3**	**0.5**	**0.1**	**0.02**	**0**	**0.02**	**0.02**

[*] *The table gives epidemiological surveillance data*

Table 1.13 Incidence of tuberculosis per 100000 populations, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	111.4	140.7	151.3	163.3	148.9	141.8	129.0	124.8	119.9	114.3	117.5
Tbilisi	123.2	114.8	110.3	101.7	106.5	106.6	124.0	111.6	100.4	104.7	94.6
Kakheti	80.6	73.4	70.7	68.0	56.2	67.8	54.8	59.5	58.5	56.1	61.3
Imereti	59.6	70.6	77.6	82.8	64.2	59.4	57.6	64.7	54.5	49.6	55.0
Samegrelo	108.6	96.5	105.8	111.4	101.4	95.4	89.3	101.9	86.8	80.9	77.2
Shida Kartli	83.8	83.9	84.1	68.1	87.0	68.7	62.0	70.6	66.4	65.6	65.9
Kvemo Kartli	75.4	58.5	62.5	74.4	57.5	68.6	69.3	80.3	68.0	67.3	58.1
Guria	136.8	97.8	97.7	110.9	97.1	76.3	82.9	78.2	80.7	58.4	61.5
Samtskhe- Javakheti	39.5	41.8	37.1	63.6	74.4	55.8	46.7	50.1	30.2	27.2	25.7
Mtskheta-Mtianeti	65.4	71.7	71.8	70.2	92.5	92.1	72.8	70.2	88.0	76.7	77.8
Racha-Lechkhumi and Kvemo Svaneti	47.1	69.2	78.5	45.1	30.7	18.6	29.2	46.1	27.4	44.5	27.8
Georgia	**96.5**	**92.8**	**94.8**	**98.1**	**96.9**	**95.0**	**94.7**	**101.4**	**98.6**	**94.2**	**84.1**

Table 1.14 Prevalence of tuberculosis per 100000 populations, Georgia, 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ajara	146.0	186.1	211.4	238.6	207.9	203.4	180.2	164.3	162.3	141.5	153.3
Tbilisi	174.6	171.8	173.0	160.8	145.7	152.3	164.5	138.9	123.3	126.8	118.6
Kakheti	137.8	109.2	104.4	103.9	85.1	97.3	70.0	77.4	71.1	71.1	74.6
Imereti	89.0	107.9	117.8	125.2	97.7	89.5	82.7	84.5	71.5	66.3	74.8
Samegrelo	170.1	150.0	170.8	185.6	163.5	176.6	129.7	141.8	116.9	110.6	106.4
Shida Kartli	115.3	125.8	125.5	103.2	127.2	109.8	90.4	96.1	89.2	83.8	82.8
Kvemo Kartli	113.8	100.1	119.0	123.6	100.6	114.5	102.6	106.9	88.3	86.1	72.8
Guria	171.7	122.4	129.0	153.5	130.1	109.4	102.3	105.5	99.9	72.7	77.3
Samtskhe- Javakheti	87.2	92.4	67.4	86.2	108.4	91.8	70.2	70.6	53.8	47.8	44.4
Mtskheta-Mtianeti	113.2	110.4	117.2	129.1	129.5	126.7	89.8	99.7	115.5	101.4	103.4
Racha-Lechkhumi and Kvemo Svaneti	64.7	100.8	115.8	76.5	51.2	39.3	41.8	54.5	37.9	63.6	36.4
Georgia	**145.2**	**143.4**	**149.7**	**153.2**	**143.1**	**147.0**	**133.0**	**135.9**	**130.4**	**123.5**	**110.7**

CHAPTER 2.

DEMOGRAPHY

Table 2.1 Mid-year population by regions (in thousand), Georgia, 2011 – 2012

	2011			2012		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	392.1	172.2	219.9	393.9	185.2	208.7
Tbilisi	1167.6	1137.1	30.5	1172.0	1141.4	30.6
Kakheti	406.6	83.8	322.8	406.1	83.8	322.3
Imereti	706.0	336.9	369.1	705.7	337.9	367.8
Samegrelo	478.3	192.8	285.5	478.2	192.8	285.4
Shida Kartli	313.8	121.3	192.5	314.0	121.4	192.6
Kvemo Kartli	508.5	198.1	310.4	511.2	199.4	311.8
Guria	140.3	37.0	103.3	139.8	37.0	102.8
Samtskhe-Javakheti	213.5	66.3	147.2	213.8	66.3	147.5
Mtskheta-Mtianeti	109.5	26.9	82.6	109.3	27.0	82.3
Racha-Lechkhumi and Kvemo Svaneti	47.2	9.1	38.1	46.7	9.1	37.6
Georgia	**4483.4**	**2381.5**	**2101.9**	**4490.7**	**2401.3**	**2089.4**

Table 2.2 Mid-year population by age and sex groups (in thousand), Georgia, 2011 – 2012

	2011			2012		
Age	Both sexes	Males	Females	Both sexes	Males	Females
-1	59.7	31.1	28.6	56.9	29.7	27.2
1-4	221.1	117.1	104.0	232.9	122.9	110.0
5-9	230.8	121.8	109.0	233.4	123.2	110.2
10-14	248.7	130.8	117.9	238.9	125.9	113.0
15-19	312.9	160.8	152.1	293.6	151.6	142.0
20-24	370.1	187.6	182.5	368.2	186.2	182.0
25-29	355.7	179.3	176.4	359.5	181.2	178.3
30-34	326.1	161.7	164.4	330.8	164.7	166.1
35-39	312.4	152.7	159.7	313.7	153.9	159.8
40-44	299.0	142.9	156.1	302.1	145.3	156.8
45-49	323.6	150.0	173.6	312.3	145.6	166.7
50-54	320.1	148.1	172.0	327.6	151.6	176.0
55-59	267.0	121.2	145.8	272.4	123.8	148.6
60-64	219.9	97.7	122.2	230.2	101.9	128.3
65-69	128.4	53.0	75.4	129.8	54.9	74.9
70-74	204.7	80.7	124.0	192.0	74.4	117.6
75-79	131.3	50.8	80.5	139.5	53.8	85.7
80-84	95.1	34.0	61.1	93.5	33.6	59.9
85+	56.8	14.3	42.5	63.4	17.1	46.3
Total	**4483.4**	**2135.6**	**2347.8**	**4490.7**	**2141.3**	**2349.4**
-15	760.3	400.8	359.5	762.1	401.7	360.4
15-64	3106.8	1502.0	1604.8	3110.4	1505.8	1604.6
65+	616.3	232.8	383.5	618.2	233.8	384.4

Table 2.3 Mid-year population by main age and sex groups (thousand), Georgia, 2008 – 2012

Age	Both sexes	Males	Females
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
2012			
Total	**4490.7**	**2141.3**	**2349.4**
-15	762.1	401.7	360.4
15-64	3110.4	1505.8	1604.6
65+	618.2	233.8	384.4

Table 2.4 Natural movement of the population, Georgia, 1995 – 2012

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
2012	**57031**	**12.7**	**49348**	**11.0**	**7683**	**1.7**	**30412**	**6.8**	**7136**	**1.6**

Table 2.5 Age-specific fertility and population reproduction rates, Georgia, 1995 – 2012

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	1.70	0.8	0.8
2012	**49.5**	**39.9**	**107.5**	**94.4**	**58.6**	**25.9**	**6.3**	**0.6**	**1.67**	**0.8**	**0.8**

Table 2.6 Number of live births by regions, Georgia, 2011– 2012

	2011			2012		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	5709	3143	2566	5733	3073	2660
Tbilisi	16715	16256	459	16573	16127	446
Kakheti	4678	1048	3630	4931	989	3942
Imereti	8835	4396	4439	8619	4488	4131
Samegrelo	5063	2127	2936	5048	2078	2970
Shida Kartli	4207	1685	2522	3929	1486	2443
Kvemo Kartli	6998	3014	3984	6628	2649	3979
Guria	1683	487	1196	1538	386	1152
Samtskhe-Javakheti	2329	778	1551	2413	790	1623
Mtskheta-Mtianeti	1364	432	932	1235	336	899
Racha-Lechkhumi and Kvemo Svaneti	433	86	347	384	79	305
Georgia	**58014**	**33452**	**24562**	**57031**	**32481**	**24550**

Table 2.7 Number of live births by the age of the mother, Georgia, 1995 – 2012

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	93	13
2012	**57031**	**5662**	**19571**	**16833**	**9734**	**4131**	**980**	**107**	**13**

Table 2.8 Number of live births by sex and secondary sex ratio, Georgia, 1995 – 2012

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
2012	**57031**	**29801**	**27230**	**109.4**

Table 2.9 Number of live births by birth order, Georgia, 1995 – 2012

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
2012	**26368**	**21740**	**6891**	**1445**	**587**	**57031**

Table 2.10 Number of deaths and mortality rates by age and sex groups, Georgia, 2012

	Number of deaths			Mortality rates (per 1000 people)		
Age	Both sexes	Males	Females	Both sexes	Males	Females
-1	715	419	296	12.6	14.1	10.9
1-4	109	68	41	0.5	0.6	0.4
5-9	46	28	18	0.2	0.2	0.2
10-14	68	46	22	0.3	0.4	0.2
15-19	122	90	32	0.4	0.6	0.2
20-24	273	218	55	0.7	1.2	0.3
25-29	337	269	68	0.9	1.5	0.4
30-34	412	325	87	1.2	2.0	0.5
35-39	598	464	134	1.9	3.0	0.8
40-44	814	614	200	2.7	4.2	1.3
45-49	1455	1094	361	4.7	7.5	2.2
50-54	2258	1609	649	6.9	10.6	3.7
55-59	2779	1964	815	10.2	15.9	5.5
60-64	3480	2302	1178	15.1	22.6	9.2
65-69	3007	1899	1108	23.2	34.6	14.8
70-74	7226	3933	3293	37.6	52.9	28.0
75-79	8343	4044	4299	59.8	75.2	50.2
80-84	9055	3676	5379	96.8	109.4	89.8
85+	8251	2391	5860	130.1	139.8	126.6
Total	**49348**	**25453**	**23895**	**11.0**	**11.9**	**10.2**

Table 2.11 Infant deaths by sex and age at death, Georgia, 2011 – 2012

	2011		2012	
	Male	Female	Male	Female
Total	**422**	**281**	**419**	**296**
0 day	62	54	72	58
1 day	39	33	50	22
2 days	33	24	37	17
3 days	26	12	15	16
4 days	17	11	14	13
5 days	17	16	22	14
6 days	11	11	17	10
7 - 27 days	85	48	94	64
28 days – 2 months	2	3	3	6
2 months	27	13	25	28
3 months	22	12	10	5
4 months	16	9	10	10
5 months	20	6	5	8
6 months	10	7	5	2
7 months	4	2	6	4
8 months	5	8	9	2
9 months	9	7	9	2
10 months	2	1	5	3
11 months	15	4	11	12

Table 2.12 Mortality by underlying causes of death (rate per 100000 people), Georgia, 2010 – 2012

	2010		2011		2012	
	Number	Rate	Number	Rate	Number	Rate
Total	**47864**	**1074.9**	**49818**	**1111.2**	**49348**	**1098.9**
Certain infectious and parasitic diseases	207	4.6	371	8.3	502	11.2
Neoplasms	2853	64.1	4773	106.5	5214	116.1
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	54	1.2	92	2.1	123	2.7
Endocrine, nutritional and metabolic diseases	475	10.7	1021	22.8	1231	27.4
Mental and behavioural disorders	29	0.7	67	1.5	74	1.6
Diseases of the nervous system	401	9.0	534	11.9	579	12.9
Diseases of the eye and adnexa	0	0.0	0	0.0	2	0.04
Diseases of the ear and mastoid process	0	0.0	0	0.0	2	0.04
Diseases of the circulatory system	14427	324.0	17884	398.9	20002	445.4
Diseases of the respiratory system	542	12.2	1149	25.6	1025	22.8
Diseases of the digestive system	776	17.4	1453	32.4	1189	26.5
Diseases of the skin and subcutaneous tissue	0	0.0	8	0.2	25	0.6
Diseases of the musculoskeletal system and connective tissue	12	0.3	34	0.8	62	1.4
Diseases of the genitourinary system	152	3.4	423	9.4	364	8.1
Pregnancy, childbirth and the puerperium	13	0.3	21	0.5	14	0.3
Certain conditions originating in the perinatal period	516	11.6	388	8.7	445	9.9
Congenital malformations, deformations and chromosomal abnormalities	37	0.8	57	1.3	105	2.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	26332	591.4	20 159	449.6	16675	371.3
Injury, poisoning and certain other consequences of external causes	1038	23.3	1 384	30.9	1715	38.2

Table 2.13 Under-15 mortality by underlying causes of death (rate per 100000 children of the corresponding age and sex groups), Georgia, 2012

	Total		Male		Female	
	Number	Rate	Number	Rate	Number	Rate
Total	**938**	**123.1**	**561**	**139.7**	**377**	**104.6**
Certain infectious and parasitic diseases	18	2.4	10	2.5	8	2.2
Neoplasms	26	3.4	13	3.2	13	3.6
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	8	1.0	7	1.7	1	0.3
Endocrine, nutritional and metabolic diseases	3	0.4	1	0.2	2	0.6
Mental and behavioural disorders	1	0.1	1	0.2	0	0.0
Diseases of the nervous system	64	8.4	48	11.9	16	4.4
Diseases of the circulatory system	35	4.6	20	5.0	15	4.2
Diseases of the respiratory system	39	5.1	19	4.7	20	5.5
Diseases of the digestive system	12	1.6	8	2.0	4	1.1
Diseases of the skin and subcutaneous tissue	1	0.1	0	0.0	1	0.3
Diseases of the genitourinary system	8	1.0	4	1.0	4	1.1
Certain conditions originating in the perinatal period	445	58.4	267	66.5	178	49.4
Congenital malformations, deformations and chromosomal abnormalities	94	12.3	52	12.9	42	11.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	113	14.8	65	16.2	48	13.3
Injury, poisoning and certain other consequences of external causes	71	9.3	46	11.5	25	6.9

Table 2.14 Infant mortality by underlying causes of death (rate per 100000 children of the corresponding age and sex groups), Georgia, 2012

	Total		Male		Female	
	Number	Rate	Number	Rate	Number	Rate
Total	**715**	**1256.6**	**419**	**1410.8**	**296**	**1088.2**
Certain infectious and parasitic diseases	11	19.3	5	16.8	6	22.1
Neoplasms	3	5.3	2	6.7	1	3.7
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	4	7.0	4	13.5	0	0.0
Diseases of the nervous system	34	59.8	23	77.4	11	40.4
Diseases of the circulatory system	25	43.9	13	43.8	12	44.1
Diseases of the respiratory system	14	24.6	7	23.6	7	25.7
Diseases of the digestive system	6	10.5	3	10.1	3	11.0
Diseases of the genitourinary system	5	8.8	2	6.7	3	11.0
Certain conditions originating in the perinatal period	443	778.6	265	892.3	178	654.4
Congenital malformations, deformations and chromosomal abnormalities	89	156.4	49	165.0	40	147.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	72	126.5	40	134.7	32	117.6
Injury, poisoning and certain other consequences of external causes	9	15.8	6	20.2	3	11.0

Table 2.15 Number of deaths by regions, Georgia, 2011 – 2012

	2011			2012		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	3280	1629	1651	3274	1642	1632
Tbilisi	12291	11920	371	12459	12140	319
Kakheti	5339	1193	4146	4969	1064	3905
Imereti	9015	3840	5175	8868	3822	5046
Samegrelo	5476	2418	3058	5412	2311	3101
Shida Kartli	3687	1370	2317	3436	1217	2219
Kvemo Kartli	4305	1785	2520	4438	1774	2664
Guria	1973	438	1535	1926	484	1442
Samtskhe-Javakheti	2167	749	1418	2162	780	1382
Mtskheta-Mtianeti	1437	316	1121	1513	428	1085
Racha-Lechkhumi and Kvemo Svaneti	848	113	735	891	128	763
Georgia	**49818**	**25771**	**24047**	**49348**	**25790**	**23558**

Table 2.16 Population natural growth by regions, Georgia, 2011 – 2012

	2011			2012		
	Total	Including		Total	Including	
		Urban	Rural		Urban	Rural
Ajara	2429	1514	915	2459	1431	1028
Tbilisi	4424	4336	88	**4114**	**3987**	**127**
Kakheti	-661	-145	-516	-38	-75	37
Imereti	-180	556	-736	-249	666	-915
Samegrelo	-413	-291	-122	-364	-233	-131
Shida Kartli	520	315	205	493	269	224
Kvemo Kartli	2693	1229	1464	2190	875	1315
Guria	-290	49	-339	-388	-98	-290
Samtskhe-Javakheti	162	29	133	251	10	241
Mtskheta-Mtianeti	-73	116	-189	-278	-92	-186
Racha-Lechkhumi and Kvemo Svaneti	-415	-27	-388	-507	-49	-458
Georgia	**8196**	**7681**	**515**	**7683**	**6691**	**992**

Table 2.17 Life expectancy at birth (in years), Georgia, 2002 – 2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	**71.5**	**72.1**	**71.6**	**74.0**	**74.3**	**75.1**	**74.2**	**73.6**	**74.4**	**74.5**	**74.7**
Male	68.0	68.7	67.9	70.0	69.8	70.5	69.3	69.2	70.0	70.2	70.2
Female	74.9	75.3	75.1	77.6	78.6	79.4	79.0	77.7	78.7	78.6	79.0

CHAPTER 3.
Health care

Table 3.1 Active health workforces, Georgia, 2000-2012

	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
2012	**21501**	**478.8**	**18235**	**406.1**	**3266**	**72.7**

Table 3.2 Active nurses and auxiliary medical personnel, Georgia, 2000-2012

	Nurses		Auxiliary medical personnel	
	Total	Number per 100000 population	Total	Number per 100000 population
2000	22 021	494.6	1859	42.1
2001	19 756	445.9	1543	35.2
2002	19 472	445.4	1455	33.4
2003	19 277	441.0	1380	31.9
2004	18 938	433.2	1370	31.7
2005	18 575	424.9	1308	30.0
2006	17 846	405.8	1181	26.9
2007	17 284	393.9	1165	26.5
2008	17 309	394.8	1061	24.2
2009	16 958	384.5	955	21.7
2010	17 211	386.5	913	20.4
2011	15 940	355.5	661	14.7
2012	**13 486**	**300.3**	**634**	**14.1**

Table 3.3 Physicians by specialization, Georgia, 2000–2012*

	General practitioners		Paediatricians		Obstetricians-Gynecologists		Psychiatrists		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
2000	2 201	49.4	2542	57.1	1574	35.4	364	8.2	1 481	33.3
2001	2 156	48.7	2385	53.8	1527	34.5	334	7.5	1 434	32.4
2002	2 200	50.3	2308	52.8	1505	34.4	356	8.1	1 440	32.9
2003	2 362	54.0	2247	51.4	1493	34.2	346	7.9	1 429	32.7
2004	2 439	55.8	2209	50.5	1458	33.4	337	7.7	1 376	31.5
2005	2 431	55.6	2107	48.2	1448	33.1	300	6.9	1 328	30.4
2006	2 198	50.0	2071	47.1	1429	32.5	307	7.0	1 336	30.4
2007	2 352	53.6	1945	44.3	1414	32.2	281	6.4	1 337	30.5
2008	2 408	54.9	1858	42.4	1462	33.4	278	6.3	1 382	31.5
2009	2 977	67.5	1579	35.8	1467	33.3	294	6.7	1 504	34.1
2010	3 146	70.7	1560	35.0	1499	33.7	291	6.5	1 559	35.0
2011	3 273	73.0	1473	32.9	1434	32.0	258	5.8	1 581	35.3
2012	**4 172**	**92.9**	**1428**	**31.8**	**1453**	**32.4**	**283**	**6.3**	**1 759**	**39.2**

Table 3.4 Health staff working in inpatient facilities, Georgia, 2000–2012

	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
2012	**24042**	**535.4**	**7951**	**33.1**	**8116**	**33.8**

* *Georgia participates in the collection of data on human and non-monetary resources in health. This data collection was initiated by OECD, Eurostat and WHO-Europe. Internationally accep Table definitions, standards and classifications, such as International Standard Classification of Occupations, ISCO-08, ILO (2009), are used for this data collection. The data in the given yearbook are revised to be compatible to the above mentioned standards and definitions and to give the opportunity for international and national comparisons. For example, therapists, family doctors and residents are included in the category of general practitioners.*

Table 3.5 Independent healthcare facilities network, Georgia, 2012

Type of facility	Total number
Outpatient facilities	214
Stomatological policlinics and cabinets	302
Dispensaries	36
Including those with beds	6
Women consultancy centers	22
Ambulance stations	40
Scientific research institutes	12
Including those with beds	11
Stations	46
Including ambulance	39
blood transfusion	7
Epidemiological centers	63
Rural physician-entrepreneur	1241
Hospitals and medical centers	221
Including specialized	90
Including maternity hospitals	33

Table 3.6 Number of encounters to outpatient health facilities per capita, Georgia, 2006–2012

	2006	2007	2008	2009	2010	2011	2012
All encounters	**2.3**	**2.0**	**2.1**	**2.0**	**2.1**	**2.1**	**2.3**
Including:							
Encounters to physicians	**1.9**	**1.7**	**1.8**	**1.9**	**1.8**	**1.8**	**2.1**
Encounters of children aged under-15	*3.3*	*3.0*	*2.8*	*2.9*	*2.5*	*2.4*	*2.6*
Ambulance calls	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
Ambulance calls to children aged under-15	*0.08*	*0.08*	*0.07*	*0.1*	*0.1*	*0.2*	*0.2*

Table 3.7 Number of encounters to health facilities per capita by the regions, Georgia, 2006–2012

	2006	2007	2008	2009	2010	2011	2012
Ajara	2.2	2.1	2.5	2.1	2.0	2.1	2.0
Tbilisi	2.8	2.4	2.9	2.8	3.2	3.4	4.1
Kakheti	2.1	1.7	1.7	1.8	1.6	1.3	1.4
Imereti	2.3	2.2	2.1	1.9	1.9	1.6	1.9
Samegrelo and Zemo SvaneTi	1.7	1.4	1.4	1.3	1.5	1.0	1.2
Shida Kartli	2.1	1.8	1.7	1.8	1.7	2.0	1.8
Kvemo Kartli	1.2	1.0	1.0	1.0	1.0	1.0	1.0
Guria	2.3	1.7	1.7	1.6	1.6	1.4	1.6
Samtskhe-Javakheti	2.0	1.9	1.9	1.4	2.3	1.3	0.8
Mtskheta-Mtianeti	1.6	1.5	1.2	1.5	1.5	1.4	1.6
Racha-Lechkhumi	1.5	1.2	1.3	1.3	1.3	1.0	1.2
Georgia	**2.3**	**2.0**	**2.1**	**2.0**	**2.1**	**2.1**	**2.3**

Table 3.8 Outpatient facilities performance, Georgia, 2006–2012

	2006	2007	2008	2009	2010	2011	2012
All encounters	**9256759**	**8016113**	**8519856**	**7889951**	**8412988**	**8638934**	**10529939**
Including:							
Encounters to physicians	8403132	7350753	7875066	7418789	7943256	8074182	8812847
Including to rural physicians	-	-	-	1635260	1579193	1508171	1430496
Home visits	681940	500610	470241	424169	384026	368248	272036
To emergency departments	-	-	-	23871	25707	85978	160184
Scheduled workload (potential number of patient visits per 1 shift per day)	87977	84819	87385	87405	87461	75764	66597
Actual number of visits per shift	35603	30789	32769	33738	30881	33227	40500
Occupancy rate of outpatient network (%)	40.5	36.3	37.5	38.6	35.3	43.8	60.8

Table 3.9 Data on vaccination and immunization, Georgia, 2012

Vaccine	age for vaccination according to the calendar	The number of vaccinated according to the calendar	Vaccination Coverage (%)
BCG-1	0 – 5 days	54729	95
Viral hepatitis B–0	0 – 12	53177	93
DPT + Hib+ Viral hepatitis B–1	from 2 months to 11 months 29 days	50100	88
DPT + Hib+ Viral hepatitis B-3	from 4 months to 11 months 29 days	49175	87
DPT-4	18 – 24 months	46162	85
Polio-1	from 2 months to 11 months 29 days	49637	88
Polio-3	from 4 months to 11 months 29 days	49555	87
Polio-4	18 – 24 months	44426	83.9
Polio-5	from 5 years to 5 years, 11 months 29 days	36863	75.2
MMR – 1	12 – 24 months	49773	88
MMR – 2	from 5 years to 5 years, 11 months 29 days	38447	82
DT	from 5 years to 5 years, 11 months 29 days	35606	73.2
TD	14 years	30156	62

Table 3.10 Immunization coverage (percent) by regions, Georgia, 2012

	BCG-1	Polio-3	DPT – Hib - Viral hepatitis B-3	MMR – 1	MMR – 2
Ajara	96.5	92.4	91.2	90.8	80.9
Tbilisi	97.4	98.8	99.0	99.4	74.4
Kakheti	91.2	93.6	93.2	97.2	92.9
Imereti	94.5	90.9	88.6	86.9	83.3
Samegrelo	96.0	91.6	93.2	89.0	82.3
Shida Kartli	94.4	93.7	87.1	88.3	66.7
Kvemo Kartli	88.5	81.2	82.6	90.1	78.2
Guria	83.8	87.6	84.9	89	77.5
Samtskhe-Javakheti	94.4	94.2	92.7	95.2	87.2
Mtskheta-Mtianeti	80.0	87.5	86.4	90.1	84.7
Racha-Lechkhumi and Kvemo Svaneti	81.8	92.1	94.6	94.7	91.6
Georgia	**95.0**	**88.0**	**87.0**	**88.0**	**82.0**

Table 3.11 Screening of children and adolescents-students, Georgia, 2012

	Total number of screened children	Revealed during screenings						
		Hearing impairment %	Visual impairment %	Overweight >90 percetile	Underweight <10 percetile	Speech defect %	Scoliosis %	Fault in posture %
All children aged under-15 and adolescents - students aged 15-18	**325821**	**0.15**	**0.82**	**0.41**	**0.23**	**0.11**	**0.67**	**0.10**
Children aged under-15	276696	0.14	0.79	0.43	0.18	0.10	0.63	0.10
0-1 years old	53823	0.02	0.14	0.04	0.08	0.12	0.27	0.03
1-5 years old	109447	0.12	0.47	0.52	0.14	0.10	0.30	0.09
5-6 years old	32333	0.27	1.93	0.97	0.35	0.15	2.29	0.25
15 years old	22065	0.21	1.18	0.41	0.71	0.17	1.33	0.08
16-18 years old	27060	0.15	0.76	0.16	0.44	0.13	0.50	0.07
Including males	9996	0.08	0.22	0.05	0.09	0.05	0.11	0.01

Table 3.12 Screening of recruits, Georgia, 2008–2012

	2008	2009	2010	2011	2012
Number of recruits screened during the reporting year	29040	23731	21836	27805	32105
Are under the follow-up by the end of the reporting year	4020	3673	4111	9641	18315

Table 3.13 Number of outpatient surgeries, Georgia, 2007–2012

	2007	2008	2009	2010	2011	2012
Total number of surgical operations	**37456**	**27426**	**34398**	**37734**	**47645**	**68570**
Including:						
On eye	3949	5214	6751	7365	6961	6471
Among them microsurgery	*2431*	*2212*	*3162*	*5123*	*1459*	*1655*
Due to: glaucoma	*415*	*450*	*730*	*318*	*748*	*770*
cataract	*2624*	*3297*	*4123*	*4370*	*4351*	*3826*
On throat-ear-nose	576	973	1240	1684	2629	9595*
On blood vessels	9	79	46	121	59	219
On organs of abdominal cavity	38	317	431	415	1426	1343
Among them dissection of non strangulated hernia	*20*	*139*	*120*	*130*	*133*	*175*
Obstetrical & gynecological	7439	7219	9098	10580	14941	20394
On breast (mammary glands)	296	317	1058	214	137	236
On skin and subcutaneous tissues	6250	8960	9070	11979	11724	20653

Table 3.14 Ambulance stations, Georgia, 2006–2012

	2006	2007	2008	2009	2010	2011	2012
Total number of ambulance stations	**90**	**78**	**77**	**81**	**78**	**75**	78
Independent	72	75	73	77	75	72	39
Aligned	18	3	4	4	3	3	39
Total number of visits	**683003**	**750156**	**774192**	**907343**	**956550**	**966493**	**1061690**
Number of persons who received assistance according to the State Programs	669764	713373	754818	864502	933741	908000	993089

* *In 2012,the increase is due to the number of surgeries conducted in Japaridze – Kevanishvili otolaryngologist clinics (in 2011 – 1310; in 2012 -6310)*

Table 3.15 Number of physical persons, who received ambulance assistance, Georgia, 2000–2012

	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
2012	**1035270**	**29242**	**2.8**	**1001494**	**96.7**	**4534**	**0.4**

Table 3.16 Number of physical persons, who received ambulance assistance by regions, Georgia, 2008-2012

	2008	2009	2010	2011	2012
Ajara	67924	80974	80762	75660	77756
Tbilisi	320354	351836	377066	442363	505492
Kakheti	59469	65206	70184	56317	64832
Imereti	94154	108081	111606	101023	108989
Samegrelo and Zemo SvaneTi	49342	76625	82059	60625	80447
Shida Kartli	40851	45177	47313	43370	48993
Kvemo Kartli	59314	65481	66413	69968	67959
Guria	24182	27515	26869	23924	21926
Samtskhe-Javakheti	25657	28717	29992	30887	23177
Mtskheta-Mtianeti	17282	21735	25982	19565	22677
Racha-Lechkhumi and Kvemo Svaneti	9638	11782	15631	12922	13022
Georgia	**768167**	**883129**	**933877**	**936614**	**1035270**

Table 3.17 Number of disabled and impaired persons registered in the network of outpatient facilities, Georgia, 2010-2012

	2010	2011	2012
Number of all registered persons at the beginning of the reporting year	**74145**	**59589**	**56625**
Including: children aged 0-15 years	5582	4117	3214
Disabled war veterans	2680	1947	1111
Number of new cases	8346	6331	6632
Number of persons taken from the register during the reporting year	7311	4256	4601
Including due to death	2015	1453	1054
Number of persons registered by the end of the reporting year	**75180**	**61664**	**58656**
According to groups of disability:			
I - severe	8229	7074	5479
II - significant	35185	28911	26107
III - moderate	7066	6252	4771

Table 3.18 Day care departments, Georgia, 2011–2012

	2011		2012	
	In inpatient facilities	In outpatient facilities	In inpatient facilities	In outpatient facilities
Day care hospital departments	14	5	24	11
Number of beds	119	84	335	109
Number of patients treated in day care hospitals	8716	1732	25516	4506

Table 3.19 Inpatient health network, Georgia, 2000–2012

	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
2012	**221***	**4.9**	**131**	**59.3**

Table 3.20 Hospital beds utilization, Georgia, 2000–2012

	Hospital beds				
	Number	Number of beds per 100000 populations	Bed occupancy rate	Average length of stay	Bed turnover
2002	18290	419.8	112.2	9.7	11.6
2003	18151	419.3	110.0	9.3	11.8
2004	17806	412.3	118.7	8.6	13.7
2005	17095	392.0	118.0	7.7	15.2
2006	16455	374.1	127.8	7.4	17.1
2007	14565	331.9	146.3	7.3	20.1
2008	14069	320.9	79.2	3.0	26.2
2009	13633	309.1	148.2	6.3	23.4
2010	13378	299.3	160.0	6.4	25.2
2011	12599	281.0	173.6	7.0	24.8
2012	**11348**	**252.7**	**228.9**	**7.0**	**32.7**

* *From 2011 information of the Ministry of Corrections and Legal Assistance was added to the database*

Table 3.21 Hospital beds utilization by regions, Georgia, 2012

	Number of beds	Number of bed per 100000 populations	Bed occupancy rate	Average length of stay	Bed turnover
Ajara	929	235.8	239.1	6.1	39.0
Tbilisi	5109	435.9	263.3	7.1	36.8
Tbilisi	406	100.0	147.1	3.6	40.6
Kakheti	1752	248.3	219.3	7.3	29.9
Samegrelo and Zemo SvaneTi	617	129.0	187.2	6.2	30.4
Shida Kartli	380	121.0	203.5	5.8	35.1
Kvemo Kartli	573	112.1	146.6	3.8	38.4
Guria	131	93.7	105.3	3.2	32.4
Samtskhe-Javakheti	330	154.3	186.3	6.6	28.0
Mtskheta-Mtianeti	95	86.9	67.3	2.4	27.9
Racha-Lechkhumi	110	235.5	57.6	4.4	13.2
Other Facilities	916	-	251.8	32.0	7.9
Georgia	**11348**	**252.7**	**228.9**	**7.0**	**32.7**

Table 3.22 Hospitalization by regions, Georgia, 2011–2012

	2011		2012	
	Number of hospital admitions	Hospitalization rates per 100000 populations	Number of hospital admitions	Hospitalization rates per 100000 populations
Ajara	32514	8292.3	36503	9267.1
Tbilisi	154855	13262.7	176063	15022.4
Tbilisi	14168	3484.5	16265	4005.2
Kakheti	51832	7341.6	52557	7447.5
Samegrelo and Zemo SvaneTi	21388	4471.7	18747	3920.3
Shida Kartli	15068	4801.8	12990	4136.9
Kvemo Kartli	18611	3660.0	21753	4255.3
Guria	4991	3557.4	3618	2588.0
Samtskhe-Javakheti	9735	4559.7	8032	3756.8
Mtskheta-Mtianeti	1284	1172.6	2665	2438.2
Racha-Lechkhumi	1444	3059.3	1426	3053.5
Other Facilities	4635	-	7209	--
Georgia	**333934**	**7448.2**	**357828**	**7968.2**

Table 3.23 Hospitalization according to the ICD10 chapters, Georgia, 2012

	Number of hospital discharges	Including hospital deaths	Case Fatality %
Total	**355506**	**7266**	**2.0**
Certain infectious and parasitic diseases	24698	262	1.1
Neoplasms	17661	492	2.8
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	1139	19	1.7
Endocrine, nutritional and metabolic diseases	3586	77	2.1
Mental and behavioural disorders	6573	47	0.7
Diseases of the nervous system	10097	380	3.8
Diseases of the eye and adnexa	5326	0	0.0
Diseases of the ear and mastoid process	969	0	0.0
Diseases of the circulatory system	50128	2899	5.8
Diseases of the respiratory system	65177	926	1.4
Diseases of the digestive system	35685	625	1.8
Diseases of the skin and subcutaneous tissue	3309	0	0.0
Diseases of the musculoskeletal system and connective tissue	6211	6	0.1
Diseases of the genitourinary system	15964	138	0.9
Pregnancy, childbirth and the puerperium	73483	10	0.0
Certain conditions originating in the perinatal period	7719	472	6.1
Congenital malformations, deformations and chromosomal abnormalities	2195	53	2.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5700	448	7.9
Injury, poisoning and certain other consequences of external causes	19886	412	2.1

Table 3.24 Hospitalization of children under-15 according to the ICD10 chapters, Georgia, 2012

	Number of hospital Discharges	Including hospital deaths	Case Fatality %
Total	**80621**	**707**	**0.9**
Certain infectious and parasitic diseases	15194	29	0.2
Neoplasms	817	15	1.8
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	296	1	0.3
Endocrine, nutritional and metabolic diseases	196	0	0.0
Mental and behavioural disorders	105	0	0.0
Diseases of the nervous system	1235	14	1.1
Diseases of the eye and adnexa	283	0	0.0
Diseases of the ear and mastoid process	126	0	0.0
Diseases of the circulatory system	137	10	7.3
Diseases of the respiratory system	40218	60	0.1
Diseases of the digestive system	3484	8	0.2
Diseases of the skin and subcutaneous tissue	730	0	0.0
Diseases of the musculoskeletal system and connective tissue	324	0	0.0
Diseases of the genitourinary system	1246	4	0.3
Pregnancy, childbirth and the puerperium	28	0	0.0
Certain conditions originating in the perinatal period	7719	472	6.1
Congenital malformations, deformations and chromosomal abnormalities	1627	48	3.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3112	33	1.1
Injury, poisoning and certain other consequences of external causes	3744	13	0.3

Table 3.25 Hospitalization of infants according to the ICD10 chapters, Georgia, 2012

	Number of hospital Discharges	Including hospital deaths	Case Fatality %
Total	**24194**	**592**	**2.4**
Certain infectious and parasitic diseases	4011	24	0.6
Neoplasms	252	1	0.4
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	49	0	0.0
Endocrine, nutritional and metabolic diseases	2	0	0.0
Mental and behavioural disorders	0	0	0.0
Diseases of the nervous system	276	2	0.7
Diseases of the eye and adnexa	23	0	0.0
Diseases of the ear and mastoid process	1	0	0.0
Diseases of the circulatory system	24	5	20.8
Diseases of the respiratory system	9769	23	0.2
Diseases of the digestive system	312	3	1.0
Diseases of the skin and subcutaneous tissue	112	0	0.0
Diseases of the musculoskeletal system and connective tissue	15	0	0.0
Diseases of the genitourinary system	166	0	0.0
Certain conditions originating in the perinatal period	7719	472	6.1
Congenital malformations, deformations and chromosomal abnormalities	714	45	6.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	502	16	3.2
Injury, poisoning and certain other consequences of external causes	250	1	0.4

Table 3.26 Autopsies, Georgia, 2011–2012

	2011		2012	
	Number of autopsies performed	% from the number of hospital deaths	Number of autopsies performed	% from the number of hospital deaths
Total	**65**	**1.0**	**230**	**3.2**
		Including:		
Children under-15	37	5.3	97	13.7
Newborns aged 0-6 days	11	3.2	11	2.9
Stillborns	217	39.2	289	44.7

Table 3.27 Surgical operations, Georgia, 2001 – 2012

	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
2012	**165679**	**36.9**	**0.4**	**19679**	**25.8**	**0.4**

Table 3.28 Surgical operations performed under general anesthesia and mortality rate, Georgia, 2001–2012

	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
2012	**81608**	**49.2**	**0.01**

Table 3.29 Surgical operations, inpatients network, Georgia, 2011–2012

	2011		2012	
	Number of inpatient operations	Case fatality rate (%)	Number of inpatient operations	Case fatality rate (%)
All operations	**143262**	**0.4**	**165679**	**0.4**
Operations on organs of the nervous system	3609	1.5	4062	2.6
Operations on organs of the endocrine system	1388	0.0	1307	0.0
Operations on the eye	6017	0.0	6643	0.01
Operations on the ear and nose	6913	0.0	7687	0.0
Operations on the oral cavity	7974	0.0	11002	0.01
Operations on heart	2352	1.4	8249	1.0
Operations on blood vessels	5040	0.7	3803	0.5
Operations on the respiratory organs	989	1.0	1249	2.3
Operations on organs of the digestive tract and abdominal cavity	28356	1.2	31292	1.1
Operations on genitourinary system	60820	0.04	68401	0.05
Operations on the musculoskeletal system	11653	0.4	11800	0.2
Operations on mammary glands (breast)	2140	0.0	2028	0.0
Operations on the skin and subcutaneous tissue	5187	1.2	4566	0.3
Operations on organs of the immune system	25	0.0	49	0.0

Table 3.30 Surgical operations, inpatients network, Georgia, 2012

	All ages	Including in children	Number of post operation deaths	Case fatality rate %
All operations	**165679**	**19679**	**687**	**0.4**
Operations on organs of nervous system	**4062**	**316**	**106**	**2.6**
Including on: brain	1439	128	94	6.5
spinal cord	206	34	1	0.5
brain tunics	91	62	11	12.1
peripherous nervous system	96	3	0	0.0
intervertebral discs	1920	3	0	0.0
Operations on organs of endocrine system	**1307**	**1**	**0**	**0.0**
Including on: hypophysis	23	0	0	0.0
thyroid gland	927	1	0	0.0
parathyroidectomia	7	0	0	0.0
adrenalectomia	12	0	0	0.0
Operations on eye	**6643**	**378**	**1**	**0.01**
Including: due to glaucoma	821	13	0	0.0
enucleation	198	16	0	0.0
due to cataract	4162	58	0	0.0
Operations on ear, nose	**7687**	**4610**	**0**	**0.0**
Including: on ear	476	20	0	0.0
adenoidectomia	4869	3874	0	0.0
Operations on the oral cavity	**11002**	**7889**	**1**	**0.001**
Including on: tongue	175	76	0	0.0
tonsils	10320	7455	1	0.001
Operations on respiratory organs	**1249**	**189**	**29**	**2.3**
Including: pulmonectomia	54	0	1	1.8
pulmonary lobe resection	153	9	3	2.0
segmental resection of lung	100	13	0	0.0
on larynx	238	22	14	5.9
resection of trachea	63	0	0	0.0
bronchial resection	1	1	0	0.0
pleural resection	17	5	0	0.0
Heart operations	**8249**	**539**	**82**	**1.0**
Including: open heart	981	12	2	0.2
due to congenital heart defects	327	293	26	7.9
endovascular balloon dilatation	601	224	0	0.0
cardiostimulator implantation	307	0	1	0.3
pericardectomia	3	0	0	0.0
Operations on blood vessels	**3803**	**10**	**18**	**0.5**
Operations on organs of the digestive tract and abdominal cavity	**31292**	**3304**	**351**	**1.1**
Operations on genitourinary system	**68401**	**933**	**33**	**0.05**
Including: on kidneys and ureters	3451	46	13	0.4
kidney transplantation	12	0	0	0.0
on the prostate gland	1533	10	7	0.4
on female pelvic organs	11933	67	3	0.02
obstetrical and gynecological operations	45705	159	1	0.002
including due to ectopic pregnancy	807	0	0	0.0
Operations on the musculoskeletal system	**11800**	**580**	**27**	**0.2**
Including: bone transplantation	69	0	0	0.0
replacement of hip joint	2110	20	0	0.0
replacement of knee joint	420	0	0	0.0
amputation of extremity or its part	1118	19	21	1.9
including amputation of extremity or its part due to diabetes	566	0	6	1.1
Operations on skin and subcutaneous tissue	**2028**	**1**	**0**	**0.0**
Operations on skin and subcutaneous tissue	**4566**	**467**	**13**	**0.3**
Operations on organs of the immune system	**49**	**0**	**0**	**0.0**
Plastic surgery	**1409**	**1**	**0**	**0.0**

Table 3.31 Surgical operations in children, Georgia, 2012

	Number of inpatient operations	Number of post operation deaths	Case fatality rate %
All operations	**19679**	**86**	**0.4**
	Including:		
Operations on organs of the nervous system	316	21	6.6
Operations on respiratory organs	189	10	5.3
Operations on heart	539	26	4.8
Operations on organs of the digestive tract and abdominal cavity	3304	28	0.8
Operations on the musculoskeletal system	586	0	0.0

Table 3.32 Surgical operations and post operation case fatality rate by regions, Georgia, 2011–2012

	2011		2012	
	Number of operations	Case fatality rate %	Number of operations	Case fatality rate %
Ajara	15429	0.4	17037	0.2
Tbilisi	71049	0.5	81401	0.5
Kakheti	5102	0.3	8263	0.2
Imereti	21314	0.4	22753	0.6
Samegrelo	6495	0.4	6684	0.6
Shida Kartli	7428	0.1	9191	0.1
Kvemo Kartli	7271	0.2	11464	0.1
Guria	2500	0.4	1681	0.3
Samtskhe-Javakheti	3022	0.1	2700	0.0
Mtskheta-Mtianeti	799	0.0	1615	0.2
Racha-Lechkhumi	125	0.8	238	2.5
Other facilities	2728	0.2	2652	0.1
Georgia	**143262**	**0.4**	**165679**	**0.4**

Table 3.33 Urgent surgical operations, Georgia, 2001–2012

	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
2012	**21773**	**13.1**	**1.3**

Table 3.34 Urgent surgical operations, Georgia, 2012

	Total number of deaths	Number of post operation deaths	Case fatality rate, %
Urgent surgical aid	**21773**	**284**	**1.3**
Including:			
Due to acute ileus	1376	89	6.5
Due to acute appendicitis	7168	5	0.1
Due to gastric and duodenal perforation	632	29	4.6
Due to bleeding in the digestive tract	254	23	9.0
Due to strangulated hernia	4256	16	0.4
Due to acute cholecystitis	2513	11	0.4
Due to acute pancreatitis	190	7	3.7
Due to ectopic pregnancy	807	0	0.0
Splenectomia	186	9	4.8
Other operations on abdominal cavity organs	2339	79	3.4
Lung resection	106	2	1.9
Nephrectomia	131	2	1.5
Orchiectomy	145	0	0.0
Ovaryectomy	292	0	0.0
Other operations on the genitourinary system	825	2	0.2
Amputation of extremity or its part	553	10	1.8

Table 3.35 Structure of urgent surgical operations, Georgia, 2011–2012

	2011		2012	
	Total	%	Total	%
Urgent surgical aid	**19384**	**100**	**21773**	**100**
Including:				
Due to acute appendicitis	7085	36.6	7168	32.9
Due to gastric and duodenal perforation	563	2.9	632	2.9
Due to acute cholecystitis	1981	10.2	2513	11.5
Due to acute ileus	1386	7.2	1376	6.3
Due to bleeding in the digestive tract	286	1.5	254	1.2
Due to strangulated hernia	3568	18.4	4256	19.5
Due to acute pancreatitis	150	0.8	190	0.9
Due to ectopic pregnancy	815	4.2	807	3.7
Splenectomia	103	0.5	186	0.8
Other operations on organs of abdominal cavity	1519	7.8	2339	10.7
Lung resection	10	0.1	106	0.5
Nephrectomia	72	0.4	131	0.6
Orchiectomy	140	0.7	145	0.7
Ovaryectomy	260	1.3	292	1.3
Other operations on the genitourinary system	618	3.2	825	3.8
Amputation of extremity or its part	828	4.3	553	2.5

Table 3.36 Number of urgent surgical operations and interval between the symptom onset and hospital admission, Georgia, 2012

	Hospital admissions			Including			
	Total number	Including delays (more than 24 hours)		Without operation	Case fatality rate (%)	Operated	Case fatality rate (%)
		Number	Number				
Acute ileus	1629	279	17.2	253	0.0	1376	6.5
Acute appendicitis	7263	1094	15.1	95	0.0	7168	0.1
Gastric and duodenal ulcer perforation	646	53	8.2	14	0.0	632	4.6
Bleeding in the digestive tract	1476	199	13.5	1222	2.8	254	9.0
Strangulated hernia	4352	278	6.4	96	0.0	4256	0.4
Acute cholecystitis	2676	382	14.3	163	0.0	2513	0.4
Acute pancreatitis	494	104	21.0	304	0.3	190	3.7
Ectopic pregnancy	807	19	2.3	0	0.0	807	0.0
Splenectomia	186	9	4.8	0	0.0	186	4.8
Other operations on organs of abdominal cavity	2785	347	12.4	446	2.2	2339	3.4
Lung resection	106	0	0.0	0	0.0	106	1.9
Nephrectomia	131	9	6.9	0	0.0	131	1.5
Orchiectomy	145	8	5.5	0	0.0	145	0.0
Ovaryectomy	292	5	1.7	0	0.0	292	0.0
Other operations on genitourinary system	841	178	21.2	16	0.0	825	0.2
Amputation of extremity or its part	554	108	19.5	1	0.0	553	1.8

Table 3.37 Operations on organs of the digestive tract and abdominal cavity, Georgia, 1998–2012

	Total number	Case fatality rate, %	Including			
			Urgent operations		Other operations	
			Number	Case fatality rate, %	Number	Case fatality rate, %
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
2012	**31292**	**1.1**	**18914**	**1.4**	**12378**	**0.7**

Table 3.38 Performance of blood transfusion facilities, Georgia, 2007 – 2012

	2007	2008	2009	2010	2011	2012
Total number of donors	28983	30366	33991	33514	25982	28576
including unselfish donors	*7444*	*7575*	11102	10273	2254	*2823*
% unselfish donors	25.7	24.9	32.7	30.7	8.7	9.9
Total number of personnel	371	317	358	350	290	302

Table 3.39 Blood collection, testing of donations, unfit donations, Georgia, 2012

	Number of donations	%
Total	**32390**	**100**
including tested on:		
HIV/AIDS	32390	100
Hepatitis B	32390	100
Hepatitis C	32390	100
Syphilis	32390	100
Blood group serology (BGS)	32390	100
Unfit blood / packed red blood cells	**3452**	**10.6**

Table 3.40 Antirabial vaccinations, Georgia, 2010 – 2012*

	2010	2011	2012
Number of patients applied for antirabial care	37205	50366	49735
Number of patients preventively vaccinated with gamma globulin	30381	41605	39956
Including:			
Conditional course of vaccinations	23400	32714	30845
Full course of vaccinations	6981	8891	9111

Table 3.41 X-ray examinations (including prophylactic examinations), Georgia, 2012

	All	Among them		
		Chest organs	Digestive organs	Bone & joint system
X-ray examinations	**908397**	**366063**	**180681**	**348755**
Including:				
Rentgenoscopy	99643	61350	17773	20243
Rentgenography	802669	296879	163335	329834
Electrorentgenography	0	0	0	0
Diagnostic fluorography	7865	7865	0	0
Special examinations	75423	2017	2697	5
Special examinations include:				
Angiography	1712			
Cholecystography	2697			
Urography	3000			
Computer tomography	39603			
Tomography	3355			
Examination of female pelvic organs	10			
Salpingography	1763			
Mammography	7826			

* *Medical statistics and epidsurveillance reconciled data*

Table 3.42 Number of ultrasonic examinations, Georgia, 2011–2012

	2011	2012
Circulatory system	108588	158775
Abdominal cavity organs	358654	436409
Female pelvic organs	335383	397148
Among them: during pregnancy	153085	177887
Newborns and young children	11852	25198
Mammary glands	25620	37493
Thyroid gland	76862	94891
Bone and joint system	3 1000	56536
Doppler examination of peripheral blood vessels	18036	33779
Ultrasonoscopy of the brain	15260	17566
Punch biopsy and drainage by ultrasonic ray	2386	1917
Intraoperational ultrasonic examination	995	3730

Table 3.43 Work of endoscopy departments (units), Georgia, 2012

	Total	Including		
		Esophagogastroduodenoscopy	Colonoscopy	Bronchoscopy
Endoscopic examinations	**44559**	**33979**	**4021**	**5066**
Including:				
Curative procedures	5954	2661	360	2232
Examination with collecting of cytomorphological specimens	2928	1381	430	877

Table 3.44 Work of ancillary medical services, Georgia, 2012

	Number
Work of physiotherapy departments	
Number of patients completed the treatment	78021
Including outpatient	*20929*
Children aged under-15 among all patients completed the treatment	16617
Including outpatient	*8712*
Number of procedures	263374
Including outpatient	*140372*
Work of therapeutic exercises units	
Number of patients who completed the treatment	23465
Including outpatient and at home	*12590*
Children aged under-15 among all patients who completed the treatment	8756
Including outpatient and at home	*5304*
Number of performed procedures	199466
Including outpatient	*111920*
Work of rephlexotherapy units	
Number of patients completed the treatment	135
Number of performed procedures	1179
Work of hemodialysis departments	
Number of dialysis beds	336
Number of performed procedures	136458
Work of departments of hyperbaric oxygenation	
Number of performed seances	170
Logopedic assisstance	
Number of patients completed speech therapy	1794
Including children under-15	*1579*

Table 3.45 Work of laboratories, Georgia, 2012

	Number of performed tests					
	Total	Including				
		Hematological	Cytological	Biochemical	Microbiological	Immunological
Total number of patients	**7007202**	**2248956**	**147484**	**2591403**	**362296**	**896336**
Including:						
Ambulatory patients	**3889048**	**1195324**	**69499**	**1354956**	**189202**	**588193**
The total number of tests includes analysis of:						
Hormones						329223
Enzymes						352048
Coagulation and anticoagulation system indices						491967
Water-salt metabolism						165965
Bacteriological examinations of tuberculosis						
Bacterioscopy						137307
Inoculation						52705
Examinations for diphtheria						1583
Inoculation						333
Examinations for meningococcs: Microscopy						2659
Inoculation						504
Examinations for malaria: Microscopy						846
Complex of serological reactions						192254
Special reaction for sero- and liquor diagnosis of syphilis						72980

Table 3.46 Work of functional diagnostics, Georgia, 2011–2012

	2011	2012
Number of examined patients	**444442**	**455936**
Including outpatient	*201598*	*267956*
Children under-15 in all examined patients	*28036*	*24138*
Number of examinations	**534713**	**512427**

Table 3.47 Infant nurseries, Georgia, 2009–2012

	2009	2010	2011	2012
Number of infant's homes	2	2	2	2
Number of places for infants	200	180	175	175
Number of staff	153	143	180	143
Including:				
Physician	9	8	8	6
Nurses and auxiliaty	13	7	8	3
Teachers	77	87	122	8
Number of infants in nurseries by the end of reporting year:				
Total	188	180	164	74
Including:				
Aged 0-1 year	38	58	49	12
Aged 1-3 years	73	74	69	45
Aged 3 years and more	77	48	46	17
Among the number of infants who left nurseries during the year:				
Taken by the parents	26	47	30	14
Adopted	4	22	36	19
Transferred to the facilities of public education and social security due to the age	32	10	5	1
Deceased	33	12	10	13

Table 3.48 Health Care Funding, Georgia, 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Share of total healthcare expenditures from GDP, %	8.7	8.5	8.5	8.6	8.4	8.2	8.7	10.1	10.2	9.4
Share of state healthcare expenditures from GDP, %	1.2	1.3	1.3	1.7	1.8	1.5	1.8	2.3	2.4	1.7
Share of state healthcare expenditures from the gross state expenditures, %	6.3	6.7	5.4	6.0	5.7	4.2	4.9	6.1	6.5	4.8
Share of state healthcare expenditures from the total health expenditures, %	13.5	15.0	15.5	19.6	21.9	18.4	20.6	23.0	23.1	18.4
Share of private healthcare expenditures from the total health expenditures, %	74.3	77.6	78.4	77.7	73.0	72.4	68.9	71.2	74.0	78.8
Share of international healthcare funding from total health expenditures, %	12.1	7.4	6.1	2.7	5.1	9.2	10.5	5.8	2.9	2.8
Total health expenditures, million lari	650.7	724.8	835.9	998.3	1159.6	1386.6	1660.7	1818.5	2096.5	2292.4
State healthcare expenditures, million lari	88.1	108.5	129.9	195.7	254.5	255.5	342.7	418.6	484.1	421.7
Local government health expenditures, million lari	21.2	20.0	26.7	41.4	17.7	15.6	14.5	18.7	14.9	22.4
Private health expenditures, million lari	483.6	562.5	655.3	775.2	846.3	1003.4	1144.1	1294.8	1551.7	1806.8
Among them paid by trial (advanced) schemes, million lari	2.6	2.8	6.7	7.5	9.8	20.8	24.5	47.5	55.7	65.7
International healthcare funding, million lari	78.9	53.8	50.7	27.4	58.8	127.7	173.6	105.1	60.7	63.9
Total health expenditures per capita, lari	149.0	168.0	194.0	229.0	264.0	316.0	379.0	412.0	471.0	511.0
State health expenditures per capita, lari	20.0	25.0	30.0	45.0	58.0	58.0	78.0	95.0	109.0	94.0
Private health expenditures per capita, lari	111.0	130.0	152.0	178.0	192.0	229.0	261.0	294.0	348.0	403.0
International healthcare funding per capita, lari	18.0	12.0	12.0	6.0	13.0	29.0	40.0	24.0	14.0	14.0

CHAPTER 4.
Population health status

Infectious and parasitic diseases

Table 4.1 Registered disease cases, prevalence and structure by classes, Georgia, 2012

	Number of registered cases	Prevalence	%
Total	**2878314**	**64095.0**	**100**
Certain infectious and parasitic diseases	99732	2220.9	3.5
Neoplasms	43731	973.8	1.5
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	25478	567.4	0.9
Endocrine, nutritionsl and metabolic diseases	186867	4161.2	6.5
Mental and behavioral disorders	83103	1850.6	2.9
Diseases of the nervous system	156826	3492.2	5.4
Diseases of the eye and adnexa	159139	3543.7	5.5
Diseases of the ear and mastoid process	70444	1568.7	2.4
Diseases of the circulatory system	473282	10539.2	16.4
Diseases of the respiratory system	605179	13476.3	21.0
Diseases of the digestive system	446472	9942.1	15.5
Diseases of the skin and subcutaneous tissue	77581	1727.6	2.7
Diseases of the musculoskeletal system and connective tissue	127162	2831.7	4.4
Diseases of the genitourinary system	198555	4421.5	6.9
Pregnancy, childbirth and puerperal period*	16821	1460.5	0.6
Certain conditions originating in the perinatal period**	2208	3880.5	0.1
Congenital malformations, deformations and chromosomal abnormalities	7614	169.6	0.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	22152	493.3	0.8
Injury, poisoning and certain other consequesnces of external causes	75968	1691.7	2.6

* *Indicators are calculated for women of the reproductive age*
** *Indicators are calculated for infants (0-1 year)*

Table 4.2 New cases of diseases, incidence and structure by classes, Georgia, 2012

	Number of new cases	Incidence	%
Total	**1662851**	**37028.8**	**100**
Certain infectious and parasitic diseases	83014	1848.6	5.0
Neoplasms	11928	265.6	0.7
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	18546	413.0	1.1
Endocrine, nutritionsl and metabolic diseases	60284	1342.4	3.6
Mental and behavioral disorders	8016	178.5	0.5
Diseases of the nervous system	68169	1518.0	4.1
Diseases of the eye and adnexa	77822	1733.0	4.7
Diseases of the ear and mastoid process	53128	1183.1	3.2
Diseases of the circulatory system	133411	2970.8	8.0
Diseases of the respiratory system	521947	11622.8	31.4
Diseases of the digestive system	280122	6237.8	16.8
Diseases of the skin and subcutaneous tissue	58654	1306.1	3.5
Diseases of the musculoskeletal system and connective tissue	57507	1280.6	3.5
Diseases of the genitourinary system	127148	2831.4	7.6
Pregnancy, childbirth and puerperal period*	11954	1037.9	0.7
Certain conditions originating in the perinatal period**	1909	3355.0	0.1
Congenital malformations, deformations and chromosomal abnormalities	2073	46.2	0.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	19321	430.2	1.2
Injury, poisoning and certain other consequesnces of external causes	67898	1512.0	4.1

Table 4.3 Registered disease cases in children aged 0-15 years, prevalence and structure by classes, Georgia, 2012

	Number of registered cases	Prevalence	%
Total	**548478**	**71969.3**	**100.0**
Certain infectious and parasitic diseases	51534	6762.1	9.4
Neoplasms	592	77.7	0.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	11504	1509.5	2.1
Endocrine, nutritionsl and metabolic diseases	9531	1250.6	1.7
Mental and behavioral disorders	1583	207.7	0.3
Diseases of the nervous system	26115	3426.7	4.8
Diseases of the eye and adnexa	20442	2682.3	3.7
Diseases of the ear and mastoid process	20356	2671.0	3.7
Diseases of the circulatory system	4993	655.2	0.9
Diseases of the respiratory system	299733	39329.9	54.6
Diseases of the digestive system	45094	5917.1	8.2
Diseases of the skin and subcutaneous tissue	22821	2994.5	4.2
Diseases of the musculoskeletal system and connective tissue	5978	784.4	1.1
Diseases of the genitourinary system	5952	781.0	1.1
Pregnancy, childbirth and puerperal period*	6	5.3	0.0
Certain conditions originating in the perinatal period**	2208	3880.5	0.4
Congenital malformations, deformations and chromosomal abnormalities	6059	795.0	1.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5048	662.4	0.9
Injury, poisoning and certain other consequesnces of external causes	8929	1171.6	1.6

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

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

Table 4.4 New cases of diseases in children aged 0-15 years, incidence and structure by classes, Georgia, 2012

	Number of new cases	Incidence	%
Total	**449203**	**58942.8**	**100**
Certain infectious and parasitic diseases	46129	6052.9	10.3
Neoplasms	300	39.4	0.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	8907	1168.7	2.0
Endocrine, nutritionsl and metabolic diseases	5222	685.2	1.2
Mental and behavioral disorders	346	45.4	0.1
Diseases of the nervous system	8130	1066.8	1.8
Diseases of the eye and adnexa	11359	1490.5	2.5
Diseases of the ear and mastoid process	17172	2253.2	3.8
Diseases of the circulatory system	823	108.0	0.2
Diseases of the respiratory system	273598	35900.5	60.9
Diseases of the digestive system	35439	4650.2	7.9
Diseases of the skin and subcutaneous tissue	19655	2579.1	4.4
Diseases of the musculoskeletal system and connective tissue	2338	306.8	0.5
Diseases of the genitourinary system	4259	558.9	0.9
Pregnancy, childbirth and puerperal period *	6	5.3	0.0
Certain conditions originating in the perinatal period **	1909	3355.0	0.4
Congenital malformations, deformations and chromosomal abnormalities	1618	212.3	0.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3539	464.4	0.8
Injury, poisoning and certain other consequesnces of external causes	8454	1109.3	1.9

Table 4.5 Morbidity rates by regions, Georgia, 2012

	Number of registered cases	Prevalence per 100000 populations	Number of new cases	Incidence per 100000 populations
Abkhazia	69495	--	28467	--
Ajara	325152	82546.8	160623	40777.6
Tbilisi	992024	84643.7	529662	45193.0
Kakheti	192166	47319.9	108070	26611.7
Imereti	441723	62593.6	294127	41678.8
Samegrelo	196947	41185.1	106961	22367.4
Shida Kartli	187600	59745.2	129862	41357.3
Kvemo Kartli	179111	35037.4	125274	24505.9
Guria	71725	51305.4	44461	31803.3
Samtskhe-Javakheti	68881	32217.5	38824	18159.0
Mtskheta-Mtianeti	58895	53883.8	40314	36883.8
Racha-Lechkhumi and Kvemo Svaneti	28430	60877.9	12506	26779.4
Other departments	66165	--	43700	--
Georgia	**2878314**	**64095.0**	**1662851**	**37028.8**

Table 4.6 Certain infectious and parasitic diseases, incidence per 100000 population, Georgia, 1990 – 2012

	Total		In children aged 0-15	
	Number of cases	Incidence	Number of cases	Incidence
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**
2012	**83014**	**1848.6**	**46129**	**6052.9**

Table 4.7 Certain infectious and parasitic diseases, incidence per 100000 population by regions, Georgia, 2011 – 2012

	2011				2012			
	Total		In children		Total		In children	
	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence
Abkhazia	1255	--	611	--	854	--	359	--
Ajara	6866	153.1	2574	338.6	10702	2716.9	7110	10643.7
Tbilisi	18249	407.0	7169	942.9	19353	1651.3	7754	3898.4
Kakheti	3487	77.8	2529	332.6	5557	1368.4	3836	5567.5
Imereti	11259	251.1	6192	814.4	19187	2718.9	13045	10889.0
Samegrelo and Zemo Svaneti	4278	95.4	2752	362.0	4515	944.2	2449	3016.0
Shida Kartli	4977	111.0	3316	436.1	5199	1655.7	3076	5771.1
Kvemo Kartli	6220	138.7	4223	555.4	7832	1532.1	3918	4513.8
Guria	2822	62.9	2085	274.2	2452	1753.9	1288	5434.6
Samtskhe-Javakheti	2032	45.3	1408	185.2	1951	912.5	1564	4308.5
Mtskheta-Mtianeti	1926	43.0	1176	154.7	2005	1834.4	1409	7616.2
Racha-Lechkhumi and Kvemo Svaneti	518	11.6	244	32.1	691	1479.7	232	2936.7
Other departments	489	--	83	--	2716	--	89	--
Georgia	**64378**	**1435.9**	**34362**	**4519.5**	**83014**	**1848.6**	**46129**	**6052.9**

Table 4.8 Notifiable diseases, incidence per 100000 population by regions, Georgia, 2011 - 2012

	2011				2012			
	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	1	0.02	0	0	0	0.0	0	0.0
Whooping cough	33	0.7	30	3.9	346	7.7	277	36.3
Measles	64	1.4	29	3.8	31	0.7	25	3.3
Rubella	64	1.42	57	7.5	75	1.7	67	8.8
Mumps	44	1	39	5.1	50	1.1	45	5.9
All viral hepatitis	4407	98.3	62	8.2	2913	64.9	24	3.1
Viral hepatitis A	90	2	30	3.9	30	0.7	13	1.7
Viral hepatitis B	1566	34.9	8	1.1	1018	22.7	8	1.0
Viral hepatitis C	2511	56	2	0.3	1864	41.5	3	0.4
Other viral hepatitis	240	5.4	22	2.9	1	0.0	0	0.0
Other salmonella infections	118	2.6	39	5.1	176	3.9	76	10.0
Shigellosis	390	8.7	329	43.3	546	12.2	431	56.6
Other bacterial foodborne intoxications	2603	58.1	1092	143.6	6460	143.6	2393	314.4
Botulism	12	0.3	0	0	20	0.4	1	0.1
Amoebiasis	9	0.2	5	0.7	44	1.0	17	2.2
Diarrhoea and gastroenteritis of presmed infectious origin	19576	436.6	12993	1708.9	26062	580.4	19305	2533.1
Brucellosis	166	3.7	8	1.1	134	3.0	9	1.2
Meningococcaemia	24	0.5	20	2.6	17	0.4	15	2.0
Malaria	2	0.04	0	0	1	0.0	0	0.0
Leishmaniasis	119	2.7	105	13.81	101	2.2	77	10.1
Acute flaccid paralysis / acute poliomyelitis	5	0.1	5	0.7	14	0.3	14	1.8
Tetanus	5	0.1	1	0.1	6	0.1	2	0.3
Anthrax	81	1.8	3	0.4	142	3.2	3	0.4
Leptospirosis	80	1.8	5	0.7	43	1.0	1	0.1
Scarlet fever	519	11.6	491	64.6	587	13.1	535	70.2
Lyme disease (Borreliosis)	37	0.8	4	0.5	1	0.0	0	0.0
Q fever	0	0	0	0	1	0.0	0	0.0
Rabies	3	0.1	1	0.1	3	0.1	0	0.0
Varicella	5810	129.6	4710	619.5	4429	98.6	3771	494.8
Echinococcosis	64	1.4	16	2.1	61	1.4	34	4.5
Trichinellosis	9	0.2	1	0.1	26	0.6	2	0.3

Table 4.9 Notifiable diseases by age groups, Georgia, 2012

	Total	Including in age groups						
		<1	1-4	5-14	15-19	20-29	30-59	60 +
Diphtheria	0	0	0	0	0	0	0	0
Whooping cough	346	121	84	72	27	20	18	4
Tetanus	6	0	1	1	0	1	0	3
Acute flaccid paralysis / acute poliomyelitis	14	2	6	6	0	0	0	0
Rubella	31	6	15	4	0	5	1	0
Measles	75	13	30	24	3	3	2	0
Mamps	50	0	27	18	3	0	2	0
Viral hepatitis A	30	0	3	10	5	5	7	0
Viral hepatitis B	1018	1	2	5	37	393	489	91
Viral hepatitis C	1864	1	1	1	14	218	1294	335
Other viral hepatitis	1	0	0	0	0	1	0	0
Salmonelosis	176	8	42	26	9	22	46	23
Shigellosis	546	20	247	164	14	23	55	23
Enterohaemorrhagic escherichiosis	11	1		3		1	6	
Bacterial foodborne intoxications	6460	247	1286	860	318	873	1789	1087
Botulism	20	0	0	1	2	4	10	3
Diarrhoea and gastroenteritis of presumed infectious origin	26062	4112	11288	3905	788	1857	2694	1418
Anthrax	142	0	0	3	4	28	91	16
Brucellosis	134	0	2	7	18	34	63	10
Lyme disease (Borreliosis)	1	0	0	0	0	1	0	0
Q fever	1	0	0	0	0	0	0	1
Rabies	3	0	0	0	0	0	3	0
Hantavisrus infection	6	0	0	3	0	1	2	0
Crimea-Congo fewer	1	0	0	0	0	0	0	1
Leptospirosis	43	0	0	1	2	5	29	6
Meningococcaemia	17	4	7	4	0	0	2	0
Meningitis caused by N. meningitidis	0	0	0	0	0	0	0	0
Meningitis caused by Haemophilus INF.B	1	0	1	0	0	0	0	0
Meningitis caused by S. pneumonae	2	0	0	1	0	0	1	0
Meningitis caused by M. tuberculosis	18	0	1	1	1	5	3	7
Scarlet fever	587	14	284	237	29	10	13	0
Varicella	4429	247	1553	1971	275	266	111	6
Leishmaniasis	101	12	55	10	2	1	20	1
Echinococcosis	61	0	14	20	1	2	10	14
Malaria	1	0	0	0	0	1	0	0
Trichinosis	26	0	0	2	4	9	11	0
Amoebiasis	44	0	8	9	2	7	14	4

Table 4.10 Certain infectious and parasitic diseases, hospital discharges, Georgia, 2011 – 2012

	2011			2012		
	Number of hospital discharges	Including deaths	Case fatality rate (%)	Number of hospital discharges	Includng deaths	Case fatality rate (%)
Certain infectious and parasitic diseases	**20695**	**247**	**1.2**	**24698**	**262**	**1.1**
Including:						
Intestinal infections	11187	14	0.1	15073	10	0.1
Respiratory tuberculosis	3761	32	0.9	2078	32	1.5
Meningococcal infection	--	--	--	30	2	6.7
Septicaemia	235	60	25.5	469	88	18.8
Viral hepatitis	1174	53	4.5	1419	64	4.5
Human immunodeficiency virus [HIV] disease	--	--	--	179	11	6.1

Table 4.11 Certain infectious and parasitic diseases, hospital discharges in children (0 – 15), Georgia, 2011 – 2012

	2011				2012			
	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	**10986**	**0.3**	**3057**	**1.0**	**15194**	**0.2**	**4011**	**0.6**
Including:								
Intestinal infections	8392	0.1	2531	0.2	11525	0.02	3378	0.0
Respiratory tuberculosis	125	0.0	2	0.0	132	0.0	1	0.0
Meningococcal infection	--	--	--	--	17	5.9	4	25.0
Septicaemia	71	32.4	61	36.1	115	20.9	82	25.6
Viral hepatitis	39	5.1	3	66.7	30	0.0	2	0.0
Human immunodeficiency virus [HIV] disease	--	--	--	--	6	0.0	0	0.0

Table 4.12 Certain infectious and parasitic diseases, hospital discharges by regions, Georgia, 2010– 2012

	2010		2011		2012	
	Number of hospital discharges	Case fatality rate %	Number of hospital discharges	Case fatality rate %	Number of hospital discharges	Case fatality rate %
Ajara	1354	1.5	1367	0.9	2086	0.5
Tbilisi	10076	1.1	10243	1.4	14414	1.1
Kakheti	394	0.0	253	0.4	118	0.8
Imereti	3950	1.2	2740	1.1	3159	0.7
Samegrelo and Zemo Svaneti	735	2.0	626	1.1	574	1.9
Shida Kartli	844	0.1	1145	0.3	903	0.1
Kvemo Kartli	1227	0.1	1047	0.1	1070	0.2
Guria	320	0.0	0	0.0	62	
Samtskhe-Javakheti	1073	0.6	647	1.2	492	2.6
Mtskheta-Mtianeti	3	0.0	0	0.0	41	12.2
Racha-Lechkhumi and Kvemo Svaneti	130	0.0	0	0.0	12	0.0
Other departments	160	0.0	2390	0.0	1768	2.9
Georgia	**20266**	**1.0**	**20695**	**1.2**	**24699**	**1.1**

Table 4.13 Tuberculosis morbidity rates per 100000 populations, Georgia, 2005 – 2012

	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
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
2012	**4973**	**110.7**	**3778**	**84.1**	**3905**	**87.0**	**2834**	**63.1**

Table 4.14 Tuberculosis morbidity rates per 100000 populations by regions, Georgia, 2011 – 2012

	2011				2012			
	Number of registered cases	Prevalence	New cases	Incidence	Number of registered cases	Prevalence	New cases	Incidence
Ajara	554	141.3	447	114.0	604	153.3	463	117.5
Tbilisi	1477	126.5	1219	104.7	1390	118.6	1109	94.6
Kakheti	289	71.1	228	56.1	303	74.6	249	61.3
Imereti	468	66.3	350	49.6	528	74.8	388	55.0
Samegrelo and Zemo Svaneti	529	110.6	387	80.9	509	106.4	369	77.2
Shida Kartli	261	83.2	205	65.3	260	82.8	207	65.9
Kvemo Kartli	438	86.1	342	67.3	372	72.8	297	58.1
Guria	102	72.7	82	58.4	108	77.3	86	61.5
Samtskhe-Javakheti	102	47.8	58	27.2	95	44.4	55	25.7
Mtskheta-Mtianeti	111	101.4	84	76.7	113	103.4	85	77.8
Racha-Lechkhumi and Kvemo Svaneti	30	63.6	21	44.5	17	36.4	13	27.8
Other departments	1172	--	800	--	674	--	457	--
Georgia	**5533**	**123.4**	**4223**	**94.2**	**4973**	**110.7**	**3778**	**84.1**

Table 4.15 Pulmonary tuberculosis morbidity by regions, Georgia, 2011– 2012

	2011				2012			
	Number of registered cases	Prevalence	New cases	Incidence	Number of registered cases	Prevalence	New cases	Incidence
Ajara	410	104.6	309	78.8	472	119.8	341	86.6
Tbilisi	1138	97.5	912	78.1	1076	91.8	830	70.8
Kakheti	223	54.8	165	40.6	230	56.6	182	44.8
Imereti	371	52.5	269	38.1	409	58.0	279	39.5
Samegrelo and Zemo Svaneti	422	88.2	285	59.6	406	84.9	277	57.9
Shida Kartli	205	65.3	153	48.8	205	65.3	164	52.2
Kvemo Kartli	321	63.1	238	46.8	281	55.0	217	42.4
Guria	87	62.0	69	49.2	85	60.8	66	47.2
Samtskhe-Javakheti	81	37.9	40	18.7	81	37.9	43	20.1
Mtskheta-Mtianeti	88	80.4	63	57.5	85	77.8	62	56.7
Racha-Lechkhumi and Kvemo Svaneti	26	55.1	17	36.0	17	36.4	13	27.8
Other departments	997	--	647	--	558	--	360	--
Georgia	**4369**	**97.4**	**3167**	**70.6**	**3905**	**87.0**	**2834**	**63.1**

Table 4.16 New cases of pulmonary tuberculosis (by smear microscopy results), Georgia, 2011 – 2012

	2011			2012		
	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	185	110	14	163	164	14
Tbilisi	521	373	18	472	341	17
Kakheti	114	50	1	131	47	4
Imereti	180	85	4	182	95	2
Samegrelo and Zemo Svaneti	194	88	3	159	114	4
Shida Kartli	85	68	0	85	77	2
Kvemo Kartli	150	87	1	142	72	3
Guria	45	23	1	41	24	1
Samtskhe-Javakheti	22	16	2	22	21	0
Mtskheta-Mtianeti	44	17	2	45	17	0
Racha-Lechkhumi and Kvemo Svaneti	9	8	0	10	3	0
Other departments	477	169	1	196	164	0
Georgia	**2026**	**1094**	**47**	**1648**	**1139**	**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, 2008 – 2012

	2008	2009	2010	2011	2012
Number of registered cases	**1860**	**1868**	**2055**	**2143**	**2028**
% from the total number:					
Recovered	63.2	60.3	63.7	67.0	68.3
Completed treatment	13.9	13.2	11.6	9.5	7.7
Unsuccessful treatment	6.2	4.4	3.5	1.9	3.1
Died	2.5	2.8	3.1	2.9	2.3
Interrupted treatment	8.8	8.8	7.3	6.7	5.1
Transferred to other institutions	3.1	2.4	1.4	0.8	0.5
Unevaluated cases	2.4	1.6	1.3	1.4	1.2
Assigned category IV (chronic)	0	6.6	8.1	9.8	11.7

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, 2012**

	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	187	3	134	18	1	2	14	0	15
Tbilisi	522	1	326	54	16	14	30	2	79
Kakheti	114	1	64	17	5	4	5	4	14
Imereti	180	0	128	4	12	2	12	3	19
Samegrelo and Zemo Svaneti	194	1	131	18	6	4	14	0	20
Shida Kartli	87	3	63	7	2	2	3	1	6
Kvemo Kartli	149	1	84	22	5	2	19	0	16
Guria	46	0	37	1	1	1	2	0	4
Samtskhe-Javakheti	22	1	14	2		1	0		4
Mtskheta-Mtianeti	45	1	32	1	3	2	2	1	3
Racha-Lechkhumi and Kvemo Svaneti	9	0	6	1	1	1	0	0	0
Other departments	473	12	366	12	11	12	3	0	57
Georgia	**2028**	**24**	**1385**	**157**	**63**	**47**	**104**	**11**	**237**

Table 4.19 **Incidence of extra pulmonary tuberculosis by regions, Georgia, 2011– 2012**

	2011			2012		
	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	138	35.2	30.9	122	31.0	20.2
Tbilisi	307	26.3	25.5	279	23.8	20.1
Kakheti	63	15.5	27.3	67	16.5	22.1
Imereti	81	11.5	23.1	109	15.4	20.6
Samegrelo and Zemo Svaneti	102	21.3	26.4	92	19.2	18.1
Shida Kartli	53	16.6	25.4	43	13.7	16.5
Kvemo Kartli	104	20.5	30.4	80	15.6	21.5
Guria	13	9.3	15.9	20	14.3	18.5
Samtskhe-Javakheti	18	8.4	31.0	12	5.6	12.6
Mtskheta-Mtianeti	21	19.2	25.0	23	21.0	20.4
Racha-Lechkhumi and Kvemo Svaneti	4	8.5	19.0	0	0.0	0.0
Other departments	153	--	19.1	97	--	14.4
Georgia	**1061**	**23.6**	**25.0**	**944**	**21.0**	**19.0**

Table 4.20 Number of registered cases of extra pulmonary tuberculosis by localization, Georgia, 2010 – 2012

	2010		2011		2012	
	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	**1282**	**28.8**	**1164**	**26.0**	**1068**	**23.8**
Including:						
Tuberculous meningitis	36	0.8	39	0.9	42	0.9
Bone and joint tuberculosis	137	3.1	131	2.9	114	2.5
Urogenital tuberculosis	107	2.4	130	2.9	126	2.8
Tuberculous pleuritis	610	13.7	515	11.5	406	9.0
Tuberculosis of lymph nodes	297	6.7	242	5.4	260	5.8
Tuberculosis of other organs	95	2.1	113	2.5	120	2.7

Table 4.21 Tuberculous meningitis, Georgia, 2010 – 2012

	2010		2011		2012	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
All registered cases	36	0.8	39	0.9	35	0.8
Among them in children	*3*	0.4	*3*	0.4	*5*	0.7

Table 4.22 New cases of HIV infection by modes of transmission, Georgia, 2010 – 2012

	2010		2011		2012	
	Number	%	Number	%	Number	%
Injecting drug use	207	47.2	189	44.6	226	43.0
Heterosexual contacts	191	43.6	201	47.4	233	44.3
Homosexual contacts	21	4.8	25	5.9	49	9.3
Blood or blood products transfusion	0	0	2	0.5	4	0.8
Vertical transmission	12	2.7	6	1.4	9	1.7
Unidentified	8	1.8	1	0.2	5	1.0
Total	**439**	**100**	**424**	**100**	**526**	**100.0**

Table 4.23 New cases of HIV infection, incidence by regions, Georgia 2010 – 2012

	2010		2011		2012	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Abkhazia	27	-	45	-	62	-
Ajara	35	9.1	37	9.4	40	10.2
Tbilisi	163	14.1	148	12.7	158	13.5
Kakheti	21	5.2	16	3.9	26	6.4
Imereti	73	10.4	48	6.8	72	10.2
Samegrelo and Zemo Svaneti	64	13.5	54	11.3	79	16.5
Shida Kartli	16	5.2	13	4.1	20	6.4
Kvemo Kartli	20	4.0	34	6.7	36	7.0
Guria	11	7.9	7	5.0	12	8.6
Samtskhe-Javakheti	4	1.9	6	2.8	2	0.9
Mtskheta-Mtianeti	4	3.7	0	0.0	5	4.6
Racha-Lechkhumi and Kvemo Svaneti	1	2.1	1	2.1	3	6.4
Foreign	0	0.0	10	-	11	-
Georgia	**439**	**9.9**	**424**	**9.5**	**526**	**11.7**

Table 4.24 New cases of HIV infection, incidence by sex and age groups, Georgia, 2010 – 2012

	2010		2011		2012	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Male - total	**312**	**14.8**	**300**	**14.1**	**384**	**17.9**
Including 0-14	8	2.0	4	0.9	7	1.7
15-24	17	4.7	27	7.7	20	5.9
25+	287	21.2	269	19.6	357	25.5
Female - total	**127**	**6.0**	**124**	**5.3**	**142**	**6**
Including 0-14	4	1.0	2	0.6	5	1.4
15-24	14	3.9	8	2.4	7	2.2
25+	109	8.1	114	6.9	130	7.8
Both sexes - total	**439**	**9.9**	**424**	**9.5**	**526**	**11.7**
Including 0-14	12	1.6	6	0.8	12	1.6
15-24	31	4.4	35	5.1	27	4.1
25+	396	13.2	383	12.7	487	15.9

Table 4.25 Mortality of HIV-infected patients by causes of death, Georgia, 2010 – 2012

	2010		2011		2012	
	Number of deaths	Case fatality rate %	Number of deaths	Case fatality rate %	Number of deaths	Case fatality rate %
HIV-related	78	86.7	72	62.1	72	65.5
HIV-unrelated	9	10.0	25	21.5	26	23.6
Unknown	3	3.3	19	16.4	12	10.9
Total	**90**	**100.0**	**116**	**100.0**	**110**	**100**

Table 4.26 Hepatitis A, incidence by regions, Georgia, 2011 – 2012

	2011				2012			
	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	1	0.3	0	0.0	2	0.5	2	0.5
Tbilisi	19	1.6	10	5.1	11	0.9	5	0.4
Kakheti	2	0.5	0	0.0	1	0.2	1	0.2
Imereti	1	0.1	1	0.8	2	0.3	0	0.0
Samegrelo and Zemo Svaneti	5	1.0	2	2.5	5	1.0	1	0.2
Shida Kartli	2	0.6	0	0.0	0	0.0	0	0.0
Kvemo Kartli	5	0.98	3	3.5	9	1.8	4	0.8
Guria	52	37.1	14	58.3	0	0.0	0	0.0
Samtskhe-Javakheti	1	0.5	0	0.0	0	0.0	0	0.0
Mtskheta-Mtianeti	1	0.9	0	0.0	0	0.0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	0	0.0	0	0.0	0	0.0
Other departments	1	--	0	--	0	0.0	0	--
Georgia	**90**	**2.0**	**30**	**0.4**	**30**	**0.7**	**13**	**0.3**

Table 4.27 Hepatitis B, incidence by regions, Georgia, 2012

	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	39	9.9	239	60.7
Tbilisi	21	1.8	309	26.4
Kakheti	15	3.7	23	5.7
Imereti	34	4.8	135	19.1
Samegrelo and Zemo Svaneti	35	7.3	43	9.0
Shida Kartli	4	1.3	35	11.1
Kvemo Kartli	10	2.0	54	10.6
Guria	2	1.4	10	7.2
Samtskhe-Javakheti	1	0.5	6	2.8
Mtskheta-Mtianeti	1	0.9	2	1.8
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	0	0.0
Other departments	0	--	0	--
Georgia	**162**	**3.6**	**856**	**19.1**

Table 4.28 Acute and chronic hepatitis C, incidence by regions, Georgia, 2012

	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	20	5.1	299	75.9
Tbilisi	13	1.1	965	82.3
Kakheti	2	0.5	7	1.7
Imereti	37	5.2	184	26.1
Samegrelo and Zemo Svaneti	87	18.2	108	22.6
Shida Kartli	6	1.9	28	8.9
Kvemo Kartli	4	0.8	87	17.0
Guria	4	2.9	7	5.0
Samtskhe-Javakheti	1	0.5	0	0.0
Mtskheta-Mtianeti	1	0.9	1	0.9
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	3	6.4
Other departments	0	--	0	--
Georgia	**175**	**3.9**	**1689**	**37.6**

Table 4.29 Structure of intestinal infections (%), Georgia, 2011 – 2012

	2011		2012	
	Number of cases	%	Number of cases	%
Total	**23544**	**100**	**33478**	**100**
	Including:			
Other salmonella infections	118	0.5	176	0.5
Shigellosis	390	1.7	546	1.6
Enterohemorrhagic e. coli	-	-	11	0.0
Bacterial foodborne intoxications	2603	11.1	6460	19.3
Amebiasis	9	0.03	44	0.1
Botulilism	12	0.01	20	0.1
Diarrhoea of presumed infectious origin	19576	83.1	26062	77.8
Norovirus diarrhoea	-	-	49	0.1
Rotavirus diarrhoea	-	-	110	0.3

Table 4.30 Diarrhoea of presumed infectious origin by regions, Georgia, 2011 – 2012

	2011				2012			
	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	6348	1619.0	3618	5440.6	8684	2204.6	5822	8715.6
Tbilisi	2621	224.5	1935	977.3	5348	456.3	4458	2241.3
Kakheti	401	98.6	218	315.9	352	86.7	263	381.7
Imereti	4856	687.8	3733	3118.6	6413	908.7	5029	4197.8
Samegrelo and Zemo Svaneti	810	169.3	515	635.0	896	187.4	522	642.9
Shida Kartli	1645	524.2	1023	1922.9	1787	569.1	1205	2260.8
Kvemo Kartli	1489	292.8	1223	1418.8	1694	331.4	1426	1642.9
Guria	143	101.9	71	298.3	118	84.4	78	329.1
Samtskhe-Javakheti	165	77.3	122	337.0	347	162.3	290	798.9
Mtskheta-Mtianeti	126	115.1	70	376.3	158	144.6	140	756.8
Racha-Lechkhumi and Kvemo Svaneti	217	459.7	35	437.5	74	158.5	31	392.4
Other departments	755	--	430	--	191	--	41	5.4
Georgia	**19576**	**436.6**	**12993**	**1708.9**	26062	580.4	**19305**	**2533.1**

Table 4.31 Sexually transmitted diseases, incidence by regions, Georgia, 2012

	Syphilis		Gonococcal infection	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Ajara	217	55.1	74	18.8
Tbilisi	260	22.2	177	15.1
Kakheti	12	3.0	68	16.7
Imereti	51	7.2	35	5.0
Samegrelo and Zemo Svaneti	31	6.5	59	12.3
Shida Kartli	24	7.6	15	4.8
Kvemo Kartli	22	4.3	38	7.4
Guria	1	0.7	0	0.0
Samtskhe-Javakheti	1	0.5	6	2.8
Mtskheta-Mtianeti	1	0.9	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	0	0.0
Other departments	2	--	42	--
Georgia	**622**	**13.9**	**514**	**11.4**

Table 4.32 Sexually transmitted diseases, incidence of new cases, Georgia, 2010 – 2012

	2010		2011		2012	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Syphilis	599	13.5	491	11.0	622	13.9
Gonococcal infection	741	16.6	662	14.8	514	11.4
Chlamydial infection	1646	37.0	1700	37.9	737	16.4
Trichomoniasis	4340	97.5	6419	143.2	4695	104.5

Table 4.33 Sexually transmitted diseases, distribution of new cases according to age and sex, Georgia, 2012

	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	345	16.1	2	0.5	9	5.9	116	31.6	102	32.0	116	12.9
	F	277	11.8	5	1.4	4	2.8	90	25.0	96	29.5	82	7.1
Gonococcal infection	M	421	19.7	2	0.5	29	19.1	274	74.6	87	27.3	29	3.2
	F	93	4.0	0	0.0	5	3.5	67	18.6	18	5.5	3	0.3
Trichomoniasis	M	1099	51.3	2	0.5	53	35.0	675	183.7	262	82.2	107	11.9
	F	3596	153.1	17	4.7	250	176.1	2031	563.7	855	262.4	443	38.2
Anogenital herpesviral infection	M	72	3.4	0	0.0	2	1.3	48	13.1	17	5.3	5	0.6
	F	528	22.5	0	0.0	51	35.9	365	101.3	98	30.1	14	1.2
Other Infections with a predominantly sexual mode of transmission	M	233	10.9	0	0.0	28	18.5	151	41.1	43	13.5	11	1.2
	F	674	28.7	5	1.4	26	18.3	441	122.4	162	49.7	40	3.4

Table 4.34 Mycoses, Georgia, 2010 – 2012

	2010		2011		2012	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
All mycoses	**10127**	**227.4**	**13318**	**297.1**	**16781**	**373.7**
Including:						
Trichophytia	599	13.5	664	14.8	442	9.8
Microsporia	208	4.7	261	5.8	1035	23.0
Candidiasis	7665	172.1	9667	215.6	12315	274.2
Other mycoses	1655	37.2	33	0.7	2989	66.6

Table 4.35 Scabies, Georgia, 2004 – 2012

	Number of cases	Incidence per 100000 population
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
2012	**1606**	**35.8**

Non-communicable diseases

Table 4.36 Neoplasms, morbidity rates, Georgia, 2001 – 2012

	Total				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 population	Number of new cases	Incidence per 100000 population
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
2012	**43731**	**973.8**	**11928**	**265.6**	**592**	**77.7**	**300**	**39.4**

Table 4.37 Malignant neoplasms, morbidity, Georgia, 2001 – 2012

	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
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
2012	**22448**	**499.9**	**4232**	**94.2**

Table 4.38 Malignant neoplasms, morbidity according to the regions, Georgia, 2012

	Number of cases registered by the end of the year	Prevalence per 100000 population*	Number of new cases	Incidence per 100000 population
Abkhazia	192	-	62	-
Ajara	3124	793.1	670	170.1
Tbilisi	3825	326.4	1044	89.1
Kakheti	3684	907.2	413	101.7
Imereti	2444	346.3	586	83.0
Samegrelo and Zemo Svaneti	1399	292.6	337	70.5
Shida Kartli	4163	1325.8	293	93.3
Kvemo Kartli	818	160.0	232	45.4
Guria	903	645.9	191	136.6
Samtskhe-Javakheti	980	458.4	170	79.5
Mtskheta-Mtianeti	662	605.7	149	136.3
Racha-Lechkhumi and Kvemo Svaneti	254	543.9	85	182.0
Georgia	**22448**	**499.9**	**4232**	**94.2**

* *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, 2012

Localization / neoplasm	Number of registered by the end of the year			Number of cases registered within 5 and more years after the first diagnoses		Number of cases enrolled for 5+ years, as % from the total number of registered cases	Number of death during the year		% of deaths from total registered cases according to localization
	Total number	% from the total	Prevalence 100000 population	Total number	% by localization		Total number	% from the total number of deaths	
All neoplasms	**22448**	**100.0**	**499.9**	**6798**	**100.0**	**26.6**	**2349**	**100.0**	**9.2**
Oral cavity organs and pharynx	450	2.0	10.0	176	2.6	39.7	40	1.7	9.0
Lips	374	1.7	8.3	138	2.0	30.3	13	0.6	2.9
Esophagus	80	0.4	1.8	9	0.1	8.8	16	0.7	15.7
Stomach	786	3.5	17.5	143	2.1	14.5	175	7.4	17.7
Colorectal	1142	5.1	25.4	253	3.7	18.6	186	7.9	13.4
Liver and gull bladder channels	213	0.9	4.7	54	0.8	16.3	104	4.4	31.4
Pancreases	144	0.6	3.2	12	0.2	5.1	85	3.6	36.0
Other digestive organs	114	0.5	2.5	30	0.4	20.0	28	1.2	18.7
Nasal cavity, middle ear and accessory sinuses	76	0.3	1.7	9	0.1	10.8	6	0.3	7.2
Larynx	948	4.2	21.1	241	3.5	22.9	66	2.8	6.3
Trachea, bronchus and lung	1156	5.1	25.7	173	2.5	10.9	381	16.2	23.9
Other respiratory and intrathoracic organs	81	0.4	1.8	76	1.1	63.9	27	1.1	22.7
Bone and articular cartilage	275	1.2	6.1	87	1.3	27.8	27	1.1	8.6
Malignant melanoma of skin	270	1.2	6.0	93	1.4	29.9	28	1.2	9.0
Other malignant neoplasms of skin	1987	8.9	44.2	763	11.2	36.7	52	2.2	2.5
Mesothelial and soft tissue	302	1.3	6.7	73	1.1	20.6	35	1.5	9.9
Breast	6153	27.4	137.0	2124	31.2	31.5	350	14.9	5.2
Cervix uteri	1673	7.5	71.2	650	9.6	35.6	91	3.9	5.0
Corpus uteri	1034	4.6	44.0	345	5.1	31.0	56	2.4	5.0
Ovary	801	3.6	34.1	179	2.6	20.1	55	2.3	6.2
Placenta	37	0.2	1.6	20	0.3	52.6	1	0.0	2.6
Female genital organs, other localization	182	0.8	7.7	79	1.2	38.5	15	0.6	7.3
Penis	79	0.4	3.7	33	0.5	35.9	9	0.4	9.8
Prostate	517	2.3	24.1	117	1.7	19.0	88	3.7	14.3
Testicle	299	1.3	14.0	119	1.8	36.7	19	0.8	5.9
Male genital organs, other localization	41	0.2	1.9	18	0.3	38.3	6	0.3	12.8
Kidney	363	1.6	8.1	87	1.3	19.9	67	2.9	15.3
Urinary bladder	507	2.3	11.3	119	1.8	20.4	69	2.9	11.8
Eyes, brain and other parts of central nervous system	435	1.9	9.7	78	1.1	15.6	57	2.4	11.4
Thyroid	252	1.1	5.6	69	1.0	24.0	15	0.6	5.2
Other endocrine glands	52	0.2	1.2	13	0.2	22.8	5	0.2	8.8
Ill-defined, secondary and unspecified sites	182	0.8	4.1	25	0.4	9.7	71	3.0	27.6
Hodgkin's disease	333	1.5	7.4	121	1.8	32.8	21	0.9	5.7
Malignant lymphomas	421	1.9	9.4	101	1.5	21.5	34	1.4	7.2
Leukaemias	547	2.4	12.2	71	1.0	12.2	25	1.1	4.3
Other lymphoid, haematopoietic and related tissue malignant neoplasms	108	0.5	2.4	80	1.2	63.5	17	0.7	13.5

Table 4.40 Malignant neoplasms, new cases according to localizations, Georgia*, 2012

Localization / neoplasm	New cases			Deaths within 1 year after first diagnosis in previous reporting year	
	Total number	% afrom the total number of new cases	Incidence per 100, 000 population	Total number	% by localization
All neoplasms	**4232**	**100.0**	**94.2**	**911**	**100.0**
Oral cavity organs and pharynx	81	1.9	1.8	15	1.6
Lips	30	0.7	0.7	2	0.2
Esophagus	22	0.5	0.5	7	0.8
Stomach	260	6.1	5.8	81	8.9
Colorectal	290	6.9	6.5	80	8.8
Liver and gull bladder channels	139	3.3	3.1	50	5.5
Pancreases	94	2.2	2.1	39	4.3
Other digestive organs	40	0.9	0.9	10	1.1
Nasal cavity, middle ear and accessory sinuses	41	1.0	0.9	3	0.3
Larynx	159	3.8	3.5	25	2.7
Trachea, bronchus and lung	501	11.8	11.2	202	22.2
Other respiratory and intrathoracic organs	33	0.8	0.7	6	0.7
Bone and articular cartilage	37	0.9	0.8	11	1.2
Malignant melanoma of skin	43	1.0	1.0	11	1.2
Other malignant neoplasms of skin	186	4.4	4.1	11	1.2
Mesothelial and soft tissue	53	1.3	1.2	12	1.3
Breast	821	19.4	18.3	89	9.8
Cervix uteri	189	4.5	8.0	31	3.4
Corpus uteri	106	2.5	4.5	14	1.5
Ovary	126	3.0	5.4	13	1.4
Placenta	0	0.0	0.0	0	0.0
Female genital organs, other localization	29	0.7	1.2	11	1.2
Penis	10	0.2	0.5	2	0.2
Prostate	187	4.4	8.7	30	3.3
Testicle	37	0.9	1.7	6	0.7
Male genital organs, other localization	8	0.2	0.4	5	0.5
Kidney	94	2.2	2.1	17	1.9
Urinary bladder	117	2.8	2.6	27	3.0
Eyes, brain and other parts of central nervous system	106	2.5	2.4	21	2.3
Thyroid	38	0.9	0.8	4	0.4
Other endocrine glands	7	0.2	0.2	11	1.2
Ill-defined, secondary and unspecified sites	84	2.0	1.9	31	3.4
Hodgkin's disease	43	1.0	1.0	10	1.1
Malignant lymphomas	75	1.8	1.7	15	1.6
Leukaemias	113	2.7	2.5	6	0.7
Other lymphoid, haematopoietic and related tissue malignant neoplasms	21	0.5	0.5	7	0.8

* *Incidence of malignant neoplasms of male and female genital organs are calculated using male and female population correspondingly*

Table 4.41 Malignant neoplasms in women, new cases according to localizations, Georgia, 2012

Localization / neoplasm	Number of new cases	% from total	Incidence per 100000 females
All neoplasms	**2188**	**100.0**	**93.1**
Oral cavity organs and pharynx	13	0.6	0.6
Lips	7	0.3	0.3
Esophagus	6	0.3	0.3
Stomach	91	4.2	3.9
Colorectal	146	6.7	6.2
Liver and gull bladder channels	66	3.0	2.8
Pancreases	50	2.3	2.1
Other digestive organs	22	1.0	0.9
Nasal cavity, middle ear and accessory sinuses	9	0.4	0.4
Larynx	6	0.3	0.3
Trachea, bronchus and lung	68	3.1	2.9
Other respiratory and intrathoracic organs	5	0.2	0.2
Bone and articular cartilage	13	0.6	0.6
Malignant melanoma of skin	30	1.4	1.3
Other malignant neoplasms of skin	90	4.1	3.8
Mesothelial and soft tissue	26	1.2	1.1
Breast	811	37.1	34.5
Cervix uteri	189	8.6	8.0
Corpus uteri	106	4.8	4.5
Ovary	126	5.8	5.4
Placenta	0	0.0	0.0
Female genital organs, other localization	29	1.3	1.2
Kidney	24	1.1	1.0
Urinary bladder	23	1.1	1.0
Eyes, brain and other parts of central nervous system	46	2.1	2.0
Thyroid	33	1.5	1.4
Other endocrine glands	5	0.2	0.2
Ill-defined, secondary and unspecified sites	40	1.8	1.7
Hodgkin's disease	20	0.9	0.9
Malignant lymphomas	23	1.1	1.0
Leukaemias	48	2.2	2.0
Other lymphoid, haematopoietic and related tissue malignant neoplasms	12	0.5	0.5

Table 4.42 Malignant neoplasms in men, new cases according to localizations, Georgia, 2012

Localization / neoplasm	Number of new cases	% from total	Incidence per 100000 males
All neoplasms	**2044**	**100.0**	**95.5**
Oral cavity organs and pharynx	68	3.3	3.2
Lips	23	1.1	1.1
Esophagus	16	0.8	0.7
Stomach	169	8.3	7.9
Colorectal	144	7.0	6.7
Liver and gull bladder channels	73	3.6	3.4
Pancreases	44	2.2	2.1
Other digestive organs	18	0.9	0.8
Nasal cavity, middle ear and accessory sinuses	32	1.6	1.5
Larynx	153	7.5	7.1
Trachea, bronchus and lung	433	21.2	20.2
Other respiratory and intrathoracic organs	28	1.4	1.3
Bone and articular cartilage	24	1.2	1.1
Malignant melanoma of skin	13	0.6	0.6
Other malignant neoplasms of skin	96	4.7	4.5
Mesothelial and soft tissue	27	1.3	1.3
Breast	10	0.5	0.5
Penis	10	0.5	0.5
Prostate	187	9.1	8.7
Testicle	37	1.8	1.7
Male genital organs, other localization	8	0.4	0.4
Kidney	70	3.4	3.3
Urinary bladder	94	4.6	4.4
Eyes, brain and other parts of central nervous system	60	2.9	2.8
Thyroid	5	0.2	0.2
Other endocrine glands	2	0.1	0.1
Ill-defined, secondary and unspecified sites	44	2.2	2.1
Hodgkin's disease	23	1.1	1.1
Malignant lymphomas	52	2.5	2.4
Leukaemias	65	3.2	3.0
Other lymphoid, haematopoietic and related tissue malignant neoplasms	9	0.4	0.4

Table 4.43 Malignant neoplasms, new cases according to stages (%), Georgia, 2006 – 2012

	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
2012	**4.5**	**22.1**	**25.6**	**40.1**	**7.7**

Table 4.44 Breast cancer, new cases according to stages (%), Georgia, 2007 – 2012

	I stage	II stage	III stage	IV stage	Unknown
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
2012	**6.0**	**35.8**	**30.7**	**24.8**	**2.7**

Table 4.45 Cervix uteri cancer, new cases according to stages (%), Georgia, 2007 – 2012

	I stage	II stage	III stage	IV stage	Unknown
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
2012	**9.0**	**23.3**	**34.4**	**22.2**	**11.1**

Table 4.46 Trachea, bronchus and lung cancer, new cases according to stages (%), Georgia, 2007 – 2012

	I stage	II stage	III stage	IV stage	Unknown
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
2012	**0.8**	**8.8**	**16.4**	**67.5**	**6.6**

Table 4.47 Prostate cancer, new cases according to stages (%), Georgia, 2007 – 2012

	I stage	II stage	III stage	IV stage	Unknown
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
2012	**2.1**	**17.1**	**27.3**	**44.4**	**9.1**

Table 4.48 Rectum, rectosigmoid junction, anus, anal canal cancer, new cases according to stages (%), Georgia, 2007 – 2012

	I stage	II stage	III stage	IV stage	Unknown
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**
2012	**1.0**	**21.7**	**29.7**	**37.6**	**10.0**

Table 4.49 Breast cancer, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Number of new cases	**1156**	**1211**	**952**	**1015**	**1023**	**1055**	**730**	**811**
Incidence rate per 100000 females	*49.4*	*51.5*	*40.9*	*43.7*	*44.2*	*45.2*	31.1	*34.5*
Number of cases enrolled by the end of the year	8174	8393	8448	8655	9019	9139	7275	6153
Prevalence rate per 100 000 population by the end of the year	353.9	363.4	366.0	375.3	389.4	391.4	309.9	261.9
Number of deaths	677	595	602	617	628	613	502	350
Mortality rate per 100 000 population	*29.3*	*25.8*	*26.1*	*26.8*	*27.1*	*25.3*	*21.4*	*14.9*
% of deaths of the total number of cases registered during the year	*7.5*	*6.3*	*6.4*	*6.5*	*6.4*	*6.2*	*5.9*	*5.2*
Number of deaths within a year of patients' first diagnoses	194	256	220	186	224	185	167	89
% of deaths within a year of patients' first diagnoses	*17.4*	*22.1*	*18.2*	*19.5*	*21.9*	*17.5*	*22.9*	*10.8*

Table 4.50 Cervix uteri cancer, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Number of new cases	**334**	**327**	**252**	**267**	**281**	**261**	**217**	**189**
Incidence rate per 100000 females	*14.5*	*14.1*	*10.9*	*11.6*	*12.1*	11.2	*9.2*	*8.0*
Number of cases enrolled by the end of the year	2374	2378	2372	2398	2464	2449	1991	1673
Prevalence rate per 100 000 females by the end of the year	*103.2*	*102.7*	*102.7*	*104.1*	*106.4*	*105.0*	*84.8*	*71.2*
Number of deaths	249	215	197	203	230	186	179	91
Mortality rate per 100 000 females	*10.8*	*9.3*	*8.5*	*8.8*	*9.9*	*8.0*	*7.6*	*4.1*
% of deaths of the total number of cases registered during the year	*9.2*	*8.0*	*7.5*	*7.7*	*8.4*	*6.9*	*7.7*	*5.0*
Number of deaths within a year of patients' first diagnoses	94	91	84	71	86	61	47	31
% of deaths within a year of patients' first diagnoses	*30.5*	*27.2*	*25.7*	*28.2*	*30.6*	*23.4*	*21.7*	*16.4*

Table 4.51 Prostate cancer, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Number of new cases	**187**	**228**	**186**	**205**	**222**	**254**	**169**	**187**
Incidence rate per 100000 males	9.1	11.0	8.9	9.9	10.6	11.9	7.8	8.7
Number of cases enrolled by the end of the year	441	472	475	511	555	618	536	517
Prevalence rate per 100 000 males by the end of the year	21.4	22.7	22.8	24.6	26.5	29.1	25.1	24.1
Number of deaths	137	169	159	162	186	168	140	88
Mortality rate per 100 000 males	6.6	8.1	7.6	7.8	8.9	7.9	6.6	4.1
% of deaths of the total number of cases registered during the year	23.7	26.4	25.1	24.1	25.1	21.4	19.9	14.3
Number of deaths within a year of patients' first diagnoses	63	80	83	92	89	89	57	30
% of deaths within a year of patients' first diagnoses	33.7	35.1	44.6	44.9	40.1	35.0	33.7	16.0

Table 4.52 Colorectal cancers, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Number of new cases	440	406	366	385	386	387	303	**290**
Incidence rate per 100000 population	10.1	9.2	8.3	8.8	8.8	8.7	6.8	6.5
Number of cases enrolled by the end of the year	1440	1426	1457	1513	1563	1642	1330	**1142**
Prevalence rate per 100 000 population by the end of the year	33.0	32.4	33.2	34.5	35.4	36.7	29.7	25.4
Number of deaths	368	324	283	289	346	255	265	**253**
Mortality rate per 100 000 population	8.4	7.4	6.4	6.6	7.8	5.7	5.9	5.6
% of deaths of the total number of cases registered during the year	20.4	18.5	16.3	16.0	18.1	13.4	16.6	13.4
Number of deaths within a year of patients' first diagnoses	173	190	143	139	168	118	104	**80**
% of deaths within a year of patients' first diagnoses	39.3	46.8	39.1	36.1	43.5	30.5	34.3	27.6

Table 4.53 Trachea, bronchus and lung cancer, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Number of new cases	**763**	**759**	**690**	**747**	**784**	**796**	**652**	**501**
Incidence rate per 100000 population	*17.49*	*17.25*	*15.72*	*17.04*	*17.77*	*17.87*	*14.54*	*11.2*
Number of cases enrolled by the end of the year	**1455**	**1327**	**1292**	**1335**	**1444**	**1532**	**1302**	**1156**
Prevalence rate per 100 000 population by the end of the year	*33.36*	*30.17*	*29.44*	*30.45*	*32.73*	*34.4*	*29.04*	*25.7*
Number of deaths	**651**	**695**	**639**	**655**	**672**	**646**	**590**	**381**
Mortality rate per 100 000 population	*14.92*	*15.8*	*14.56*	*14.94*	*15.23*	*14.5*	*13.15*	*8.48*
% of deaths of the total number of cases registered during the year	*30.03*	*31.68*	*31.68*	*31.87*	*31.37*	*29.42*	*29.54*	*24.04*
Number of deaths within a year of patients' first diagnoses	**431**	**445**	**396**	**412**	**361**	**333**	**331**	**202**
% of deaths within a year of patients' first diagnoses	*56.49*	*58.63*	*57.40*	*55.15*	*46.05*	*41.83*	*50.77*	*40.3*

Table 4.54 Data on special treatments of malignant neoplasms, Georgia, 2007 – 2012

	2007	2008	2009	2010	2011	2012
Number of patients in clinical group II*	**2253**	**2589**	**2525**	**2706**	**1957**	**2613**
The course of treatment completed	1684	2005	2130	2215	1658	2118
Including the following methods of treatment::						
Surgical	571	776	791	758	597	737
Radiotherapy	148	270	212	256	126	156
Medication	193	252	334	379	309	410
Combined	684	617	710	735	570	654
Complex	88	90	83	87	56	161

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

Table 4.55 Cancer, hospital discharges by regions, Georgia, 2011 – 2012

	2011			2012		
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Number of deaths	Case fatality rate (%)
Ajara	1159	16	1.4	1556	12	0.8
Tbilisi	12762	298	2.3	13253	410	3.1
Kakheti	68	5	7.4	477	9	1.9
Imereti	1572	22	1.4	1892	40	2.1
Samegrelo and Zemo Svaneti	39	3	7.7	146	3	2.1
Shida Kartli	23	3	13.0	71	4	5.6
Kvemo Kartli	93	3	3.2	43	1	2.3
Guria	15	2	13.3	73		
Samtskhe-Javakheti	7	2	28.6	16	3	18.8
Mtskheta-Mtianeti	2	1	50.0	1	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	123	10	8.1
Other departments	124	1	0.8	0	0	0.0
Georgia	**15864**	**356**	**2.2**	**17661**	**492**	**2.8**

Table 4.56 Cancer, hospital discharges in children under-15, by regions, Georgia, 2011 – 2012[*]

	2011			2012		
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Number of deaths	Case fatality rate (%)
Ajara	25	1	4.0	21	0	0.0
Tbilisi	952	9	0.9	795	15	1.9
Imereti	2	1	50.0	1	0	0.0
Georgia	**979**	**11**	**1.1**	**817**	**15**	**1.8**

[*] *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, 1990 – 2012

	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
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
2012	**25478**	**567.4**	**18546**	**413.0**	**11504**	**1509.5**	**8907**	**1168.7**

Table 4.58 Diseases of blood and blood-forming organs by regions, Georgia, 2011 – 2012

	2011				2012			
	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	1792	-	863	-	1454	--	573	--
Ajara	2479	632.2	1362	347.4	2372	602.2	1447	367.4
Tbilisi	2010	172.1	1113	95.3	5638	481.1	4379	373.6
Kakheti	2001	492.1	1472	36.0	2065	508.5	1473	362.7
Imereti	4351	616.3	3258	461.5	4791	678.9	3575	506.6
Samegrelo and Zemo Svaneti	2037	425.9	1511	315.9	2279	476.6	1654	345.9
Shida Kartli	1784	568.5	1490	474.8	1953	622.0	1642	522.9
Kvemo Kartli	1968	387.0	1581	310.9	2214	433.1	1735	339.4
Guria	1824	1300.1	1443	1028.5	1336	955.7	1036	741.1
Samtskhe-Javakheti	817	382.7	548	256.7	623	291.4	475	222.2
Mtskheta-Mtianeti	544	496.8	445	406.4	487	445.6	375	343.1
Racha-Lechkhumi and Kvemo Svaneti	159	336.9	131	277.5	107	229.1	72	154.2
Other departments	112	--	75	--	159	--	110	--
Georgia	**21878**	**488.0**	**15292**	**341.1**	**25478**	**567.4**	**18546**	**413.0**

Table 4.59 Diseases of blood and blood-forming organs in children by regions, Georgia, 2011 – 2012

	2011				2012			
	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	667	-	415	-	589	--	322	--
Ajara	1293	1944.4	832	1251.1	1394	2086.8	921	1378.7
Tbilisi	570	287.9	421	212.6	1837	923.6	1372	689.8
Kakheti	1115	1615.9	927	1343.5	1033	1499.3	822	1193.0
Imereti	2282	1906.4	1911	1596.5	2268	1893.2	1820	1519.2
Samegrelo and Zemo Svaneti	1193	1471.0	978	1205.9	1170	1440.9	953	1173.6
Shida Kartli	785	1475.6	681	1280.1	839	1574.1	748	1403.4
Kvemo Kartli	1422	1649.7	1184	1373.5	1139	1312.2	923	1063.4
Guria	1281	5382.4	1066	4479.0	728	3071.7	595	2510.5
Samtskhe-Javakheti	337	930.9	290	801.1	205	564.7	162	446.3
Mtskheta-Mtianeti	256	1376.3	213	1145.2	275	1486.5	245	1324.3
Racha-Lechkhumi and Kvemo Svaneti	75	937.5	70	875.0	22	278.5	21	265.8
Other departments	14	--	8	--	5	--	3	--
Georgia	**11290**	**1484.9**	**8996**	**1183.2**	**11504**	**1509.5**	**8907**	**1168.7**

Table 4.60 Diseases of the blood and blood-forming organs, hospital discharges and case fatality rates, Georgia, 2012

	Discharged from an in-patient facility			Children aged 0-15	
	Number of hospital discharges	Number of deaths	Case fatality rate (%)	Number of hospital discharges	Case fatality rate (%)
Ajara	131	2	1.5	9	0
Tbilisi	744	11	1.5	256	1
Kakheti	14	2	14.3	0	0
Imereti	167	3	1.8	31	0
Samegrelo and Zemo Svaneti	5	0	0	0	0
Shida Kartli	17	0	0	0	0
Kvemo Kartli	9	1	11.1	0	0
Guria	5	0	0	0	0
Samtskhe-Javakheti	0	0	0	0	0
Mtskheta-Mtianeti	15	0	0	0	0
Racha-Lechkhumi and Kvemo Svaneti	1	0	0	0	0
Other departments	1	0	0	0	0
Georgia	**1120**	**19**	**1.7**	**296**	**1**

Table 4.61 Anemia, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Total number of registered cases	**14236**	**14102**	**15828**	**16670**	**21914**	**20979**	**18545**	**23245**
Prevalence rate per 100000 population	*325.6*	*320.7*	*360.7*	*380.3*	*496.8*	*471.1*	*413.6*	*517.6*
Total number of new cases	**7751**	**8024**	**8976**	**10419**	**16012**	**15902**	**13734**	**17334**
Incidence rate per 100000 population	*177.3*	*182.5*	*204.5*	*237.7*	*363.0*	*357.1*	*306.3*	*386.0*

Table 4.62 Anemia in children under-15, Georgia, 2005 – 2012

	2005	2006	2007	2008	2009	2010	2011	2012
Total number of registered cases	**7851**	**6662**	**6930**	**7594**	**11449**	**11146**	**10339**	**10888**
Prevalence rate per 100000 population	*857.2*	*838.5*	*903.3*	*1009.6*	*1520.7*	*1470.4*	*1359.9*	*1428.7*
Total number of new cases	**4636**	**3883**	**4416**	**5177**	**9666**	**9472**	**8450**	**8505**
Incidence rate per 100000 population	*506.1*	*488.7*	*575.6*	*688.2*	*1283.8*	*1249.6*	*1111.4*	*1116.0*

Table 4.63 Anemia by regions, Georgia, 2011 – 2012

	2011				2012			
	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	1341	--	681	--	1032	--	444	--
Ajara	2149	548.1	1309	333.8	2300	583.9	1413	358.7
Tbilisi	1487	127.4	906	77.6	5137	438.3	4190	357.5
Kakheti	1846	454.0	1384	340.3	1966	484.1	1412	347.7
Imereti	3220	456.1	2613	370.1	4314	611.3	3225	457.0
Samegrelo and Zemo Svaneti	1855	387.8	1430	299.0	2120	443.3	1573	328.9
Shida Kartli	1715	546.5	1444	460.2	1892	602.5	1601	509.9
Kvemo Kartli	1739	342.0	1400	275.3	1988	388.9	1542	301.6
Guria	1730	1233.1	1426	1016.4	1285	919.2	1017	727.5
Samtskhe-Javakheti	708	331.6	514	240.7	573	268.0	445	208.1
Mtskheta-Mtianeti	508	463.9	429	391.8	433	396.2	345	315.6
Racha-Lechkhumi and Kvemo Svaneti	150	317.8	126	266.9	100	214.1	66	141.3
Other departments	97	--	72	--	105	--	61	--
Georgia	**18545**	**413.6**	**13734**	**306.3**	**23245**	**517.6**	**17334**	**386.0**

Table 4.64 Endocrine, nutritional and metabolic diseases, Georgia, 2000 – 2012

	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
2012	**133419**	**2971.0**	**60284**	**1342.4**	**4797**	**629.4**	**5222**	**685.2**

Table 4.65 Some endocrine, nutritional and metabolic diseases, Georgia, 2011 – 2012

	2011				2012			
	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	**140267**	**3128.6**	**41141**	**917.6**	**133419**	**2971.0**	**60284**	**1342.4**
Including:								
Sub clinical iodine-deficiency hypothyroidism and other hypothyroidism	26503	591.1	7457	166.3	25402	565.7	14963	333.2
Other non-toxic goitre	15756	351.4	6107	136.2	4583	102.1	3905	87.0
Thyrotoxicosis (hyperthyroidism)	5576	124.4	2163	48.2	5601	124.7	2894	64.4
Diabetes mellitus insulin dependent (type I)	17889	399.0	2754	61.4	16225	361.3	3717	82.8
Diabetes mellitus non-insulin dependent (type II)	57442	1281.2	9415	210.0	59632	1327.9	11857	264.0

Table 4.66 Endocrine, nutritional and metabolic diseases by regions, Georgia, 2012

	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	3027	--	74	--	1359	--	96	--
Ajara	14128	3586.7	457	684.1	4188	1063.2	702	1050.9
Tbilisi	48637	4149.9	1573	790.8	18751	1599.9	827	415.8
Kakheti	9965	2453.8	314	455.7	4013	988.2	469	680.7
Imereti	20210	2863.8	481	401.5	9987	1415.2	556	464.1
Samegrelo and Zemo Svaneti	7495	1567.3	328	403.9	2913	609.2	591	727.8
Shida Kartli	10024	3192.4	732	1373.4	6048	1926.1	805	1510.3
Kvemo Kartli	9515	1861.3	311	358.3	7196	1407.7	709	816.8
Guria	1714	1226.0	103	434.6	481	344.1	133	561.2
Samtskhe-Javakheti	3823	1788.1	255	702.5	1635	764.7	144	396.7
Mtskheta-Mtianeti	2822	2581.9	131	708.1	1385	1267.2	146	789.2
Racha-Lechkhumi and Kvemo Svaneti	1252	2680.9	29	367.1	247	528.9	32	405.1
Other departments	798	--	9	--	1870	--	12	--
Georgia	**133419**	**2971.0**	**4797**	**629.4**	**60284**	**1342.4**	**5222**	**685.2**

Table 4.67 Diabetes mellitus, Georgia, 2010 – 2012

	2010		2011		2012	
New cases	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**
Diabetes mellitus	**11026**	**247.6**	**12606**	**281.2**	**16714**	**372.2**
Including:						
Insulin-dependent diabetes mellitus (Type I)	2894	65.0	2754	61.4	3717	82.8
Non-insulin-dependent diabetes mellitus (Type II)	7756	174.2	9415	210.0	11857	264.0
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	**71205**	**1599.1**	**76619**	**1708.9**	**79169**	**1763.0**
Including:						
Insulin-dependent diabetes mellitus (Type I)	17517	393.4	17889	399.0	16225	361.3
Non-insulin-dependent diabetes mellitus (Type II)	52776	1185.2	57442	1281.2	59632	1327.9

Table 4.68 Diabetes mellitus in children, Georgia, 2010 – 2012

	2010		2011		2012	
New cases	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**	**Total number**	**Incidence per 100000 population**
Diabetes mellitus	**63**	**8.3**	**78**	**10.3**	**158**	**20.7**
Including:						
Insulin-dependent diabetes mellitus (Type I)	35	4.6	41	5.4	122	16.0
Non-insulin-dependent diabetes mellitus (Type II)	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	**238**	**31.4**	**263**	**34.6**	**347**	**45.0**
Including:						
Insulin-dependent diabetes mellitus (Type I)	189	24.9	190	25.0	285	37.4
New cases	32	4.2	38	5.0	--	

Table 4.69 Diabetes mellitus, morbidity by regions, Georgia, 2012

	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	1450	-	2	-	255	-	0	-
Ajara	8559	2172.9	8	12.0	1037	263.3	12	18.0
Tbilisi	27062	2309.0	135	67.9	4202	358.5	23	11.6
Kakheti	6446	1587.3	21	30.5	1390	342.3	12	17.4
Imereti	13472	1909.0	43	35.9	3069	434.9	17	14.2
Samegrelo and Zemo Svaneti	3476	726.9	22	27.1	755	157.9	6	7.4
Shida Kartli	5725	1823.2	58	108.8	1733	551.9	45	84.4
Kvemo Kartli	6807	1331.6	18	20.7	3148	615.8	20	23.0
Guria	1069	764.7	11	46.4	151	108.0	11	46.4
Samtskhe-Javakheti	2505	1171.7	19	52.3	438	204.9	8	22.0
Mtskheta-Mtianeti	1364	1247.9	6	32.4	354	323.9	3	16.2
Racha-Lechkhumi and Kvemo Svaneti	853	1826.6	3	38.0	124	265.5	0	0
Other departments	381	-	1	-	58	-	1	-
Georgia	**79169**	**1763.0**	**347**	**45.5**	**16714**	**372.2**	**158**	**20.7**

Table 4.70 Endocrine, nutritional and metabolic diseases, hospital discharges, Georgia, 2011– 2012

	2011				2012			
	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	**3163**	**1.9**	**248**	**0.0**	**3586**	**2.1**	**196**	**0.0**
Including:								
Thyrotoxicosis	297	0.3	0	0.0	277	0.4	1	0.0
Diabetes mellitus	1738	2.6	219	0.0	2084	3.2	177	0.0

Table 4.71 Endocrine, nutritional and metabolic diseases, hospital discharges according to regions, Georgia, 2011 - 2012

	2011				2012			
	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	354	0.3	2	0.0	376	1.9	3	0.0
Tbilisi	1543	1.7	221	0.0	1832	1.6	178	0.0
Kakheti	176	4.5	0	0.0	344	2.9	5	0.0
Imereti	592	1.9	15	0.0	573	1.2	9	0.0
Samegrelo and Zemo Svaneti	146	2.7	4	0.0	146	7.5	0	0.0
Shida Kartli	82	2.4	0	0.0	33	0.0	0	0.0
Kvemo Kartli	96	2.1	3	0.0	110	3.6	1	0.0
Guria	37	5.4	1	0.0	9	0.0	0	0.0
Samtskhe-Javakheti	66	6.1	1	0.0	52	17.3	0	0.0
Mtskheta-Mtianeti	2	0.0	0	0.0	6	0.0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	7	0.0	0	0.0	8	0.0	0	0.0
Other departments	62	0.0	1	0.0	97	0.0	0	0.0
Georgia	**3163**	**1.9**	**248**	**0.0**	**3586**	**2.1**	**196**	**0.0**

Table 4.72 Thyroid gland screenings, Georgia, 2010 – 2012

	2010		2011		2012	
	Total number	%	Total number	%	Total number	%
Referred to medical institutions						
Total	**37856**	**100**	**33850**	**100**	**43772**	**100**
Total number of thyroid gland hyperplasia	23814	62.9	21487	63.5	25310	57.8
Prescribed treatment	22170	93.1	19474	90.6	22745	89.9
Including children						
Total	**6130**	**100**	**3922**	**100**	**4864**	**100**
Total number of thyroid gland hyperplasia	3389	55.3	2200	56.1	2182	44.9
Prescribed treatment	3109	91.7	1614	73.4	1944	89.1

Table 4.73 Distribution of cases of thyroid gland enlargement by stages, Georgia, 2011 – 2012

	2011						2012					
	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	**21487**	**63.5**	**36.0**	**24.0**	**27.7**	**12.2**	**25310**	**57.8**	**29.2**	**27.3**	**28.4**	**15.0**
Including children	2200	56.1	42.6	27.9	26.0	3.5	2182	44.9	45.3	31.8	18.5	4.4

Table 4.74 Distribution of cases of thyroid gland enlargement by regions, screening results, Georgia, 2012

	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	2295	891	38.8	1093	120	11.0
Ajara	6045	3726	61.6	595	287	48.2
Tbilisi	10587	5888	55.6	544	217	39.9
Kakheti	2900	1109	38.2	720	329	45.7
Imereti	10747	7307	68.0	338	233	68.9
Samegrelo and Zemo Svaneti	3371	1600	47.5	316	230	72.8
Shida Kartli	4764	3479	73.0	815	582	71.4
Kvemo Kartli	1081	343	31.7	31	30	96.8
Guria	42	42	100.0	1	1	100.0
Samtskhe-Javakheti	661	465	70.3	220	74	33.6
Mtskheta-Mtianeti	852	331	38.8	149	49	32.9
Racha-Lechkhumi and Kvemo Svaneti	105	43	41.0	42	30	71.4
Other departments	99	70	70.7	0		
Georgia	**43772**	**25310**	**57.8**	**4864**	**2182**	**44.9**

Table 4.75 Prevention of iodine deficiency activity, Georgia, 2006-2012

	2006	2007	2008	2009	2010	2011	2012
Total number of iodine deficiency preventions	24910	25471	24805	21521	13395	10311	13173
Including children	11205	1000 1	12369	7113	3351	2138	2737

Table 4.76 Mental and behavioral disorders, Georgia, 1990 -2012

	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
2012	**78296**	**1743.5**	**4075**	**90.7**	**1357**	**178.0**	**183**	**24.0**

Table 4.77 Mental and behavioural disorders by regions, Georgia, 2011 – 2012[*]

	2011				2012			
	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	1221	--	20	--	1233	--	14	--
Ajara	7594	1936.8	111	28.3	7688	1951.8	106	26.9
Tbilisi	3310	283.5	393	33.7	16948	1446.1	2360	201.4
Kakheti	6331	1557.1	210	51.6	5363	1320.6	152	37.4
ImereTi	18566	2629.7	475	67.3	17689	2506.6	397	56.3
Samegrelo and Zemo Svaneti	11523	2409.2	142	29.7	9545	1996.0	109	22.8
Shida Kartli	7591	2419.1	213	67.9	7829	2493.3	293	93.3
Kvemo Kartli	5982	1176.4	175	34.4	5080	993.7	342	66.9
Guria	3110	2216.7	99	70.6	3159	2259.7	88	62.9
Samtskhe-Javakheti					2032	950.4	84	39.3
Mtskheta-Mtianeti	2508	2290.4	32	29.2	1628	1489.5	109	99.7
Racha-Lechkhumi and Kvemo Svaneti	0	--	0	--	102	218.4	21	45.0
Georgia	**67736**	**1510.8**	**1870**	**41.7**	**78296**	**1743.5**	**4075**	**90.7**

[*] *Data from psychoneurological inpatient facilities*

Table 4.78 Mental and behavioral disorders in children by regions, Georgia, 2011 – 2012

	2011				2012			
	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	267	401.5	11	16.5	277	158.7	12	18.0
Tbilisi	68	34.3	13	6.6	355	84.0	141	23.6
Kakheti	126	182.6	17	24.6	136	197.4	18	26.1
ImereTi	294	245.6	66	55.1	325	271.3	32	26.7
Samegrelo and Zemo Svaneti	195	240.4	10	12.3	191	203.2	25	7.4
Shida Kartli	104	195.5	5	9.4	12	202.6	1	33.8
Kvemo Kartli	60	69.6	9	10.4	92	106.0	35	40.3
Guria	27	113.4	2	8.4	21	88.6	0	0.0
Samtskhe-Javakheti	0	--	0	--	92	148.8	44	41.3
Mtskheta-Mtianeti	18	96.8	4	21.5	7	37.8	0	0.0
Georgia	**1159**	**152.4**	**137**	**18.0**	**1357**	**178.1**	**183**	**24.0**

Table 4.79 Mental and behavioural disorders by certain nosologies, Georgia, 2012

	Number of new cases	Number of registered cases by the end of the year	Incidence per 100000 population	Prevalence per 100000 population
All cases	**4075**	**78296**	**90.7**	**1743.5**
Organic, including symptomatic, mental disorders	676	11165	15.1	248.6
Including: dementia in other specified diseases classified elsewhere (developed during epilepsy (G40.-+))	105	2414	2.3	53.8
organic personality disorders (including limbic epilepsy personality syndrome)	218	5538	4.9	123.3
Mental and behavioural disorders due to psychoactive substances use	36	2228	0.8	49.6
Schizophrenia, schizotypal and delusional disorders	1204	23871	26.8	531.6
Including: schizophrenia	*437*	*14955*	*9.7*	*333.0*
schizotypal disorders	*200*	*2827*	*4.5*	*63.0*
persistent delusional disorders	*155*	*2313*	*3.5*	*51.5*
acute and transient psychotic disorders	*240*	*1254*	*5.3*	*27.9*
schizoaffective disorders	*157*	*2292*	*3.5*	*51.0*
Mood (affective) disorders	618	6262	13.8	139.4
Including: maniac episode	*70*	*908*	*1.6*	*20.2*
bipolar affective disorder	*189*	*1460*	*4.2*	*32.5*
depressive episode	*240*	*1889*	*5.3*	*42.1*
recurrent depressive disorders	*116*	*1919*	*2.6*	*42.7*
Neurotic, stress-related and somatoform disorders	522	9060	11.6	201.8
Behavioural syndromes associated with physiological disturbances and physical factors	1	429	0.0	9.6
Disorders of adult personality and behaviour	257	2793	5.7	62.2
Mental retardation	701	20905	15.6	465.5
Disorders of psychological development	19	1128	0.4	25.1
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	41	455	0.9	10.1

Table 4.80 Mental and behavioral disorders registered by the end of the year, by age and sex, Georgia, 2012

	Total	Including : aged				Females
		0-14	15-17	18-19	20-59	
Mental and behavioural disorders	**78296**	**1357**	**960**	**1387**	**55109**	**29223**
Including:						
Organic, including symptomatic, mental disorders	11165	181	141	193	7293	3589
Mental and behavioural disorders due to psychoactive substances use	2228	0	0	20	1558	119
Schizophrenia, schizotypal and delusional disorders	23871	9	41	158	17667	9451
Including schizophrenia	*14955*	*2*	*24*	*92*	*9290*	*5434*
Mood (affective) disorders	6262	85	72	249	4535	2674
Neurotic, stress-related and somatoform disorders	9060	2	44	78	7753	5171
Behavioural syndromes associated with physiological disturbances and physical factors	429	0	0	0	407	159
Disorders of adult personality and behaviour	2793	0	0	126	1753	534
Mental retardation	20905	903	583	525	12941	6838
Disorders of psychological development	1128	71	46	37	955	521
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	455	106	33	1	247	167

Table 4.81 Mental and behavioral disorders, new cases, age and sex distribution, Georgia, 2012

	Total	Including : aged				Females
		0-14	15-17	18-19	20-59	
Mental and behavioural disorders	**4075**	**183**	**75**	**402**	**2351**	**1461**
Including:						
Organic, including symptomatic, mental disorders	676	1	6	38	346	159
Mental and behavioural disorders due to psychoactive substances use	36	0	5	15	13	6
Schizophrenia, schizotypal and delusional disorders	1204	1	6	39	804	420
Including schizophrenia	437	0	0	10	281	134
Mood (affective) disorders	618	1	4	49	449	300
Neurotic, stress-related and somatoform disorders	522	2	2	25	456	358
Behavioural syndromes associated with physiological disturbances and physical factors	1	0	0	0	0	0
Disorders of adult personality and behaviour	257	0	0	176	80	51
Mental retardation	701	150	43	60	200	149
Disorders of psychological development	19	5	0	0	1	3
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	41	23	9	0	2	15

Table 4.82 Mental and behavioural disorders, hospital discharges by regions, Georgia, 2012

	Number of discharges	Including hospital deaths	Case fatality rate (%)
Total	**3243**	**34**	**1.0**
Including:			
Organic, including symptomatic, mental disorders	381	3	0.8
Mental and behavioural disorders due to psychoactive substances use	139	2	1.4
Schizophrenia, schizotypal and delusional disorders	2316	24	1.0
Including schizophrenia	1610	21	1.3
Mood (affective) disorders	*200*	*4*	*2.0*
Neurotic, stress-related and somatoform disorders	*24*	*0*	*0*
Behavioural syndromes associated with physiological disturbances and physical factors	*2*	*0*	*0*
Disorders of adult personality and behaviour	*27*	*0*	*0*
Mental retardation	153	1	0.7

Table 4.83 Mental and behavioural disorders, hospital discharges, Georgia, 2010 - 2012

	2010	2011	2012
Number of discharges	3734	3138	3243
Including: deaths	56	46	34
Case fatality rate (%)	*1.5*	*1.5*	*1.0*
Number of patient treated in the diurnal hospitals	593	680	1175

Table 4.84 Diseases of the nervous system, Georgia, 2007 - 2012

	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
2012	**156826**	**3492.2**	**68169**	**1518.0**	**26115**	**3426.7**	**8130**	**1066.8**

Table 4.85 Diseases of the nervous system, morbidity by the regions, Georgia, 2011 – 2012

	2011				2012			
	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	6406	--	2577	--	4872		1987	--
Ajara	10533	2686.3	3464	883.4	7160	1817.7	2982	757.0
Tbilisi	64546	5528.1	15081	1291.6	73279	6252.5	20962	1788.6
Kakheti	6334	1557.8	2070	509.1	8099	1994.3	2897	713.4
Imereti	16461	2331.6	8020	1136.0	21627	3064.6	13594	1926.3
Samegrelo and Zemo Svaneti	5920	1237.7	1730	361.7	8869	1854.7	3720	777.9
Shida Kartli	8024	2557.0	5254	1674.3	9753	3106.1	6746	2148.4
Kvemo Kartli	10028	1972.1	5165	1015.7	10591	2071.8	7110	1390.8
Guria	1092	778.3	407	290.1	1662	1188.8	454	324.7
Samtskhe-Javakheti	2115	990.6	788	369.1	2200	1029.0	1050	491.1
Mtskheta-Mtianeti	2353	2148.9	1001	914.2	2989	2734.7	1553	1420.9
Racha-Lechkhumi and Kvemo Svaneti	922	1953.4	472	1000 .0	936	2004.3	419	897.2
Other departments	8983	--	66	--	4789	--	4695	--
Georgia	**143717**	**3204.5**	**46095**	**1028.1**	**156826**	**3492.2**	**68169**	**1518.0**

Table 4.86 Diseases of the nervous system in children by the regions, Georgia, 2011 – 2012

	2011				2012			
	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	541	--	306	--	188	--	69	--
Ajara	1033	1553.4	411	618.0	638	955.1	151	226.0
Tbilisi	16416	8290.9	3186	1609.1	18504	9303.2	3736	1878.3
Kakheti	797	1155.1	371	537.7	726	1053.7	381	553.0
Imereti	1862	1555.6	1092	912.3	1951	1628.5	1143	954.1
Samegrelo and Zemo Svaneti	937	1155.4	439	541.3	1308	1610.8	773	952.0
Shida Kartli	2458	4620.3	2092	3932.3	686	1287.1	467	876.2
Kvemo Kartli	3368	3907.2	2181	2530.2	1583	1823.7	1235	1422.8
Guria	251	1054.6	95	399.2	212	894.5	76	320.7
Samtskhe-Javakheti	270	745.9	97	268.0	204	562.0	48	132.2
Mtskheta-Mtianeti	118	634.4	58	311.8	96	518.9	44	237.8
Racha-Lechkhumi and Kvemo Svaneti	20	250.0	4	50.0	13	164.6	2	25.3
Other departments	8	--	8	--	6	--	5	--
Georgia	**28079**	**3693.1**	**10340**	**1360.0**	**26115**	**3426.7**	**8130**	**1066.8**

Table 4.87 Diseases of the nervous system by certain nosologies, Georgia, 2011 – 2012

	2011				2012			
	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	**143717**	**3205.5**	**46095**	**1028.1**	**156826**	**3492.2**	**68169**	**1518.0**
Including:								
Inflammatory diseases of the central nervous system	6554	146.2	3209	71.6	5977	133.1	2982	66.4
Systemic atrophies primarily affecting the central nervous system	2363	52.7	986	22.0	3289	73.2	2096	46.7
Extrapyramidal and movement disorders	9517	212.3	2048	45.7	11787	262.5	3552	79.1
Other degenerative and demyelinating diseases of the nervous system	2607	58.1	883	19.7	5504	122.6	2818	62.8
Episodic and paroxysmal disorders	26246	585.4	5771	128.7	29986	667.7	14314	318.7
Including: Epilepsy and status epilepticus	*11498*	*256.5*	*1686*	*37.6*	10022	223.2	1961	43.7
Disorders of the peripheral nervous system	46594	1039.3	16765	373.9	50917	1133.8	23917	532.6
Cerebral palsy and other paralytic syndromes	8107	180.8	2487	55.5	7955	177.1	2460	54.8

Table 4.88 Diseases of the nervous system in children by certain nosologies, Georgia, 2011 – 2012

	2011				2012			
	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	**28079**	**3693.1**	**10340**	**1360.0**	**26115**	**3426.7**	**8130**	**1066.8**
Including:								
Inflammatory diseases of the central nervous system	2249	295.8	1987	261.3	590	77.4	299	39.2
Systemic atrophies primarily affecting the central nervous system	462	60.8	279	36.7	153	20.1	82	10.8
Extrapyramidal and movement disorders	947	124.6	300	39.5	458	60.1	185	24.3
Other degenerative and demyelinating diseases of the nervous system	195	25.6	124	16.3	105	13.8	36	4.7
Episodic and paroxysmal disorders	5283	694.9	2090	274.9	5298	695.2	2484	325.9
Including: Epilepsy and status epilepticus	*2272*	*298.8*	*389*	*51.2*	2227	292.2	521	68.4
Disorders of the peripheral nervous system	1225	161.1	406	53.4	1172	153.8	490	64.3
Cerebral palsy and other paralytic syndromes	2100	276.2	553	72.7	2297	301.4	647	84.9

Table 4.89 Diseases of the nervous system, hospital discharges, Georgia, 2011 – 2012

	2011		2012	
	Hospital discharges	Case fatality rate (%)	Hospital discharges	Case fatality rate (%)
Diseases of the nervous system	**6545**	**3.5**	**10097**	**3.8**
Including:				
Cerebral palsy in children	70	4.3	135	1.5
Disorders of the peripheral nervous system	939	0.9	437	0.9

Table 4.90 Diseases of the nervous system, hospital discharges in children, Georgia, 2011 – 2012

	2011				2012			
			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	**1351**	**1.2**	**538**	**1.5**	**1235**	**1.1**	**276**	**0.7**
Including:								
Infantile cerebral palsy	64	4.7	3	0.0	81	2.5	1	0
Disorders of the peripheral nervous system	360	0.0	287	0.0	23	4.5	2	0

Table 4.91 Diseases of the nervous system, hospital discharges by regions, Georgia, 2011 – 2012

	2011				2012			
	Hospital discharges		Case fatality rate (%)		Hospital discharges		Case fatality rate (%)	
	All ages	Children	All ages	Children	All ages	Children	All ages	Children
Ajara	1059	159	0.9	0.6	883	68	1,4	0.0
Tbilisi	2401	656	4.0	1.4	2918	861	3,2	1.4
Kakheti	524	8	6.7	0.0	615	6	4,6	0.0
Imereti	846	377	3.5	1.1	2125	164	5,0	1.2
Samegrelo and Zemo Svaneti	226	65	0.0	0.0	1295	66	3,4	0.0
Shida Kartli	629	51	6.4	2.0	671	56	2,1	0.0
Kvemo Kartli	165	14	3.0	7.1	627	3	7,5	0.0
Guria	142	19	4.2	0.0	302	10	2,0	0.0
Samtskhe-Javakheti	165	2	1.2	0.0	169	1	0,6	0.0
Mtskheta-Mtianeti	3	0	0.0	0.0	8	0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	40	0	2.5	0.0	202	0	4,0	0.0
Other departments	345	0	1.2	0.0	282	0	7.1	0.0
Georgia	**6545**	**1351**	**3.5**	**1.2**	**10097**	**1235**	**3.8**	**1.1**

Table 4.92 Nervous system surgeries and case fatality rate, Georgia, 2010 – 2012

	2010		2011		2012	
	Number of operations	Case fatality rate, (%)	Number of operations	Case fatality rate, (%)	Number of operations	Case fatality rate, (%)
Total number of operations	**3387**	**2.5**	**3609**	**1.5**	**4062**	**2.6**
Including on:						
Brain	1013	4.2	1126	1.6	1439	6.5
Spinal cord	66	1.5	244	0.4	206	0.5
Dura and pia maters	107	10.7	36	11.1	91	12.1
Peripheral nervous system	109	0.9	103	0.0	96	0.0
Intervertebral disks	1960	0.0	1979	0.1	1920	0.0

Table 4.93 Nervous system surgeries by regions, Georgia, 2012*

	Total	Including on				
		Brain	Spinal cord	Dura and pia maters	Peripheral nervous system	Intervertebral disks
Ajara	303	7	10	2	1	283
Tbilisi	2996	1133	173	73	95	1212
Imereti	437	199	1	8	0	229
Samegrelo and Zemo Svaneti	120	57	0	0	0	63
Shida Kartli	103	26	22	6	0	49
Kvemo Kartli	2	2				
Other departments	101	15	0	2	0	84
Georgia	**4062**	**1439**	**206**	**91**	**96**	**1920**

Table 4.94 Diseases of the eye and adnexa, Georgia, 2007 – 2012

	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
2012	**159139**	**3543.7**	**77822**	**1733.0**	**20442**	**2682.3**	**11359**	**1490.5**

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

Table 4.95 Diseases of the eye and adnexa by certain nosologies, Georgia, 2011 – 2012

	2011				2012			
	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	**138351**	**3085.9**	**51745**	**1154.1**	**159139**	**3543.7**	**77822**	**1733.0**
Including:								
Disorders of lens (cataract)	39353	877.7	11807	263.3	49253	1096.8	23333	519.6
Glaucoma	13088	291.9	3894	86.9	15507	345.3	6671	148.6
Disorders of refraction and accommodation	43664	973.9	18262	407.3	50924	1134.0	24739	550.9

Table 4.96 Diseases of the eye and adnexa in children, certain nosologies, Georgia, 2011 – 2012

	2011				2012			
	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	**18423**	**2423.1**	**10296**	**1354.2**	**20442**	**2682.3**	**11359**	**1490.5**
Including:								
Disorders of lens (cataract)	212	27.9	86	11.3	208	27.3	65	8.5
Glaucoma	61	8.0	16	2.1	59	7.7	11	1.4
Disorders of refraction and accommodation	8316	1093.8	2826	371.7	11528	1512.7	5497	721.3

Table 4.97 Diseases of the eye and adnexa by regions, Georgia, 2011 – 2012

	2011				2012			
	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	4830	--	1314	--	4373	--	1785	--
Ajara	12934	3298.6	6152	1569.0	12716	3228.2	6779	1721.0
Tbilisi	62870	5384.5	14932	1278.9	66555	5678.8	19577	1670.4
Kakheti	6617	1627.4	2387	587.1	8027	1976.6	3391	835.0
Imereti	16449	2329.9	8176	1158.1	22342	3165.9	15275	2164.5
Samegrelo and Zemo Svaneti	5131	1072.8	2240	468.3	9547	1996.4	6249	1306.8
Shida Kartli	7811	2489.2	5405	1722.4	10016	3189.8	7627	2429.0
Kvemo Kartli	10073	1980.9	6303	1239.5	13263	2594.5	9052	1770.7
Guria	2444	1742.0	987	703.5	1522	1088.7	644	460.7
Samtskhe-Javakheti	2490	1174.5	1573	742.0	2915	1363.4	1936	905.5
Mtskheta-Mtianeti	2115	1938.6	1116	1022.9	3384	3096.1	2397	2193.0
Racha-Lechkhumi and Kvemo Svaneti	808	1701.1	305	642.1	879	1882.2	280	599.6
Other departments	2149	--	1712	--	3600	--	2830	--
Georgia	**124576**	**2797.7**	**49531**	**1112.4**	**159139**	**3543.7**	**77822**	**1733.0**

Table 4.98 Diseases of the eye and adnexa in children by regions, Georgia, 2011 – 2012

	2011				2012			
	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	815	--	339	--	512	--	319	--
Ajara	1733	2606.0	1087	1634.6	2863	4285.9	1769	2648.2
Tbilisi	8217	4150.0	3588	1812.1	10352	5204.6	4692	2359.0
Kakheti	873	1265.2	504	730.4	756	1097.2	397	576.2
Imereti	2472	2065.2	1325	1106.9	2619	2186.1	1783	1488.3
Samegrelo and Zemo Svaneti	457	563.5	284	350.2	541	666.3	327	402.7
Shida Kartli	1183	2223.7	1103	2073.3	820	1538.5	710	1332.1
Kvemo Kartli	1636	1897.9	1387	1609.0	1131	1303.0	783	902.1
Guria	432	1815.1	334	1403.4	281	1185.7	150	632.9
Samtskhe-Javakheti	283	781.8	128	353.6	236	650.1	202	556.5
Mtskheta-Mtianeti	257	1381.7	178	957.0	256	1383.8	187	1010.8
Racha-Lechkhumi and Kvemo Svaneti	37	462.5	14	175.0	25	316.5	7	88.6
Other departments	28	--	25	--	50	--	33	--
Georgia	**18423**	**2423.1**	**10296**	**1354.2**	**20442**	**2682.3**	**11359**	**1490.5**

Table 4.99 Diseases of the eye and adnexa, hospital discharges, Georgia, 2011 – 2012

	2011			2012		
	Hospital discharges	Including children		Hospital discharges	Including children	
		0-15	0-1		0-15	0-1
Diseases of the eye and adnexa	**6105**	**268**	**13**	**5326**	**283**	**23**
Including:						
Disorders of lens (cataract)	3365	37	1	3120	44	0
Glaucoma	581	10	0	593	12	7

Table 4.100 Eye and adnexa surgery, Georgia, 2009 – 2012

	2009	2010	2011	2012
In-patient operations				
Total	**5124**	**5723**	**6017**	**6643**
Including: glaucoma operations	*594*	*588*	*614*	821
enucleating surgery	*132*	*213*	*135*	198
cataract operations	*2803*	*3405*	*3680*	4162
Among total number of operations - microsurgery	3372	4435	3661	4540
Out-patient operations				
Total	**6751**	**7365**	**6961**	**6471**
Including: glaucoma operations	*730*	*318*	*748*	770
cataract operations	*4123*	*4370*	*4351*	3826
Among total number of operations - microsurgery	3162	5123	1459	1655

Table 4.101 Diseases of the eye and adnexa, in-patient surgeries by regions, Georgia, 2011-2012

	2011				2012			
	Total	Including			Total	Including		
		Glaucoma	Enucleating	Cataract		Glaucoma	Enucleating	Cataract
Ajara	832	21	4	643	1183	103	52	909
Tbilisi	2249	195	78	938	2595	270	97	1273
Kakheti	365	56	16	280	379	42	15	293
Imereti	1839	279	32	1209	1721	292	26	1154
Samegrelo and Zemo Svaneti	331	10	2	318	37	0	0	35
Shida Kartli	65	15	35	190	60	4	1	55
Kvemo Kartli	268	32	3	211	237	20	2	198
Guria	22	0	0	22	216	34	2	180
Samtskhe-Javakheti	34	6	0	22	36	13	3	20
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0	83	0	0	0
Mtskheta-Mtianeti	0	0	0	0	87	42	0	45
Other departments	12	0	0	2	9	1	0	0
Georgia	**6017**	**614**	**170**	**3839**	**6643**	**821**	**198**	**4162**

Table 4.102 Diseases of the eye and adnexa, out-patient surgeries by regions, Georgia, 2011 – 2012

	2011				2012			
	Total	Including			Total	Including		
		Glaucoma	Enucleating	Cataract		Glaucoma	Enucleating	Cataract
Ajara	9	1	0	0	14	8	1	3
Tbilisi	5495	823	634	3402	4531	1591	523	2430
Kakheti	177		11	166	381	11	27	340
Imereti	784	590	81	509	688	33	137	518
Samegrelo and Zemo Svaneti	4	4	0	173	5	4	0	0
Shida Kartli	294	32	20	20	339		37	158
Kvemo Kartli	85	1	2	81	183	2	10	106
Guria	90	6	0	0	215	5	33	177
Samtskhe-Javakheti	21	2	0	0	32	1	2	11
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0	83	0	0	83
Mtskheta-Mtianeti	2	0	0	0	0	0	0	0
Georgia	**6961**	**1459**	**748**	**4351**	**6471**	**1655**	**770**	**3826**

Table 4.103 Diseases of the ear and mastoid process, Georgia, 2007- 2012

	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
2012	**70444**	**1568.7**	**53128**	**1183.1**	**20356**	**2671.0**	**17172**	**2253.2**

Table 4.104 Diseases of the ear and mastoid process, Georgia, 2011–2012

	2011				2012			
	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	**45463**	**1014.0**	**29862**	**666.1**	**70444**	**1568.7**	**53128**	**1183.1**
Including:								
Otitis media	19533	435.7	12877	287.2	32495	723.6	25175	560.6

Table 4.105 Diseases of the ear and mastoid process in children, Georgia, 2011 – 2012

	2011				2012			
	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	**14797**	**1946.2**	**12269**	**1613.7**	**20356**	**2671.0**	**17172**	**2253.2**
Including:								
Otitis media	7220	949.6	5881	773.5	11921	1564.2	10082	1322.9

Table 4.106 Diseases of the ear and mastoid process, morbidity rates by regions, Georgia, 2011 – 2012

	2011				2012			
	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	2978	--	1079	--	2590	--	1009	--
Ajara	5208	1328.2	2953	753.1	6367	1616.4	3437	872.6
Tbilisi	11130	953.2	6955	595.7	19927	1700.3	14583	1244.3
Kakheti	2639	649.0	1831	450.3	3554	875.2	2025	498.6
Imereti	7937	1124.2	6316	894.6	12671	1795.5	10957	1552.6
Samegrelo and Zemo Svaneti	3376	705.8	2035	425.5	4989	1043.3	3557	743.8
Shida Kartli	2545	811.0	1949	621.1	8276	2635.7	7525	2396.5
Kvemo Kartli	4999	983.1	3422	673.0	5990	1171.8	5278	1032.5
Guria	1299	925.9	1090	776.9	913	653.1	699	500.0
Samtskhe-Javakheti	858	401.9	647	303.0	1714	801.7	1208	565.0
Mtskheta-Mtianeti	1017	928.8	849	775.3	1464	1339.4	1182	1081.4
Racha-Lechkhumi and Kvemo Svaneti	220	466.1	162	343.2	675	1445.4	386	826.6
Other departments	1257	--	574	--	1314	--	1282	--
Georgia	**45463**	**1014.0**	**29862**	**666.1**	**70444**	**1568.7**	**53128**	**1183.1**

Table 4.107 Diseases of the ear and mastoid process in children by regions, Georgia, 2011 – 2012

	2011				2012			
	Number of registered cases	Prevalence per 1000 0 children	Number of new cases	Incidence per 1000 0 children	Number of registered cases	Prevalence per 1000 0 children	Number of new cases	Incidence per 1000 0 children
Abkhazia	718	--	427	--	545	--	271	--
Ajara	1996	3001.5	1475	2218.0	2652	3970.1	1855	2776.9
Tbilisi	2884	1456.6	2598	1312.1	6243	3138.8	5572	2801.4
Kakheti	840	1217.4	749	1085.5	945	1371.6	814	1181.4
Imereti	2342	1956.6	2055	1716.8	4076	3402.3	3580	2988.3
Samegrelo and Zemo Svaneti	1178	1452.5	916	1129.5	1464	1803.0	1195	1471.7
Shida Kartli	975	1832.7	918	1725.6	1099	2061.9	987	1851.8
Kvemo Kartli	2410	2795.8	1799	2087.0	1769	2038.0	1574	1813.4
Guria	762	3201.7	701	2945.4	538	2270.0	449	1894.5
Samtskhe-Javakheti	283	781.8	248	685.1	494	1360.9	412	1135.0
Mtskheta-Mtianeti	304	1634.4	284	1526.9	351	1897.3	312	1686.5
Racha-Lechkhumi and Kvemo Svaneti	57	712.5	55	687.5	124	1569.6	103	1303.8
Other departments	48	--	44	--	56	--	48	--
Georgia	**14797**	**1946.2**	**12269**	**1613.7**	**20356**	**2671.0**	**17172**	**2253.2**

Table 4.108 Diseases of the ear and mastoid process, hospital discharges, Georgia, 2011 – 2012

	2011		2012	
	Hospital discharges	Including children	Hospital discharges	Including children
Ajara	272	4	187	12
Tbilisi	1891	756	404	21
Kakheti	4	1	4	
Imereti	62	21	362	91
Samegrelo and Zemo Svaneti	75	0	1	0
Shida Kartli	2	0	2	0
Kvemo Kartli	0	0	1	1
Guria	0	0	0	0
Samtskhe-Javakheti	0	0	1	1
Mtskheta-Mtianeti	1	0	0	0
Racha-Lechkhumi and Kvemo Svaneti	0	0	0	0
Other departments	8	0	7	0
Georgia	**2315**	**782**	**969**	**126**

Table 4.109 In-patient surgeries on ear, Georgia, 2009 – 2012

	2009	2010	2011	2012
Total number – all ages	**308**	**427**	**1938**	**7687**
Including in children	*3*	*37*	*744*	4610

Table 4.110 In-patient surgeries on ear by to regions, Georgia, 2011 - 2012[*]

	2011		2012	
	All ages	In children	All ages	In children
Ajara	59	0	64	8
Tbilisi	1871	744	388	12
Kakheti	2	0	14	0
Imereti	1	0	8	0
Samegrelo and Zemo Svaneti	2	0	0	0
Kvemo Kartli	1	0	2	0
Georgia	**1938**	**744**	**476**	**20**

Table 4.111 Diseases of the circulatory system, morbidity rates, Georgia, 2003 – 2012

	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
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
2012	**355657**	**7919.9**	**133411**	**2970.8**	**4044**	**530.6**	**823**	**108.0**

Table 4.112 Diseases of the circulatory system, morbidity rates by certain nosologies, Georgia, 2006– 2012

	2006	2007	2008	2009	2010	2011	2012
Prevalence[*]* per 100000 population	**6427.9**	**6584.6**	**6993.3**	**7400.3**	**7582.9**	**8107.4**	**10539.2**
Incidence per 100000 population	**1891.0**	**1622.4**	**1696.7**	**2177.3**	**2205.2**	**2307.7**	**2970.8**
Including:							
Rheumatic diseases *Prevalence*	377.8	351.8	341.7	314.0	289.2	262.0	219.7
Incidence	100.0	87.4	72.9	76.9	124.3	76.9	103.3
Hypertensive diseases *Prevalence*	3329.9	3441.4	3719.8	4088.3	4335.9	4733.2	4658.7
Incidence	917.4	803.5	814.0	1109.4	1182.5	1267.3	1458.6
Ischaemic heart diseases *Prevalence*	1955.7	1868.7	1951.9	1981.8	1993.7	2080.3	1947.5
Incidence	569.9	427.5	429.8	521.6	558.5	614.0	662.1
Cerebrovascular diseases *Prevalence*	261.1	274.0	281.2	316.8	333.7	346.0	338.1
Incidence	116.9	88.2	101.3	123.9	112.7	106.3	220.7

[*] *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 4.113 Diseases of the circulatory system in children, morbidity rates by certain nosologies, Georgia, 2006 – 2012

	2006	2007	2008	2009	2010	2011	2012
Prevalence per 100000 children	**670.1**	**675.3**	**678.3**	**634.2**	**617.6**	**549.3**	**530.6**
Incidence per 100000 children	**218.0**	**156.5**	**166.2**	**180.5**	**145.8**	**98.5**	**108.0**
Including:							
Rheumatic diseases *Prevalence*	333.7	315.7	308.2	273.1	252.0	222.7	175.4
Incidence	81.4	53.2	51.0	33.3	63.0	26.3	38.6
Hypertensive diseases *Prevalence*	4.9	5.6	6.5	8.0	9.0	8.7	8.9
Incidence	2.4	0.8	1.3	5.7	3.0	3.3	1.4
Cerebrovascular diseases *Prevalence*	6.9	2.6	1.7	1.6	2.0	1.7	1.6
Incidence	5.5	0.5	1.6	1.1	0.9	0.3	0.3

Table 4.114 Diseases of the circulatory system by regions, Georgia, 2012

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	10464	--	2393	--
Ajara	20751	5268.1	7663	1945.4
Tbilisi	141097	12039.0	27998	2389.0
Kakheti	30797	7583.6	9522	2344.7
Imereti	54241	76861.1	39460	5591.6
Samegrelo and Zemo Svaneti	27530	5757.7	11223	2346.9
Shida Kartli	19927	6346.2	11555	3680.0
Kvemo Kartli	14768	2888.9	9826	1922.1
Guria	8317	5949.2	2847	2036.5
Samtskhe-Javakheti	11589	5420.5	4283	2003.3
Mtskheta-Mtianeti	7282	6662.4	4086	3738.3
Racha-Lechkhumi and Kvemo Svaneti	7751	16597.4	1643	215.6
Other departments	1143	--	912	--
Georgia	**355657**	**7919.9**	**133411**	**2970.8**

Table 4.115 Diseases of the circulatory system, according to certain nosologies, Georgia, 2012

	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	**355657**	**100**	**4044**	**100**	**133411**	**100**	**823**	**100**
Including								
Acute rheumatic fever	2408	0.7	271	6.7	2756	2.1	232	27.9
Chronic rheumatic heart diseases	7457	1.5	1066	26.4	1882	1.4	62	7.5
Hypertensive diseases	209209	58.8	59	1.4	65504	49.1	11	1.3
Ischaemic heart diseases	87458	24.6	0		29734	22.3	0	
Pulmonary heart disease and diseases of pulmonary circulation	1128	0.3	5	0.1	1186	0.9	1	0.1
Cerebrovascular diseases	15182	4.3	10	0.3	9913	7.4	2	0.2
Diseases of arteries, arterioles and capillaries	5748	1.6	4	0.1	4003	3.0	2	0.2
Other diseases of circulatory system	12812	3.6	2235	55.8	4166	3.1	56	6.8

Table 4.116 Hypertensive diseases by regions, Georgia, 2012

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	6527	--	877	--
Ajara	13992	3552.2	4651	1180.8
Tbilisi	67741	5779.9	11748	1002.4
Kakheti	20820	5126.8	5183	1276.3
Imereti	36014	5103.3	16719	2369.1
Samegrelo and Zemo Svaneti	17403	3639.3	5906	1235.0
Shida Kartli	12928	4117.2	6652	2118.5
Kvemo Kartli	9390	1836.9	6214	1215.6
Guria	5899	4219.6	1998	1429.2
Samtskhe-Javakheti	7748	3623.9	2448	1145.0
Mtskheta-Mtianeti	5255	4807.9	2121	1940.5
Racha-Lechkhumi and Kvemo Svaneti	4502	9640.3	679	1454.0
Other departments	990	--	308	--
Georgia	**209209**	**4658.7**	**65504**	**1458.7**

Table 4.117 Ischaemic heart diseases, distribution by certain nosologies, Georgia, 2012

	Registered by the end of the year		New cases	
	Number	%	Number	%
Ischaemic heart diseases	**87458**	**100**	**29734**	**100**
Including:				
Angina pectoris	29514	33.6	11477	38.4
Acute myocardial infarction	2589	3.0	2436	7.9
Other acute ischaemic heart diseases	8684	10.0	5883	19.9
Other ischaemic heart diseases	46658	53.4	9940	33.8

Table 4.118 Rheumatic diseases, morbidity rates, Georgia, 2012

	Registered by the end of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Rheumatic diseases	**9865**	219.7	**2197**	**103.3**
Acute rheumatic fever	2408	53.6	2756	61.4
Including rheumatic fever with heart involvement	*846*	*18.8*	*1518*	*33.8*
Chronic rheumatic heart diseases	7457	166.1	1882	41.9

Table 4.119 Diseases of the circulatory system, hospital discharges, Georgia, 2012

	Total number – all ages	In children	Case fatality rate (%)
Diseases of circulatory system	**50128**	**137**	**6.1**
Including:			
Acute rheumatic fever	39	9	0.1
Including rheumatic fever with heart involvement	*28*	*5*	*0.0*
Chronic rheumatic heart diseases	438	12	0.1
Hypertensive diseases	3154	3	6.7
Ischaemic heart diseases	21335	0	3.4
Including: Angina pectoris	*10075*	*0*	0.5
Acute myocardial infarction	*6523*	*0*	*8.5*
Recurrent myocardial infarction	*416*	*0*	*4.2*
Other acute ischaemic heart diseases	*1716*	*0*	*5.7*
Chronic ischaemic heart disease	*2605*	*0*	*2.1*
Pulmonary heart disease and diseases of pulmonary circulation	374	0	25.7
Cerebrovascular diseases	7440	11	18.1
Including: Subarachnoid haemorrhage	*517*	*0*	*23.4*
Intracerebral and other nontraumatic intracranial haemorrhages	*1467*	*9*	*28.3*
Cerebral infarction	*2830*	*0*	*17.7*
Occlusion and stenosis of precerebral and cerebral arteries, not resulting in cerebral infarction	*249*	*1*	*12.0*
Other cerebrovascular diseases	*470*	*0*	*3.0*

Table 4.120 Diseases of the circulatory system, hospital discharges and case fatality rate by regions, Georgia, 2012

	Total number of discharges	Including hospital deaths	Case fatality rate (%)
Ajara	3993	324	8.1
Tbilisi	26160	1215	4.6
Kakheti	2676	218	8.1
Imereti	7696	447	5.8
Samegrelo and Zemo Svaneti	1991	123	6.2
Shida Kartli	1492	237	15.9
Kvemo Kartli	2987	130	4.4
Guria	534	87	16.3
Samtskhe–Javakheti	1092	74	6.8
Mtskheta–Mtianeti	612	19	3.1
Racha–Lechkhumi and Kvemo Svaneti	205	7	3.4
Other departments	690	18	5.5
Georgia	**50128**	**2899**	**5.8**

Table 4.121 Surgeries on the circulatory system, Georgia, 2012

	Number of surgeries performed in hospitals	Case fatality rae (%)	Including in children under-15	Case fatality rae (%)	Including in infants	Case fatality rae (%)
Operations on the heart and on the blood vessels	12052	0.8	549	4.7	471	5.3
Including:						
On open heart	981	0.2	12	0	12	9.7
Correction of the congenital heart malformation	327	8.0	293	8.9	257	0
Correction of the acquired heart malformation	373	1.9	0	0	0	0
Implantation of ta cardio stimulator	307	0.3	0	0	0	0
Correction of tachy arrhythmia	195	0	0	0	0	0
Coronary artery bypass surgery	913	2.3	0	0	0	0
Coronary artery angioplasty	4010	0.4	0	0	0	0
including stenting	2748	0.4	0	0	0	0
Pericardiumectomy	3	0	0	0	0	0
Other surgeries on arteries	674	0.7	2	0	0	0
Other surgeries on veins	2027	0.1	3	0	1	0
Surgeries on lymphatic ducts	80	0	4	0	0	0

Table 4.122 Diseases of the respiratory system, Georgia, 2000 – 2012

	All ages				Children aged 0-15			
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
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
2012	**605179**	**13476.3**	**521947**	**11622.8**	**299733**	**39329.9**	**273598**	**35900.5**

Table 4.123 Diseases of the respiratory system by regions, Georgia, 2012

	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	16558	--	10959	--	8085	--	5648	--
Ajara	48812	12392.0	36093	9163.0	26059	39010.5	20771	31094.3
Tbilisi	177500	15145.1	149271	12736.4	104728	52653.6	94004	47261.9
Kakheti	55420	13646.9	50605	12461.2	23439	34018.9	22569	32756.2
Imereti	97048	13752.0	88233	12502.9	43223	36079.3	41750	34849.7
Samegrelo	38618	8075.7	31401	6566.5	16982	20913.8	15471	19053.0
Shida Kartli	56577	18018.2	51861	16516.2	29588	55512.2	27308	51234.5
Kvemo Kartli	41440	8106.4	39028	7634.6	20994	24186.6	20555	23680.9
Guria	18928	13539.3	15371	10995.0	7081	29877.6	6559	27675.1
Samtskhe–Javakheti	18646	8721.2	16759	7838.6	8407	23159.8	8151	22454.5
Mtskheta–Mtianeti	18694	17103.4	17622	16122.6	8493	45908.1	8363	45205.4
Racha–Lechkhumi and Kvemo Svaneti	6201	13278.4	5013	10734.5	1901	24063.3	1793	22696.2
Other departments	10737	--	9731	--	753	--	656	--
Georgia	**605179**	**13476.3**	**521947**	**11622.8**	**299733**	**39329.9**	**273598**	**35900.5**

Table 4.124 Diseases of the respiratory system by certain nosologies, Georgia, 2012

	All ages		In children	
	Prevalence per 100000 population	Incidence per 100000 population	Prevalence per 100000 population	Incidence per 100000 population
Total number of diseases of the respiratory system	**13476.3**	**11622.8**	**39329.9**	**35900.5**
Including:				
Acute upper respiratory infections	7923.9	7518.6	28632.1	27166.3
Pneumonia	743.1	700.7	1244.2	1167.2
Other lower respiratory infections	1407.8	1342.1	3481.7	3346.8
Other diseases of upper respiratory tract	1430.7	937.4	3274.9	2124.0
Including allergic rhinitis	272.3	178.3	531.0	399.0
Chronic lower respiratory diseases	1070.7	391.4	735.7	359.4
Including: chronic and not specified bronchitis	474.0	201.8	405.2	255.5
emphysema	20.0	6.8	2.8	0.8
asthma and status asthmaticus	353.2	77.3	194.9	46.6
other chronic obstructive pulmonary disease	129.2	61.6	97.8	35.3
bronchiectasis	10.0	5.2	3.8	3.3
Lung diseases due to external agents	14.5	10.5	2.0	0.9
Other respiratory diseases principally affecting the interstitium	6.4	2.3	3.1	1.0
Suppurative and necrotic conditions of lower respiratory tract	1.3	0.6	0.4	0.0
Other diseases of the respiratory system	109.5	69.3	78.9	55.5

Table 4.125 Diseases of the respiratory system according to certain nosologies, Georgia, 2012

	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	**605179**	**100**	**521947**	**100**	**299733**	**100**	**273598**	**100**
Including:								
Acute upper respiratory infections	355837	58.8	337639	64.7	218205	72.8	207034	75.7
Pneumonia	33370	5.5	31467	6.0	9482	3.2	8895	3.3
Other lower respiratory infections	63222	10.4	60268	11.5	26534	8.9	25506	9.3
Other diseases of upper respiratory tract	64249	10.6	42096	8.1	24958	8.3	16187	5.9
Including allergic rhinitis	12228	2.0	8009	1.5	4047	1.4	3041	1.1
Chronic lower respiratory diseases	48080	7.9	17577	3.4	5607	1.9	2739	1.0
Including: chronic and not specified bronchitis	21284	3.5	9063	1.7	3088	1.0	1947	0.7
emphysema	897	0.1	304	0.1	21	0.01	6	0.0
asthma and status asthmaticus	15861	2.6	3472	0.7	1485	0.5	355	0.1
other chronic obstructive pulmonary disease	5800	1.0	2766	0.5	745	0.2	269	0.1
bronchiectasis	448	0.1	232	0.04	29	0.01	25	0.01
Lung diseases due to external agents	650	0.1	470	0.1	15	0.01	7	0.0
Other respiratory diseases principally affecting the interstitium	286	0.1	103	0.02	24	0.01	8	0.0
Suppurative and necrotic conditions of lower respiratory tract	77	0.01	38	0.01	4	0.0	0	0.0
Other diseases of the respiratory system	3889	0.6	2013	0.4	621	0.2	403	0.1

Table 4.126 Asthma and status asthmaticus by regions, Georgia, 2011 – 2012

	2011				2012			
	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	374	--	51	--	302	--	48	--
Ajara	881	224.7	83	124.8	845	214.5	82	122.8
Tbilisi	4047	346.6	322	162.6	4016	342.7	412	207.1
Kakheti	896	220.4	45	65.2	986	242.8	36	52.2
Imereti	3128	443.1	375	313.3	2124	301.0	231	192.8
Samegrelo	1406	294.0	143	176.3	1160	242.6	138	170.0
Shida Kartli	786	250.5	47	88.3	1051	334.7	37	69.4
Kvemo Kartli	518	101.9	48	55.7	504	98.6	44	50.7
Guria	461	328.6	111	466.4	798	570.8	147	620.3
Samtskhe–Javakheti	346	162.1	21	58.0	354	165.6	15	41.3
Mtskheta–Mtianeti	237	216.4	14	75.3	258	236.0	5	27.0
Racha–Lechkhumi and Kvemo Svaneti	166	351.7	7	87.5	159	340.5	6	75.9
Other departments	2	--	1	--	37	--	0	--
Georgia	**13248**	**295.5**	**1268**	**166.8**	**12594**	**280.4**	**1201**	**157.6**

Table 4.127 New cases of asthma and status asthmaticus by regions, Georgia, 2011 – 2012

	2011				2012			
	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	68	--	11	--	41	--	13	--
Ajara	130	33.2	14	21.1	127	32.2	28	41.9
Tbilisi	704	60.3	126	63.6	734	62.6	97	48.8
Kakheti	178	43.8	15	21.7	255	62.8	12	17.4
Imereti	711	100.7	86	71.8	900	127.5	90	75.1
Samegrelo	174	36.4	43	53.0	329	68.8	47	57.9
Shida Kartli	272	86.7	23	43.2	512	163.1	9	16.9
Kvemo Kartli	296	58.2	34	39.4	273	53.4	44	50.7
Guria	75	53.5	14	58.8	80	57.2	6	25.3
Samtskhe–Javakheti	97	45.4	9	24.9	72	33.7	4	11.0
Mtskheta–Mtianeti	55	50.2	8	43.0	63	57.6	2	10.8
Racha-Lechkhumi and Kvemo Svaneti	25	53.0	3	37.5	12	25.7	3	38.0
Other departments	4	--	0	--	74	--	0	--
Georgia	**2789**	**62.2**	**386**	**50.8**	**3472**	**77.3**	**355**	**46.6**

Table 4.128 Diseases of the respiratory system, hospital discharges, Georgia, 2012

	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	**65177**	**1.4**	**40218**	**0.1**	**9769**	**0.2**
Including:						
Acute upper respiratory infections	18335	0.04	16746	0.04	5089	0
Influenza	1107	0.2	584	0	207	0
Pneumonia	14216	1.9	5769	0.2	1515	0.2
Other lower respiratory infections	6328	0.03	6087	0.03	1886	0.1
Other diseases of upper respiratory tract	13959	0.007	8358	0.01	116	0
Including allergic rhinitis	24	0	7	0	0	0
Chronic lower respiratory diseases	3372	1.4	212	0.5	30	0
Including: chronic and not specified bronchitis	378	0.3	132		26	0
emphysema	31	3.2	2	50.0	0	0
asthma and status asthmaticus	515	1.0	24	0	0	0
other chronic obstructivepulmonary disease	2227	1.8	9	0	4	0
bronchiectasis	18	0	2	0	0	0
Lung diseases due to external agents	149	4.0	5	0	3	0
Other respiratory diseases principally affecting the interstitium	404	5.9	1	100.0	0	0
Suppurative and necrotic conditions of lower respiratory tract	123	5.7	35	0	1	0
Other diseases of the respiratory system	3328	13.1	606	4.3	250	3.6

Table 4.129 Diseases of the respiratory system, hospital discharges and case fatality rate by regions, Georgia, 2012

	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	5837	1.0	3151	0.3	501	1.4
Tbilisi	27736	1.8	19215	0.2	3882	0.4
Kakheti	3765	0.7	2086	0	603	0
Imereti	8890	1.7	5072	0.1	1229	0
Samegrelo	6101	0.9	4497	0.1	1791	0.
Shida Kartli	3210	1.0	2226	0.1	733	0.1
Kvemo Kartli	4255	1.3	1898	0.2	545	0
Guria	954	0.9	667	0	104	0
Samtskhe–Javakheti	2524	0.1	1143	0	333	0
Mtskheta–Mtianeti	334	5.4	52	0	8	0
Racha–Lechkhumi and Kvemo Svaneti	510	0.2	192	0	40	0
Other departments	955	0.2	19	0	0	0
Georgia	**65177**	**1.4**	**40218**	**0.2**	**9769**	**0.2**

Table 4.130 Surgeries on the respiratory system, Georgia, 2012

	Number of operations	On Children	Number of deaths	Case fatality rate (%)
Respiratory system surgeries	**1249**	**189**	**29**	**2.3**
	Including:			
Pulmonectomy	54	0	1	1.8
Resection of a part of the lung	153	9	3	1.9
Resection of a segment of the lung	100	13	0	0
On the larynx	238	22	14	5.9
Resection of the trachea	63	0	0	0
Resection of the bronchus	1	1	0	0
Resection of the pleura	17	5	0	0

Table 4.131 Diseases of the digestive system, Georgia, 2002 – 2012

	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
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
2012	**446472**	**9942.1**	**280122**	**6237.8**	**45094**	**5917.1**	**35439**	**4650.2**

Table 4.132 Diseases of the digestive system, prevalence by certain nosologies, Georgia, 2012

	Number of registered cases	Prevalence per 100000 population	In children	
			Number of registered cases	Prevalence per 100000 children
Diseases of the digestive system	**446472**	**9942.1**	**45094**	**5917.1**
Including:				
Diseases of oral cavity, salivary glands and jaw	258749	5761.9	27035	3547.4
Diseases of oesophagus, stomach and duodenum	72584	1616.3	4967	651.8
Including: gastric and duodenal peptic ulcers	*20449*	*455.4*	*138*	*18.1*
gastritis and duodenitis	*43417*	*966.8*	*3171*	*416.1*
Liver diseases	8232	183.3	92	12.1
Disorders of gallbladder, biliary tract and pancreas	65634	1461.6	3129	410.6
Including: cholelithiasis and cholecystitis	*50269*	*1119.4*	*2111*	*277.0*
acute pancreatitis and other disorders of pancreas	*3439*	*76.6*	*0*	*0.0*

Table 4.133 Diseases of the digestive system, incidence by certain nosologies, Georgia, 2012

	Number of new cases	Incidence per 100000 population	In children	
			Number of new cases	Incidence per 100000 children
Diseases of the digestive system	**280122**	**6237.8**	**35439**	**4650.2**
Including:				
Diseases of oral cavity, salivary glands and jaw	197945	4407.9	23514	3085.4
Diseases of oesophagus, stomach and duodenum	32021	713.1	3420	448.8
Including: gastric and duodenal peptic ulcers	*8483*	*188.9*	*68*	*8.9*
gastritis and duodenitis	*19854*	*442.1*	*2177*	*285.7*
Liver diseases	3933	87.6	66	8.7
Disorders of gallbladder, biliary tract and pancreas	19548	435.3	1284	168.5
Including: cholelithiasis and cholecystitis	*13571*	*302.2*	*1055*	*138.4*
acute pancreatitis and other disorders of pancreas	*1373*	*30.6*	*0*	*0.0*

Table 4.134 Diseases of the digestive system, incidence rate by regions, Georgia, 2011 – 2012

	2011				2012			
			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	2897	--	731	--	3001	--	727	--
Ajara	34615	8828.1	2575	3872.2	52923	13435.6	5087	7615.3
Tbilisi	112006	9592.8	13574	6855.6	120038	10242.2	18084	9092.0
Kakheti	8314	2044.8	1937	2807.2	11417	2811.4	1463	2123.4
Imereti	33284	4714.4	1748	1460.3	42862	6073.7	3450	2879.8
Samegrelo and Zemo Svaneti	9526	1991.6	1493	1840.9	14806	3096.2	2425	2986.5
Shida Kartli	6789	2163.5	1025	1926.7	10430	3321.7	1371	2572.2
Kvemo Kartli	8309	1634.0	1350	1566.1	8718	1705.4	1464	1986.6
Guria	2316	1650.7	1081	4542.0	2610	1967.0	397	1675.1
Samtskhe–Javakheti	2585	1210.8	440	1215.5	2883	1348.5	396	1090.9
Mtskheta–Mtianeti	2386	2179.0	329	1768.8	2976	2722.8	405	2189.2
Racha–Lechkhumi and Kvemo Svaneti	553	1171.6	39	487.5	782	1674.5	113	1430.4
Other departments	1003	--	50	--	6676	--	57	--
Georgia	**224583**	**5009.2**	**26372**	**3468.6**	**280122**	**6237.8**	**35439**	**4650.2**

Table 4.135 Diseases of the digestive system, hospital discharges, Georgia, 2012

	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	**35685**	**625**	**1.8**	**3484**	**8**	**0.2**
Including:						
Diseases of oral cavity, salivary glands and jaw	1471	1	0.1	270	0	0.0
Gastric and duodenal, peptic ulcers	1956	66	3.4	20	0	0.0
Gastritis and duodenitis	973	8	0.8	73	0	0.0
Diseases of appendix	6885	5	0.1	1302	1	0.1
Hernia	7090	20	0.3	926	0	0.0
Diseases of peritoneum	1108	84	7.6	66	1	1.5
Diseases of liver	1025	156	15.2	7	2	28.6
Cholecystitis, cholelithiasis and other disorders of biliary tract	5470	18	0.3	33	0	0.0

Table 4.136 Diseases of the digestive system, hospital discharges and case fatality rate by regions, Georgia, 2011 – 2012

	2011				2012			
	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	2544	2.3	323	0.3	2957	2.5	207	0.0
Tbilisi	13952	2.3	1488	0.5	14512	2.1	1748	0.4
Kakheti	1784	1.6	219	0.0	2005	1.2	184	0.0
Imereti	5417	1.8	572	0.0	6447	1.3	597	0.2
Samegrelo and Zemo Svaneti	2494	1.5	135	0.0	1881	2.3	155	0.0
Shida Kartli	2226	1.5	303	0.0	2276	1.1	109	0.0
Kvemo Kartli	2628	1.0	552	0.0	2604	1.3	345	0.0
Guria	703	2.6	103	0.0	747	2.3	61	0.0
Samtskhe–Javakheti	643	2.6	71	0.0	786	0.6	57	0.0
Mtskheta–Mtianeti	159	1.9	19	0.0	327	0.9	1	0.0
Racha–Lechkhumi and Kvemo Svaneti	179	1.7	10	0.0	159	3.8	11	0.0
Other departments	1371	4.8	9	0.0	984	1.1	9	0.0
Georgia	**34100**	**2.1**	**3804**	**0.2**	**35685**	**1.8**	**3484**	**0.2**

Table 4.137 Diseases of the genitourinary system, Georgia, 2001 – 2012

	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	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
2012	**198555**	**4421.5**	**127148**	**2831.4**	**5952**	**781.0**	**4259**	**558.9**

Table 4.138 Diseases of the genitourinary system, Georgia, 2011 – 2012

	2011		2012	
	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	**138016**	**100**	**198555**	**100**
	Including:			
Glomerulonephritis, nephritic and nephrotic syndromes	8283	6.0	8176	4.1
Chronic tubulo-interstitial nephritis (kidney infections)	5389	3.9	6687	3.4
Renal failure	1557	1.1	1765	0.9
Urolithiasis	13362	9.7	14562	7.3
Diseases of male genital organs	21866	15.8	30828	15.5
Including: Hyperplasia of prostate	*9718*	*7.0*	13836	7.0
Inflammatory diseases of prostate	*6620*	*4.8*	11268	5.7
Male infertility	*643*	*0.5*	1637	0.8
Diseases of female genital organs	66818	48.4	105818	53.3
Including: Salpingitis, oophoritis	*13306*	*9.6*	19229	9.7
Endometrios	*3670*	*2.7*	6717	3.4
Erosion and ectropion of cervix uteri	*10722*	*7.8*	19739	9.9
Menstruation disorders	*11612*	*8.4*	19542	9.8
Menopausal and other perimenopausal disorders	*7686*	*5.6*	13568	6.8
Female infertility	*3935*	*2.9*	5967	3.0

Table 4.139 Diseases of the genitourinary system according to regions, Georgia, 2011 – 2012

	2011				2012			
	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	5578	-	2281	-	4322	-	1525	-
Ajara	19788	5046.7	10329	2634.3	21239	5392.0	12747	3236.1
Tbilisi	42797	3665.4	25190	2157.4	80553	6873.1	53125	4532.8
Kakheti	8196	2015.7	4104	1009.3	9765	2404.6	5153	1268.9
Imereti	16689	2363.9	10519	1489.9	25540	3619.1	18024	2554.1
Samegrelo	11687	2443.4	5484	1146.6	13423	2807.0	7826	1636.6
Shida Kartli	9278	2956.7	6058	1930.5	12784	4071.3	9047	2881.2
Kvemo Kartli	9042	1778.2	6819	1341.0	13627	2665.7	10300	2014.9
Guria	2775	1977.9	1590	1133.3	4388	3138.8	1184	846.9
Samtskhe–Javakheti	3316	1553.2	1981	927.9	4195	1962.1	2185	1022.0
Mtskheta–Mtianeti	2629	2400.9	1351	1233.8	2816	2576.4	1753	1603.8
Racha–Lechkhumi and Kvemo Svaneti	1101	2332.6	598	1266.9	1293	2768.7	646	1383.3
Other departments	5140	-	835	-	4610	-	3633	-
Georgia	**138016**	**3078.4**	**77139**	**1720.5**	**198555**	**4421.5**	**127148**	**2831.4**

Table 4.140 Diseases of the genitourinary system in children by regions, Georgia, 2011 – 2012

	2011				2012			
	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	562	--	342	--	231	--	102	--
Ajara	598	899.2	411	618.0	498	745.5	361	540.4
Tbilisi	2801	1414.6	2031	1025.8	2639	1326.8	1679	844.1
Kakheti	554	802.9	447	647.8	479	695.2	387	561.7
Imereti	640	534.7	522	436.1	782	652.8	656	547.6
Samegrelo	392	483.4	289	356.4	328	403.9	259	319.0
Shida Kartli	374	703.0	324	609.0	323	606.0	271	508.4
Kvemo Kartli	401	465.2	357	414.2	290	334.1	229	263.8
Guria	281	1180.7	246	1033.6	173	730.0	135	569.6
Samtskhe–Javakheti	150	414.4	125	345.3	68	187.3	49	135.0
Mtskheta–Mtianeti	79	424.7	71	381.7	109	589.2	101	545.9
Racha–Lechkhumi and Kvemo Svaneti	46	575.0	40	500.0	24	303.8	22	278.5
Other departments	11	--	10	--	8	--	8	--
Georgia	**6889**	**906.1**	**5215**	**685.9**	**5952**	**781.0**	**4259**	**558.9**

Table 4.141 Diseases of the genitourinary system by certain nosologies, Georgia, 2012*

	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Diseases of the genitourinary system	**198555**	**4421.5**	**127148**	**2831.4**
	Including:			
Glomerulonephritis, nephritic and nephrotic syndromes	8176	182.1	3351	74.6
Chronic tubulo-interstitial nephritis (kidney infections)	6687	148.9	3856	85.9
Renal failure	1765	39.3	733	16.3
Urolithiasis	14562	324.3	7218	160.7
Diseases of male genital organs	30828	1439.7	18501	864.0
Including: Hyperplasia of prostate	13836	646.1	6468	302.1
Inflammatory diseases of prostate	11268	526.2	7708	360.0
Male infertility	1637	108.7	1330	88.3
Diseases of female genital organs	105818	4504.0	71149	3028.4
Including: Salpingitis, oophoritis	19229	818.5	12618	537.1
Endometriosis	6717	285.9	4533	192.9
Erosion and ectropion of cervix uteri	19739	840.2	15384	654.8
Disorders of menstruation	19542	1696.8	14581	1266.0
Menopausal and other perimenopausal disorders	13568	1178.1	9491	824.1
Female infertility	5967	518.1	4441	385.6

Table 4.142 Diseases of the genitourinary system, hospital discharges by the regions, Georgia, 2012

	Number of hospital discharges	Including deaths	Case fatality rate (%)	In children aged <15		
				Number of hospital discharges	Including deaths	Case fatality rate (%)
Ajara	1135	11	1.0	168	0	0
Tbilisi	8872	82	0.9	843	3	0.4
Kakheti	553	1	0.2	32	0	0
Imereti	2368	25	1.0	85	1	1.2
Samegrelo	716	6	0.8	13	0	0
Shida Kartli	613	2	0.3	94	0	0
Kvemo Kartli	989	10	1.0	4	0	0
Guria	74	1	1.3	0	0	0
Samtskhe–Javakheti	157	0	0	2	0	0
Mtskheta–Mtianeti	10	0	0	0	0	0
Racha–Lechkhumi and Kvemo Svaneti	93	0	0	1	0	0
Other departments	246	0	0	0	0	0
Georgia	**15826**	**138**	**0.9**	**1242**	**4**	**0.3**

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

Table 4.143 Diseases of the genitourinary system, hospital discharges and case fatality rate, Georgia, 2012

	All ages			Aged 0-15	
	Number of hospital discharges	Including deaths		Number of hospital discharges	
		Total	Case fatality rate (%)	Total	Case fatality rate (%)
Total	**15826**	**138**	**0.9**	**1242**	**0.3**
Including:					
Glomerulonephritis, nephritic and nephrotic syndromes	337	5	1.5	80	0
Chronic tubulo-interstitial nephritis (kidney infections)	837	3	0.4	68	0
Urolithiasis	950	2	0.2	12	0
Prostate disorders	1452	7	0.5	5	0

Table 4.144 Diseases of the genitourinary system, surgeries, Georgia, 2012

	Total number of surgeries	Number of surgeries in children	Including deaths	Case fatality rate (%)
Total	68401	933	33	0.1
Operations on kidneys and ureter	3451	46	13	0.4
Including: Kidney transplantation	*12*	*0*	*0*	*0*
Resection of kidney	*77*	*2*	*0*	*0*
Nephrectomy	*370*	*8*	*2*	*0.5*
On ureters	*427*	*21*	*3*	*0.7*
On bladder	*1235*	*3*	*4*	*0.3*
On urethra	*324*	*5*	*1*	*0.3*
Operations on Prostate	1533	10	7	0.5
Orchiectomy	517	23	0	0
Operations on female genital organs	11933	67	3	0.03
Including: Uteri D&C	*2139*	*0*	*0*	*0*
Female sterilization	*237*	*10*	*0*	*0*
Amputation of uteri	*817*	--	*0*	*0*
Extirpation of uteri	*4764*	*5*	*3*	*0.1*
Ovarian resection	*863*	*21*	*0*	*0*
Ovariectomy	*648*	*16*	*0*	*0*
Excision tissue of female external genital organs	325	3	0	0
Obstetrical - gynecological operations	45705	159	1	0

Table 4.145 Congenital malformations, deformations and chromosomal abnormalities, Georgia, 2002-2012

	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
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
2012	**7614**	**169.6**	**2073**	**46.2**	**6059**	**795.0**	**1618**	**212.3**

Table 4.146 Congenital malformations, deformations and chromosomal abnormalities by regions, Georgia, 2012

	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	66	40	--	--	17	17	--	--
Ajara	356	281	90.4	420.7	196	191	49.8	285.9
Tbilisi	5423	4508	462.7	2264.2	937	769	79.9	386.2
Kakheti	339	236	83.5	343.0	159	104	39.2	151.2
Imereti	563	377	79.8	315.5	320	197	45.3	164.9
Samegrelo	205	156	42.9	193.1	89	77	18.6	95.3
Shida Kartli	131	102	41.7	192.1	60	52	19.1	97.9
Kvemo Kartli	241	156	47.1	180.1	143	104	28.0	120.1
Guria	135	86	96.6	364.4	46	28	32.9	118.6
Samtskhe–Javakheti	44	34	20.6	93.7	16	15	7.5	41.3
Mtskheta–Mtianeti	53	48	48.5	259.5	47	43	43.0	232.4
Racha–Lechkhumi and Kvemo Svaneti	26	19	55.7	237.5	43	10	34.3	125.0
Other departments	32	16	--	--	27	11	--	--
Georgia	**7614**	**6059**	**169.6**	**795.0**	**2073**	**1618**	**46.2**	**212.3**

Table 4.147 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2011 - 2012

	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-5 year	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
2012	**2195**	**53**	**2.4**	**1627**	**48**	**3.0**	**3.8**	**6.3**

Table 4.148 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges and case fatality rate by regions, Georgia, 2012

	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	84	0	66	0	0	0	0
Tbilisi	1918	2.1	1432	36	2.5	34	5.8
Kakheti	7	0	1	0	0	0	0
Imereti	111	7.2	88	8	9.1	8	10.8
Samegrelo	24	8.3	7	2	28.6	3	66.7
Shida Kartli	6	16.7	3	1	33.3	1	33.3
Kvemo Kartli	0	0	0	0	0	0	0
Guria	2	50.0	2	1	50.0	0	0
Samtskhe–Javakheti	28	0	28	0	0	0	0
Mtskheta–Mtianeti	0	--	0	0	0	0	0
Racha–Lechkhumi and Kvemo Svaneti	0	--	0	0	0.0	0	0
Other departments	15	0	0	0	0	0	0
Georgia	**2195**	**2.4**	**1627**	**48**	**3.0**	**45**	**6.3**

Table 4.149 Congenital malformations, deformations and chromosomal abnormalities in children under-5 years, incidence per 100000 children, Georgia, 2012

	Children aged 0-5		Including children under-1 year	
	New cases	Incidence per 100000 children	New cases	Incidence per 100000 children
Congenital malformations, deformations and chromosomal abnormalities	**829**	**286.1**	**592**	**1040.4**
Including:				
Congenital malformations of the nervous system	39	13.5	23	40.4
Including: Anencephaly and similar malformations	*2*	*0.7*	*2*	*3.5*
Congenital hydrocephalus	*17*	*5.9*	*10*	*17.6*
Spina-bifida	*4*	*1.4*	*3*	*5.3*
Congenital malformations of the circulatory system	241	83.2	182	319.9
Including: Congenital malformations of cardiac chambers and connections	51	17.6	45	79.1
Congenital malformations of cardiac septa	*100*	*34.5*	*73*	*128.3*
Congenital malformations of pulmonary and tricuspid valves	*10*	*3.5*	*10*	*17.6*
Congenital malformations of aortic and mitral valves	*17*	*5.9*	*14*	*24.6*
Other congenital malformations of heart	*21*	*7.2*	*16*	*28.1*
Congenital malformations of great arteries	*6*	*2.1*	*4*	*7.0*
Other congenital malformations of peripheral vascular system	*1*	*0.3*	*0*	*0.0*
Other congenital malformations of circulatory system	*15*	*5.2*	*15*	*26.4*
Congenital malformations of the digestive sistem	2	0.7	2	3.5
Including: Cleft lip and cleft palate	*31*	*10.7*	*23*	*40.4*
Atresia of oesophagus with tracheo-oesophageal fistula and without fistula	*1*	*0.3*	*0*	*0.0*
Congenital absence, atresia and stenosis of large intestine	*3*	*1.0*	*1*	*1.8*
Congenital malformations of genital organs	27	9.3	22	38.7
Including: Indeterminate sex and pseudohermaphroditism	*1*	*0.3*	*1*	*1.8*
Congenital malformations of the urinary system	18	6.2	13	22.8
Including: Congenital uronephrosis	*5*	*1.7*	*4*	*7.0*
Congenital malformations and deformations of the musculoskeletal system	161	55.6	126	221.4
Including: Osteogenesis imperfecta	*6*	*2.1*	*4*	*7.0*
Polyostotic fibrous dysplasia	*1*	*0.3*	*1*	*1.8*
Neurofibromatosis (nonmalignant)	0	0.0	0	0.0
Down syndrome	37	12.8	26	45.7

Table 4.150 Congenital malformations, deformations and chromosomal abnormalities in children under-5 years, prevalence per 100000 children, Georgia,2012

	Children aged 0-5		Including children under-1 year	
	Registered cases	Prevalence per 100000 children	Registered cases	Prevalence per 100000 children
Congenital malformations, deformations and chromosomal abnormalities	**1495**	**515.9**	**883**	**1551.8**
Including:				
Congenital malformations of the nervous system	62	21.4	29	51.0
Including: Anencephaly and similar malformations	8	2.8	3	5.3
Congenital hydrocephalus	23	7.9	12	21.1
Spina-bifida	11	3.8	6	10.5
Congenital malformations of the circulatory system	383	132.2	232	407.7
Including: Congenital malformations of cardiac chambers and connections	91	31.4	50	87.9
Congenital malformations of cardiac septa	166	57.3	101	177.5
Congenital malformations of pulmonary and tricuspid valves	18	6.2	15	26.4
Congenital malformations of aortic and mitral valves	23	7.9	14	24.6
Other congenital malformations of heart	30	10.4	21	36.9
Congenital malformations of great arteries	8	2.8	4	7.0
Other congenital malformations of peripheral vascular system	1	0.3	0	0.0
Other congenital malformations of circulatory system	16	5.5	16	28.1
Congenital malformations of the digestive sistem	4	1.4	3	5.3
Including: Cleft lip and cleft palate	45	15.5	28	49.2
Atresia of oesophagus with tracheo-oesophageal fistula and without fistula	3	1.0	0	0.0
Congenital absence, atresia and stenosis of large intestine	4	1.4	1	1.8
Congenital malformations of genital organs	38	13.1	25	43.9
Including: Indeterminate sex and pseudohermaphroditism	2	0.7	1	1.8
Congenital malformations of the urinary system	29	10.0	17	29.9
Including: Congenital uronephrosis	9	3.1	7	12.3
Congenital malformations and deformations of the musculoskeletal system	213	73.5	162	284.7
Including: Osteogenesis imperfecta	7	2.4	5	8.8
Polyostotic fibrous dysplasia	11	3.8	2	3.5
Neurofibromatosis (nonmalignant)	2	0.7	0	0.0
Down syndrome	83	28.6	31	54.5

Table 4.151 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2012

	2012							
	Discharged from the hospital and died		Discharged from hospital children aged 0-15			Children aged 0-15 died in hospital		
	Number of hospital discharges	Including deaths	Total	Including children under-5 year	Including children under-1 year	Total	Including children under-5 year	Including children under-1 year
Congenital malformations, deformations and chromosomal abnormalities	2195	53	1627	1205	714	48	46	45
Including:								
Congenital malformations of the nervous system	80	7	62	52	45	7	7	6
Congenital malformations of eye, ear, face and neck	57	0	34	22	9	0	0	0
Congenital malformations of the circulatory system	607	36	463	388	282	32	31	31
Congenital malformations of the respiratory system	16	1	8	8	5	1	1	1
Cleft lip and cleft palate	108	0	83	73	32	0	0	0
Other congenital malformations of the digestive system	144	5	123	111	79	4	4	4
Congenital malformations of genital organs	627	1	533	316	92	1	1	1
Congenital malformations of the urinary system	64	0	24	18	10	0	0	0
Congenital malformations and deformations of the musculoskeletal system	385	1	243	161	82	1	1	1
Including: Osteogenesis imperfecta	*2*	*0*	*2*	*2*	*0*	*0*	*0*	*0*
Polyostotic fibrous dysplasia	*5*	*0*	*5*	*1*	*1*	*0*	*0*	*0*
Other congenital malformations	31	0	17	12	9	0	0	0
Cromosomal abnormalities, not elsewhere classified	32	1	32	30	30	1	0	0
Including: Down syndrome	*15*	*1*	*15*	*13*	*13*	*1*	*0*	*0*

Table 4.152 Injury, poisoning and certain other consequences of external causes, Georgia, 2002 – 2012

	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
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**
2012	**75968**	**1691.7**	**67898**	**1512.0**	**8929**	**1171.6**	**8454**	**1109.3**

Table 4.153 Injury, poisoning and certain other consequences of external causes, incidence rates and case distribution, Georgia, 2012

	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	**67898**	**1512.0**	**100**	**8454**	**1109.3**	**100**
Including:						
Fracture of skull and facial bones, neck, ribs, sternum and spine	2005	44.6	3.0	126	17.1	1.5
Intracranial injury	1678	37.4	2.5	130	94.3	1.5
Injuries to upper and lower limbs	6616	147.3	9.7	719	195.4	8.5
Dislocation, sprain and strain of joints and ligaments	8679	193.3	13.0	1489	7.9	17.1
Injuries to the thorax, intra-abdominal and pelvic organs	1043	23.2	1.5	60	476.2	0.7
Wounds, injuries of blood vessels, superficial injuries	26440	588.8	39.0	3629	2.0	43.0
Injuries of nerves and spinal cord	673	15.0	1.0	15	54.1	0.2
Burns and corrosions	1512	33.7	2.0	412	171.9	4.9
Poisoning by drugs, medicaments and biological substances, toxic effects of substances chiefly nonmedical as to source	10273	228.8	15.0	1310	6.3	15.5
Including: Poisoning by drugs, medicaments and biological substances	239	5.3	0.3	48	155.6	0.6
Toxic effects of substances chiefly nonmedical as to source	8139	181.2	12.0	1186	3.8	14.0

Table 4.154 Injury, poisoning and certain other consequences of external causes by regions, Georgia, 2011 – 2012

	2011				2012			
	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	1295	--	1181	--	1010	--	939	--
Ajara	7296	1860.7	5880	1499.6	4581	1163.0	3083	782.7
Tbilisi	6592	564.6	5742	491.8	10819	923.1	9741	831.1
Kakheti	3754	923.3	3547	872.4	4436	1092.3	4114	1013.1
Imereti	4735	670.7	4627	655.4	12765	1808.8	12538	1776.7
Samegrelo	3242	677.8	3208	670.7	10594	2215.4	9364	1958.2
Shida Kartli	1901	605.8	1733	552.3	3000	955.4	2816	896.8
Kvemo Kartli	4854	954.6	3989	784.5	4977	973.6	4734	926.1
Guria	1850	1318.6	1832	1305.8	14557	10412.7	14530	10393.4
Samtskhe–Javakheti	1498	701.6	1462	684.8	1894	885.9	1631	762.9
Mtskheta–Mtianeti	1422	1298.6	1406	1284.0	1111	1016.5	1099	1005.5
Racha–Lechkhumi and Kvemo Svaneti	671	1421.6	666	1411.0	1183	2533.2	1176	2518.2
Other departments	4274	--	641	--	5041	--	2133	--
Georgia	**43384**	**967.7**	**35914**	**801.0**	**75968**	**1691.7**	**67898**	**1512.0**

Table 4.155 Injury, poisoning and certain other consequences of external causes in children, Georgia, 2011 – 2012

	2011				2012			
	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	136	--	121	--	159	**--**	**157**	**--**
Ajara	738	1109.8	572	860.2	717	1073,4	519	776.9
Tbilisi	1477	746.0	1464	739.4	1334	670,7	1235	620.9
Kakheti	863	1250.7	856	1240.6	831	1206,1	817	1185.8
Imereti	1239	1035.1	1194	997.5	1532	1278,8	1481	1236.2
Samegrelo	619	763.3	612	754.6	1030	1268,5	986	1214.3
Shida Kartli	342	642.9	333	625.9	329	617,3	325	609.8
Kvemo Kartli	1176	1364.3	893	1036.0	571	657,8	535	616.4
Guria	538	2260.5	532	2235.3	1937	5336,1	1931	8147.7
Samtskhe–Javakheti	311	859.1	298	823.2	211	581,3	194	534.4
Mtskheta–Mtianeti	148	795.7	148	795.7	165	891,9	161	870.3
Racha–Lechkhumi and Kvemo Svaneti	46	575.0	46	575.0	102	1291,1	102	1291.1
Other departments	18	--	18	--	11	--	11	-
Georgia	**7651**	**1006.3**	**7087**	**932.1**	8929	1171,6	8454	1109.3

Table 4.156 **Injury, poisoning and certain other consequences of external causes, hospital discharges by regions, Georgia, 2011-2012**

	2011				2012			
	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	1792	1.6	320	0.3	1702	2.2	7	57.1
Tbilisi	8985	2.1	1478	0.5	10315	1.5	3064	0.2
Kakheti	956	2.9	95	0.0	1064	1.8	104	
Imereti	2840	3.6	185	1.3	3041	3.1	321	0.6
Samegrelo	1223	5.9	138	0.7	1037	2.2	99	--
Shida Kartli	618	2.4	30	0.0	578	3.3	28	--
Kvemo Kartli	781	2.3	57	0.0	703	1.4	42	--
Guria	337	3.3	37	0.0	144	3.5	26	-
Samtskhe–Javakheti	315	2.2	26	0.0	320	7.5	15	6.7
Mtskheta–Mtianeti	114	0	0	3.5	359	7.0	17	--
Racha–Lechkhumi and Kvemo Svaneti	49	8.2	1	0.0	58	1.7	8	--
Other departments	681	0.0	11	0.0	565	50.0	13	-
Georgia	**18691**	**2.6**	**2378**	**0.6**	**19886**	**2.1**	**3744**	**0.3**

CHAPTER 5.
Maternal and child health

Table 5.1 Births, child and maternal mortality rates (data collected from health facilities), Georgia, 2006 – 2012

	2006	2007	2008	2009	2010	2011	2012
Total number of deliveries	48181	49626	56096	61656	61928	57413	56848
Including hospital deliveries	*47593*	*49317*	*55850*	*61441*	*61653*	*57318*	*56746*
home deliveries	*588*	*309*	*246*	*215*	*275*	*95*	*102*
Total number of live births	47856	49476	56025	61677	61901	57503	56890
Including home live births without further hospitalization	*536*	*308*	*235*	*209*	*255*	*95*	*101*
Total number of stillbirths	817	738	717	665	682	554	647
Total number of infant deaths (at the age 0-1year)*	882	699	802	872	741	634	617
Total number of early neonatal deaths (at the age 0-6 days)	604	467	516	558	410	349	373
Total number of late neonatal deaths(at the age7-28 days)	146	118	147	214	186	139	151
Total number of post neonatal deaths (at the age 29-365 days)	132	114	139	100	145	146	93
Total number of under-five deaths*	945	945	898	949	830	691	705
Total number of maternal deaths	11	10	8	33	12	16	13
Stillbirth rate per 1000 births	16.8	14.7	12.6	10.7	10.9	9.5	11.2
Early neonatal mortality rate per 1000 live births	12.6	9.4	9.2	9.0	6.6	6.1	6.6
Late neonatal mortality rate per 1000 live births	3.1	2.4	2.6	3.5	3.0	2.4	2.7
Perinatal mortality rate per 1000 births	29.2	24.0	21.7	19.7	17.4	15.6	17.7
Infant mortality rate per 1000 live births*	18.4	14.1	14.3	14.1	12.0	11.0	10.8
Under-five mortality rate per 1000 live births*	19.7	15.7	16.0	15.4	13.4	12.0	12.4
Maternal mortality rate per 100000 live births **	23.0	20.2	14.3	52.1	19.4	27.6	22.8

Table 5.2 Births and infant deaths by the regions (data collected from health facilities), Georgia, 2012

	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
Ajara	5703	59	10.2	48	8.4	30	5.3	15.4
Tbilisi	23620	315	13.2	360	15.2	164	6.9	20.0
Kakheti	3656	33	8.9	13	3.6	11	3.0	11.9
Imereti	8622	104	11.9	150	17.4	133	15.4	27.2
Samegrelo and Zemo Svaneti	3901	23	5.9	9	2.3	8	2.1	7.9
Shida Kartli	3278	29	8.8	10	3.1	8	2.4	11.2
Kvemo Kartli	4814	60	12.3	16	3.3	9	1.9	14.2
Guria	921	6	6.5	7	7.6	6	6.5	12.9
Samtskhe-Javakheti	1886	13	6.8	3	1.6	3	1.6	8.4
Mtskheta-Mtianeti	432	5	11.4	0	0.0	0	0.0	11.4
Racha-Lechkhumi and Kvem Svaneti	57	0	0.0	1	17.5	1	17.5	17.5
Georgia	**56890**	**647**	**11.2**	**617**	**10.8**	**373**	**6.6**	**17.7**

* *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, 2012

	Number of pregnancies taken from the enrollment lists	Pregnancy brought to the end		Pregnant women with 4 antenatal care visits	
		Number	%	Number	%
Abkhazia	303	282	93.1	229	81.2
Ajara	6262	5415	86.5	5004	92.4
Tbilisi	18576	16754	90.2	13824	82.5
Kakheti	3526	3186	90.4	2793	87.7
Imereti	7838	7052	90.0	6216	88.1
Samegrelo and Zemo Svaneti	3303	2772	83.9	2395	86.4
Shida Kartli	3158	2970	94.0	2857	96.2
Kvemo Kartli	4367	4077	93.4	2318	56.9
Guria	797	753	94.5	583	77.4
Samtskhe-Javakheti	2042	1736	85.0	1626	93.7
Mtskheta-Mtianeti	395	365	92.4	339	92.9
Racha-Lechkhumi and Kvemo Svaneti	153	91	59.5	68	74.7
Georgia	**50720**	**45453**	89.6	**38252**	84.2

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	322	309	96.0	309	96.0	309	96.0
Ajara	6185	5830	94.3	5796	93.7	5820	94.1
Tbilisi	20317	16872	83.0	17059	84.0	16767	82.5
Kakheti	3683	3463	94.0	3420	92.9	3426	93.0
Imereti	7967	7401	92.9	6710	84.2	6446	80.9
Samegrelo and Zemo Svaneti	3649	3239	88.8	3158	86.5	3201	87.7
Shida Kartli	4186	3318	79.3	3040	72.6	2941	70.3
Kvemo Kartli	4763	4358	91.5	4376	91.9	4104	86.2
Guria	866	820	94.7	829	95.7	826	95.4
Samtskhe-Javakheti	2401	2031	84.6	1874	78.1	1820	75.8
Mtskheta-Mtianeti	452	432	95.6	440	97.3	435	96.2
Racha-Lechkhumi and Kvemo Svaneti	196	146	74.5	137	69.9	137	69.9
Georgia	**54987**	**48219**	87.7	**47148**	85.7	**46232**	84.1

Table 5.5 Live births and stillbirths according to the birth weight (data from maternity hospitals), Georgia, 2012

	Total	500 - 999	1000 - 1499	1500-2499	2500-3999	> 4000
Number of live births	56789	142	482	3068	48270	4827
% from the total number of livebirths	100.0	0.3	0.8	5.4	85.0	8.5
Number of stillbirths	647	281	100	132	118	16
% from the total number of stillbirths	100.0	43.4	15.5	20.4	18.2	2.5

Table 5.6 Incidence of diseases in newborns (data from maternity hospitals), Georgia, 2012

	Number of cases	Incidence rate per 1000 livebirths
Total	5489	96.5
Certain conditions originating in the perinatal period	4893	86.0
Including: Disorders of newborn related to slow fetal growth and fetal malnutrition	863	15.2
Birth trauma	176	3.1
Birth trauma	14	0.2
Including: Intracranial laceration and hemorrhage due to birth injury	18	0.3
Respiratory disorders specific to the perinatal period	1928	33.9
Including: Intrauterine hypoxia and birth asphyxia	482	8.5
Respiratory distress syndrome of newborn	1227	21.6
Congenital pneumonia	22	0.4
Infections specific to the perinatal period	437	7.7
ინცლშდინგ ცრინგმენტალ ვირალ დისემასეს	9	0.2
Including: Sepsis of newborn	133	2.3
Haemorrhagic and haematological disorders of fetus and newborn	596	10.5
Including intracranial haemorrhage of fetus and newborn	75	1.3
Haemolytic disease of fetus and newborn	415	7.3
Syndrome of infant of mother with gestational diabetes	5	0.1
Syndrome of infant of a diabetic mother	3	0.1
Hypothermia of newborn	4	0.1
Convulsions of newborn	19	0.3
Neonatal cerebral ischaemia	664	11.7
Feeding problems of newborn	12	0.2
Other diseases of the perinatal period	185	3.3
Congenital malformations	512	9.0
Including congenital malformations of the nervous system	43	0.8
Including congenital hydrocephalus	8	0.1
Spina bifida	27	0.5
Congenital malformations of the circulatory system	153	2.7
Including congenital malformations of cardiac chambers and connections	20	0.4
Congenital malformations of cardiac septa	44	0.8
Congenital malformation of pulmonary and tricuspid valves	14	0.2
Congenital malformation of aortic and mitral valves	7	0.1
Other congenital malformations of heart	41	0.7
Congenital malformation of great arteries	8	0.1
Other congenital malformations of circulatory system	4	0.1
Congenital malformations of the respiratory system	3	0.1
Cleft lip and cleft palate	21	0.4
Atresia of oesophagus with and without fistula	10	0.2
Congenital absense, atresia and stenosis of large intestine	14	0.2
Congenital malformations of genital organs	79	1.4
Including indeterminate sex and pseudohermaphroditism	4	0.1
Congenital malformations of the urinary system	21	0.4
Congenital malformations and deformations of the musculoskeletal system	56	1.0
Down's syndrome	14	0.2
Other diseases of newborn	84	1.5

Table 5.7 Essential data on breastfeeding, Georgia, 2011 – 2012

	2011		2012	
	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	40571	70.7	39109	68.7
Breastfeeding initiated in 1-8 hours after birth	9882	17.2	10074	17.7
Breastfeeding initiated in 8-24 hours after birth	2947	5.1	2891	5.1
Total number of the breastfed newborns	55340	96.4	54264	95.4
Data collected from the children policlinics				
Newborns breastfed at the age of 3 months	20179	35.1	32415	57.0

Table 5.8 Caesarean sections number, rate and structure, Georgia, 2011 – 2012

	2011			2012		
	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	**20143**	**350.9**	**100**	**20930**	**367.9**	**100**
Including:						
Scheduled	11563	--	57.4	12702	--	60.7
Urgent	8580	--	42.6	8228	--	39.3

Table 5.9 Caesarean sections number and indicators, Georgia, 2012

	Number of deliveries	Total number of caesarean sections	% from the total number of deliveries	Ratio per 1000 live births
Ajara	5685	2278	40.1	399.4
Tbilisi	23581	8649	36.7	366.2
Kakheti	3660	1342	36.7	367.1
Imereti	8634	3366	39.0	390.4
Samegrelo and Zemo Svaneti	3900	1964	50.4	503.5
Shida Kartli	3268	1273	39.0	388.3
Kvemo Kartli	4827	1347	27.9	279.8
Guria	920	281	30.5	305.1
Samtskhe-Javakheti	1883	120	6.4	63.6
Mtskheta-Mtianeti	434	139	32.0	321.8
Racha-Lechkhumi and Kvemo Svaneti	56	2	3.6	35.1
Georgia	**56848**	**20761**	**36.5**	**364.9**

Table 5.10 Abortions and contraception, Georgia, 2000 – 2012

	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			
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
2012	**56890**	**39225**	**15941**	**689.5**	**9881**	**24312**

Table 5.11 Abortions by the age groups, Georgia, 2012

	All ages	Age groups						
		< 15	15-19	20-29	30-34	35-39	40-44	≥ 45
Total number	**39225**	**19**	**1955**	**18857**	**10320**	**5937**	**1956**	**181**
Indicator per 1000 women	***34.1***	***0.2***	***13.8***	***52.3***	***62.1***	***37.2***	***12.5***	***1.1***
Including:								
Spontaneous abortions	4973	9	296	2648	1159	586	236	39
Induced abortions	33688	10	1631	15995	8994	5247	1679	132
Gestational age less than 12 weeks	33558	10	1618	15921	8971	5233	1673	132
Mini abortions (Gestational age less than 5 weeks)	15941	7	733	7424	4254	2652	822	49
At gestational age 12-22 weeks (due to medical or social reasons)	130	0	13	74	23	14	6	0
Number of abortions during the first pregnancy terminated by induced	**176**	**0**	**51**	**76**	**31**	**15**	**3**	**0**

Table 5.12 Essential data on reproductive health, Georgia,* 2012

	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	902	902	0	25	25	0	47	0
Ajara	7401	6188	1213	381	319	62	525	677
Tbilisi	37190	34842	2348	4943	3764	1179	2424	1203
Kakheti	2523	2523		109	109	0	229	142
Imereti	14392	12971	1421	798	782	16	1295	601
Samegrelo and Zemo Svaneti	5377	5361	16	183	182	1	343	402
Shida Kartli	4611	4596	15	168	168	0	258	158
Kvemo Kartli	6125	6113	12	200	200	0	301	854
Guria	638	616	22	67	67	0	115	101
Samtskhe-Javakheti	1402	1347	55	224	224	0	45	300
Mtskheta-Mtianeti	1281	1236	45	102	102	0	274	14
Racha-Lechkhumi and Kvemo Svaneti	886	870	16	11	11	0	54	14
Georgia	**82728**	**77565**	**5163**	**7211**	**5953**	**1258**	**5610**	**4466**

* *Encounters to out-patient facilities due to reproductive health problems, excluding antenatal care visits*

Table 5.13 Essential data on reproductive health, Georgia*, 2012

	Encounters for a contraception method selection		
	Both sexes	Females	Males
Abkhazia	138	138	0
Ajara	1858	1580	278
Tbilisi	3940	3112	828
Kakheti	399	399	
Imereti	6764	5371	1393
Samegrelo and Zemo Svaneti	738	723	15
Shida Kartli	421	406	15
Kvemo Kartli	641	629	12
Guria	118	96	22
Samtskhe-Javakheti	206	151	55
Mtskheta-Mtianeti	248	203	45
Racha-Lechkhumi and Kvemo Svaneti	41	25	16
Georgia	**15512**	**12833**	**2679**

Table 5.14 Child deaths registered by health facilities, Georgia, 2012

	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
Ajara	60	89.8	70.0	30.0	48	8.4	72.9	27.1	57	10.0	71.9	57
Tbilisi	441	221.7	99.8	0.2	360	15.2	100.0	0.0	412	17.4	99.8	412
Kakheti	19	27.6	57.9	42.1	13	3.6	84.6	15.4	15	4.1	73.3	15
Imereti	172	143.6	95.3	4.7	150	17.4	98.7	1.3	160	18.6	98.1	160
Samegrelo and Zemo Svaneti	18	22.2	72.2	27.8	9	2.3	88.9	11.1	14	3.6	85.7	14
Shida Kartli	14	26.3	85.7	14.3	10	3.1	100.0	0.0	11	3.4	100.0	11
Kvemo Kartli	27	31.1	48.1	51.9	16	3.3	62.5	37.5	23	4.8	56.5	23
Guria	10	42.2	70.0	30.0	7	7.6	85.7	14.3	8	8.7	75.0	8
Samtskhe-Javakheti	5	13.8	80.0	20.0	3	1.6	100.0	0.0	4	2.1	100.0	4
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	2	25.3	50.0	50.0	1	17.5	100.0	0.0	1	17.5	100.0	1
Georgia	**768**	**100.8**	**92.1**	**7.9**	**617**	**10.8**	**95.9**	**4.1**	**705**	**12.4**	**94.6**	**705**

Table 5.15 Incidence of diseases in children under-1 and under-5, Georgia, 2012

	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	**63589**	**1117.6**	**192653**	**664.8**
Including:				
Certain infectious and parasitic diseases	6877	120.9	21411	73.9
Neoplasms	49	0.9	93	0.3
Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism	2296	40.4	5628	19.4
Endocrine, nutritional and metabolic diseases	1480	26.0	2734	9.4
Mental and behavioural disorders	0	0.0	53	0.2
Diseases of the nervous system	2192	38.5	4140	14.3
Diseases of the eye and adnexa	1744	30.7	5289	18.3
Diseases of the ear and mastoid process	3375	59.3	8485	29.3
Diseases of the circulatory system	53	0.9	194	0.7
Diseases of the respiratory system	38163	670.7	126057	435.0
Diseases of the digestive system	1628	28.6	4871	16.8
Diseases of the skin and subcutaneous tissue	2060	36.2	6619	22.8
Diseases of the musculoskeletal system and connective tissue	211	3.7	629	2.2
Diseases of the genitourinary system	373	6.6	1470	5.1
Certain conditions originating in the perinatal period	1909	33.6	1909	6.6
Congenital malformations, deformations and chromosomal abnormalities	592	10.4	829	2.9
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	448	7.9	1184	4.1
Injury, poisoning and certain other consequences of external causes	139	2.4	1058	3.7

CHAPTER 6.
Migrant Health Survey (MHS): Main Health Determinants

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 vege Table servings days per week	3	4	4
Average number of vege Table 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%

ANNEX 1.

Survey Report on a Completeness of Registration and Quality Assessment of Mortality Caused by Trauma

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I. Introduction

The combined impact of mortality and morbidity caused by trauma is largely unknown. Generally disease caused by trauma takes the leading place in the trauma disease structure. Disease caused by injuries is one of the main problems in public health all over the world as it is the leading cause for the mortality and disability in persons below the age of 45. The morbidity calculations conducted in past years clearly showed that trauma constituted 10% of global mortality and 12% of global morbidity.

In 2008 the WHO implemented the project, which assessed the road safety level in 49 European countries and global recommendations on road safety used by different countries. In accordance with this survey the level of mortality caused by trauma is two times higher in the low and average income countries than in high-income countries; and is 4 times higher in CIS countries than in the North European Countries.

In 2008 the survey conducted among the women of reproductive age in Georgia revealed a lot of discrepancies in the mortality data as in general context as well as in the registration of the concrete injury accidents. But the non-registered, non-reported and wrong coded injury accidents in population were not separately reported.

In mortality statistics, external cause's codes should be used for coding initial causes of death in case if the cause concerns to the class XIX. It is recommended to develop causes of death according to the classes XIX and XX codes.

Data Registration in Georgia

In Georgia according to the international and national standards, the registation of the trauma accidents and injury data is located in the following institutions:

- National Statistics Office of Georgia
- National Center of Disease Control and Public Health.
- Ministry of Internal Affairs of Georgia

The National Statistics Office maintains the mortality database, which is run using death certificates.

At the National Center of Disease Control and Public Health data on deaths are generated in accordance with the patient's diagnosis (including trauma) received from medical organizations (primary healthcare organizations, hospitals). All over the country the data are gathered in statistical reporting forms on the basis of the Order of Minister of Labour, Health and Social Affairs once a year. Besides, additional reporting system is working in Tbilisi: each medical organization provides statistical reports once a month not in aggregated form, but in a patient-oriented form. Each diagnosis is coded accordig to **ICD-10 codes.**

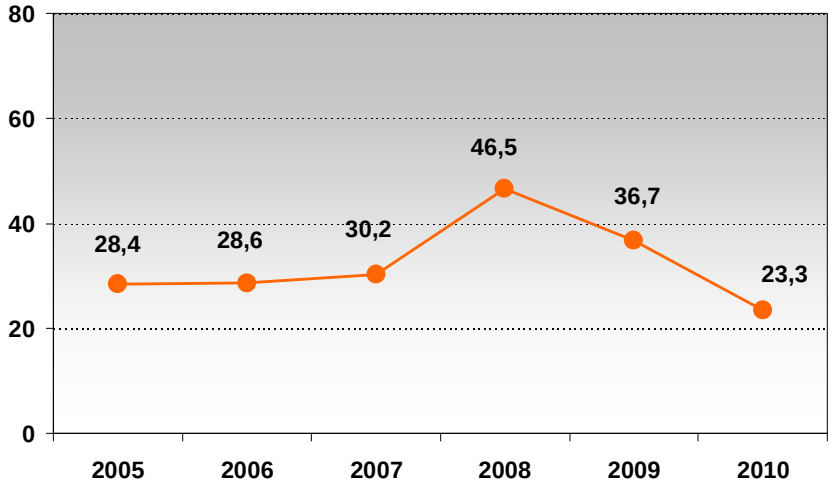
The Ministry of Internal Affairs of Georgia collects data on the basis of the police protocols, which include reported crimes according to the character: road accidents, murders, suicides and others. Besides, the information is gathered on the basis of violence and accidents.

II Problem Description – Survey Confirmation

Demografic Statistics

The improvement of the registration process of mortality in 2009-2010 resulted in the increase of the number of registered deaths in Georgia (by 7.8% in 2009, and by 2.7% in 2010). In recent years in Georgia, simultaneously with the improvement of the completeness of mortality registration, traumas and injuries related death rate has been decreased: in 2010, compared to 2008, the rate decreased by 49.9%.

Figure 1. Injury caused mortality rate per 100,000 population, Georgia



Source: National statistics office

Since 2008 the share of the injury classes has been decreased in mortality structure from 4.7 % to 2.2% in 2010. This class has been located on the 4th place in the mortality structure.

Changes in the mortality rate have been expressed not only in regarding to injuries, but also they have been reflected in decrease of the share of other leading causes of mortality, such as cardiovascular diseases and cancers. It is probably caused by the frequent use of unknown cause of deaths. Taking into consideration the above mentioned, in 2007-2010, the mortality caused by unknown causes increased from 79.1 to 591.4 (100,000 population) and took the first place in the mortality structure.

It is impossible to assess a real situation and further analyse it due to such disfigure of the mortality sturcture. According to the GeoStat data the structure of death results caused by injury (trauma) is debolished. A death certificate is not completed in accordance with the ICD-10 instructions and therefore, does not reveal death true causes and reduces the authenticity of coding by classification.

As mentioned above, the injury cases are subject to double coding. For the coding of the injury the codes T and S of the ICD-10 class XIX is used; for external causes coding – the codes V, W, X, Y of the XX class are used. Ideally a death certificate should inlcude both codes for each death due to trauma.

Table 1. Injury related mortality structure, Georgia, 2010

	Code ICD-10	Total	%
Total	**S00-T98**	**1,038**	**100**
Injuries of the head area	S00-S09	255	24.6
Injuries of the neck	S10-S19	5	0.5
Injuries of the breast	S20-S29	29	2.8
Injuries of the stomach, neck, backbone, pelvis	S30-S39	59	5.7
Injuries of the wrist and hand	S60-S69	1	0.1
Injuries of the pelvis and hip	S70-S79	3	0.3
Injuries of the knee and shin	S80-S89	1	0.1
Injuries involving different body regions	T00-T07	81	7.8
Injuries to unspecified part of trunk, limb or body regions	T08-T14	366	35.3
Effects of foreign body entering through orifice	T15-T19	1	0.1
Burns and corosions	T20-T32	18	1.7
Frostbite	T33-T35	2	0.2
Toxic effects of substances chiefly nonmedical.as to source	T51-T65	11	1.1
Other and unspecified effects of external causes	T66-T78	200	19.3
Certain early complication of trauma	T79	6	0.6

Source : National Statistcis Office

It is important to note that the 1/5 of the trauma is described as trauma caused by „external causes and other unspecified factors"- codes T66-T78, pointing that there was not indicated injury mode in 1/5 of the death certificates.

The same deaths can be classified according to the external causes of injury. The table below clssifies the same cases according to an external cause of theinjury. (using codes from the class XX – "External causes of morbidity and mortality").

Table 2. Mortality Structure according to external causes of injuries, Georgia 2010

	Code ICD-10	Total	%
Total	**V01-Y98**	**1,038**	**100**
Transport accidents	V01-V99	173	16.7
Falls	W00- W19	9	0,9
Accidental drowning and submersion	W65-W74	52	5.0
Other accidental threats to breathing	W75-W84	10	1.0
Exposure to electric current, radiation and extreme ambient air temperature and pressure	W85-W99	20	1.9
Exposure to smoke, fire, and flames	X00-X09	13	1.3
Contact with heat and hot substancies	X10-X19	10	1.0
Contact with venomous enimals and plants	X20-X29	1	0.1
Exposure to forces of nature	X30-X39	8	0.8
Accidental poisoning by and exposure to noxious substancies	X40-X49	17	1.6
Accidental exposure to other unknown and unspecified factors	X58-X59	424	40.8
Intentional selfharm	X60-X84	113	10.9
Assault	X85-Y09	15	1.4
Event of undetermined intent	Y10-Y34	171	16.5
Surgical and other medical procedures as the cause of abnormal reaction of the patient, or later complication, without mention of misadventure at the time of the procedure	Y83-Y84	2	0.2

Source : National Statistcis Office

Thus, 41% of cases refers to the group “Accidental exposure to other unknown and unspecified factors” (codes X58-X59), indicating that no concrete factors, place of occurence and etc. were mentioned in the death certificate.

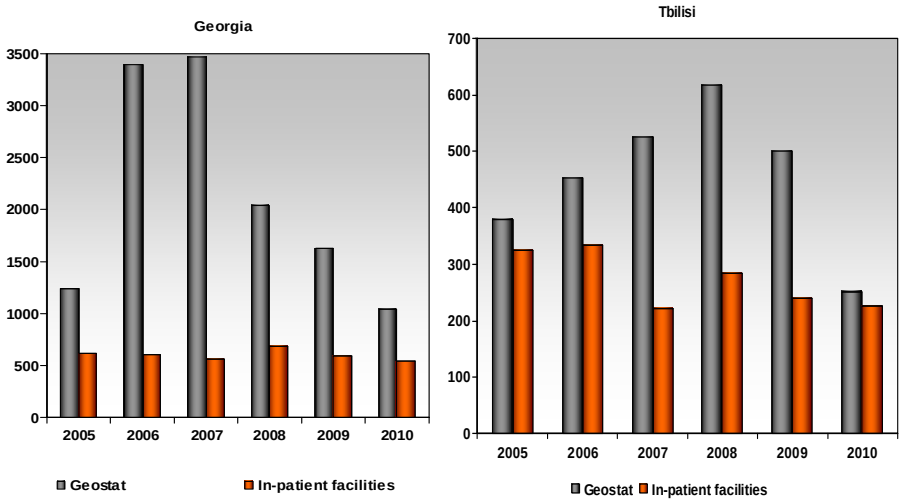
It should be noted, that the 4 digit codes, which define the details of death circumstances, were not used. Without the mentioned details it is impossible to define such important things as road accidents, industrial and nonindustrial injuries and other accidents. Therefore, it is impossible to make comparison by all parameters with other countries and to participate in international projects.

Medical Statistics

The monthly statistical reporting form № IV-066 – “register of the patients discharged from a hospital in Tbilisi”, approved by the order N101/N from April 5, 2005 of the Minister of Labour, Health and Social Affairs of Georgia, has been used for the study. Using this form the National Center of Disease Control and Public Health receives information on each hospitalization case from hospitals. The form containes information about a patient’s age, sex, diagnosis, duration of the medical treatment and outcome. In the case of injury the form contains just the classification of injury without description of external causes.

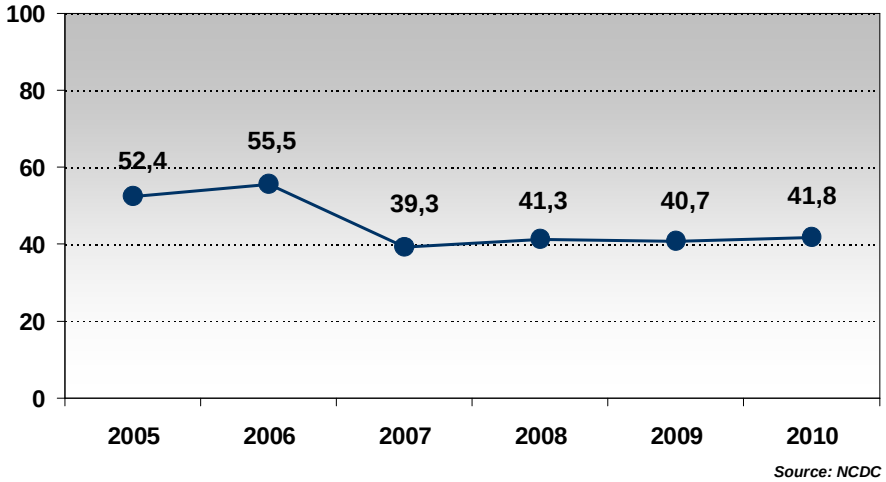
In Georgia in recent years, the hospital mortality caused by injuries is stable and the same time it quite different from the demographic statistical data. In 2005-2010, the difference between the number of the injury related deaths at hospitals and the data of the National Statistics Office varied in between 16.2%-52.3% in the whole country, and 42.0%-90.1% in Tbilisi.

Figure 2. **Numbers of Injury caused deaths, vital and health statistics**



According to the medical statistics, in 2010 the share of the registered number of death caused by injuris at Tbilisi hospitals was approximetaly 47.4% from the total number registered in the country.

Figure 3. **Percent of the injury-related hospital deaths, registered in Tbilisi, from the total number of injury-related hospital deaths in Georgia**

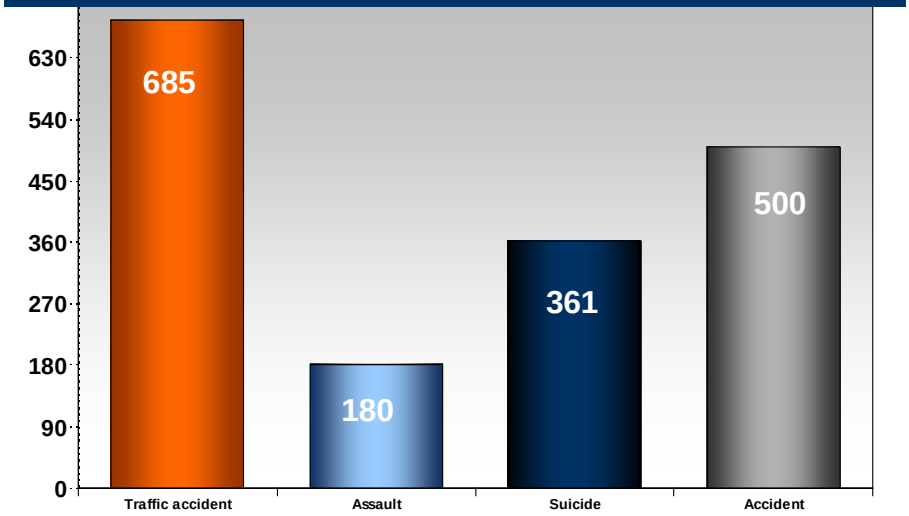


Source: NCDC

Ministry of Internal Affairs

The Ministry of Internal Affairs groups the information about the number of deaths caused by injury according to various classifications; therefore, it is possible to compare only several categories of the external causes of injuries: road accidents, intended murder, suicide.

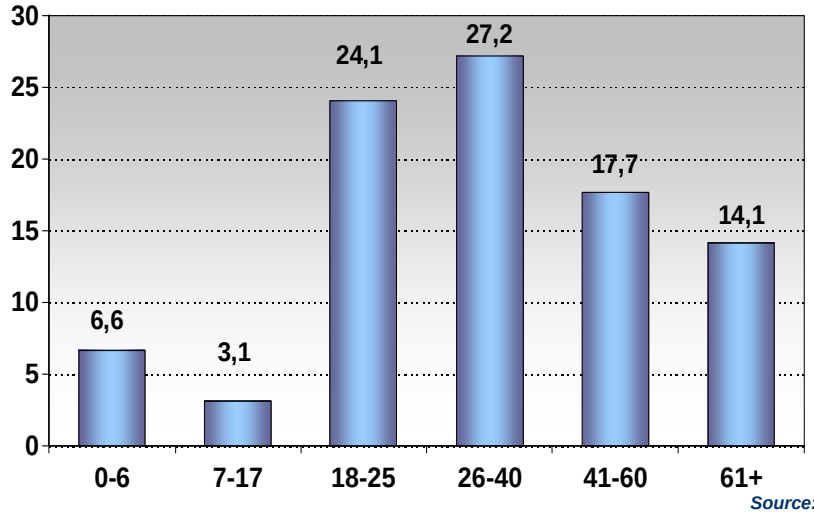
Figure 4. **Number of injury-related deaths according to the Ministry of internal affaires data**



Source: MIA

In 2007, according to the data of the World Health Organization, Georgia took the 9th place among 10 countries with the high level of mortality caused by road accidents, and tendency of mortality has been increasing. According to the European status report on road safety (2009), the general tendency of mortality caused by road accidents in Georgia corresponds to the general European tendency and frequently happens in population aged 18-40.

Figure 5. **Traffic accident-related mortality rate per 100,000 population by age groups. Georgia, 2007**



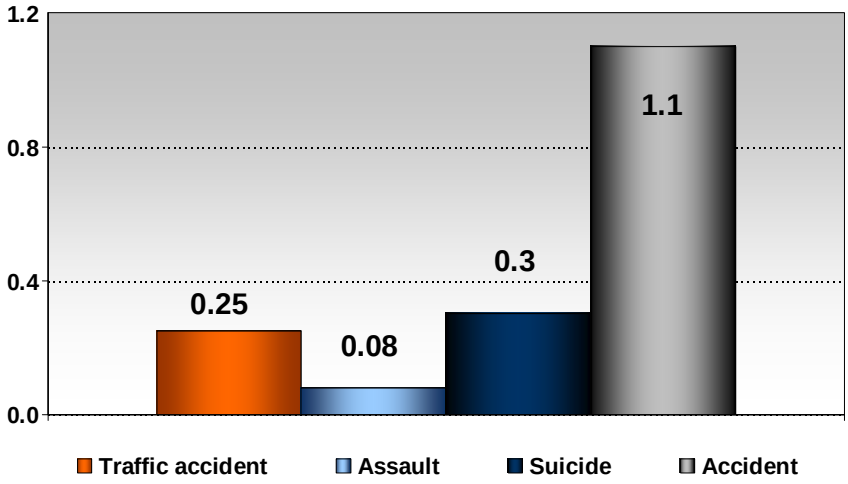
Source: MIA

Due to the measures carried out in recent years including improvement of road infrastructure and road cover, renovation and expansion of the public transport, acceptance of the legislative package changes concerning obligatory usage of the safety belts and prohibition of mobile during the car driving, the situation has been changed in Georgia and nowadays the tendency of the number of road accidents and deaths has been decreased. In 2011 this progress was reflected in the WHO report on road safety and trauma developed by the Georgian National Coordinator.

Statistical data of deaths, caused by injuries, in the databases of the three different state departments significantly vary. The only official source of mortality statistics is the Georgian National Statistics Office, which provides information for international comparison and intervention planning.

In the GeoStat data incomplete and unspecified information is found, compared to the MIA data on death caused by trauma,.

Figure 6. Injury-related death, ratio by types of injury (Geostat / MIA), Georgia, 2010



The deaths caused by injuries are registered in the three databases separately and the numbers are never compared. Besides, these cases can be wrongly coded, thus, it is very difficult to assess the actual injury caused mortality.

II. Tasks and objectives of the survey

The objective of the survey was to review registered completeness of mortality data caused by trauma, to check and assess formulation of death causes and quality of coding according to groups of ICD-10 as being mortality causes coding instrument in national informational systems, provides the supervising possibilities of public health. Therefore, it is very important if medical staff provide with exact and complete information about external causes in a death certificate.

The objective of the research implies to use ICD-10 for assessment of the qualitative and quantitative external causes coding in death certificates.

Tasks:

- To develop survey criteria;
- To reveal a potential case;
- To sort and include data into the database;
- To code the underlying causes of by a competent person;
- To collected data, enter them into the united database and to filtrate;
- Data analysis;
- Conclusions;
- Recommendations.

The following data sources were used during the survey :

- The database of the National Center of Disease Control and Public Health;
- Death certificates from the hospital archives;
- The database of the National Statistics Office of Georgia.

III. Description of the process

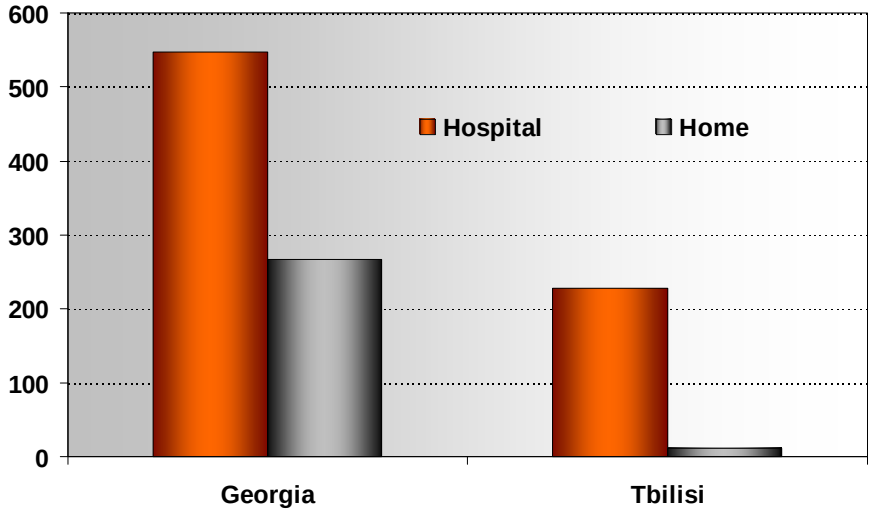
On the first stage, the cases potentially relative to the survey were identified. A number of details were considered. The medical statistical information from regions is received in an aggregated way and gives no basis to identify the cases. Information, which contains diagnosis and outcome (including fatal) for each case, is collected only from Tbilisi hospitals using the statistical form №IV-066.

According to the data from the National Statistics Office, the share of the registered deaths caused by injury, in Tbilisi is high enough. In 2010, Tbilisi cases constituted 24.4% from the total number of deaths due to injury, registered in the country; 90% among Tbilisi cases are registered in hospitals. The sex distribution and mortality rate for Georgia and Tbilisi are almost similar.

Table 3. Comparison of number of the deaths caused by injury according to the data of Georgia and Tbilisi 2010

	Georgia	among	
		Tbilisi	%
Total	**1,038**	**253**	**24.4**
Males	841	199	23.7
Females	197	54	27.4

Figure 7. Home and hospital injury –related deaths (number of cases), 2010



Source: National statistics office

Although, Tbilisi registration system gives an opportunity to assess coding (classification according to categories) per each concrete case and to compare the results with the data of the National Statistics Office. Thus, the cases for the study were limited to the cases, registered at Tbilisi hospitals.

Those hospitals, which had submitted statistical reports on deaths caused by trauma, poisoning and external causes, were selected for the survey.

A patient's form included the following general information:

- Number of the patient's history;
- sex;
- Date of birth (date, month, year);
- Date of hospitalization (day, month, year);
- Basic diagnosis (ICD -10 code);
- outcome (fatal outcome, year, month);
- patient's address (country, region, city).

26 hospitals in Tbilisi were selected for study. All deaths (basic diagnosis) caused by injury at those hospitals in 2010 were selected from the database of the National Centre of Disease Control and Public Health. During the field work, medical histories of the patients, who died from trauma in 2010, were reviewed and questionnaires were completed. The logbooks, death certificates and their counterfoils were also studied. The information on the underlying causes of death and other conditions were separately coded on the basis of questionnaire. This gave a possibility to compare the collected data with the data of the National Statistics Office.

The survey included the following steps:

1. Selection of information of deaths caused by trauma, poisoning and external causes from the Tbilisi in-patient database at the National Center of Disease Control and Public health.
2. Medical records of patients, died in 2010, were selected from hospitals' archives.
3. In medical records, all components of a death-related information of each patient (including anamnesis, pre diagnosis, final diagnosis and others) was studied, in order to find the injury and its circumstancies (external causes and place of occurence) s. Besides, the logbooks, as well as the death certificates, issued by a hospital were reviewed.
4. All cases caused by trauma were selected.
5. The special questionnaires were completed, using the selected medical histories. The questionnaires included the following data:
    - Identification number of a patient's record;
    - Demographical data of a patient;
    - Date of hospitalization;
    - Cause of hospitalization;
    - Final diagnosis;
    - Date of death;
    - Injury / trauma circumstances – external causes and place of occurence;
    - Cause of death.
6. All death causes (types of unjury and external causes of injury) were coded in a questionnaire, defining the death underlying cause of death.
7. To identify the cases, the data collected during the study were compared with the 2010 mortality database of the National Statistics Office. For comparison the personalized information was used refering each death case.
8. The comparison of the codes of underlying causes of death coding and the verification fo records were made in both databases (GeoStat and survey).

IV. Survey results

On the first stage of the survey, 194 deaths, occured at Tbilisi hospitals in 2010, were selected from the statistical dabase of the National Center of Disease Control and Public Health. Of which, 23

cases were not found during the survey (due to liquidation of hospitals); in 18 cases other diseases, which were not injury-related (e.g. stroke), were indicated in the medical records. Relatively, on the first stage of the survey 153 cases were coincided with the database of the medical statistics.

Table 4. Comparing the Routine Statistics and the Field Work Data

	Number	%
Deaths caused by injury, registered at Tbilisi Hospitals (form №IV-066)	**194**	**100**
Among which		
Not found in the archives of hospital involved in research	23	11.8
Non trauma-related causes	18	9.3

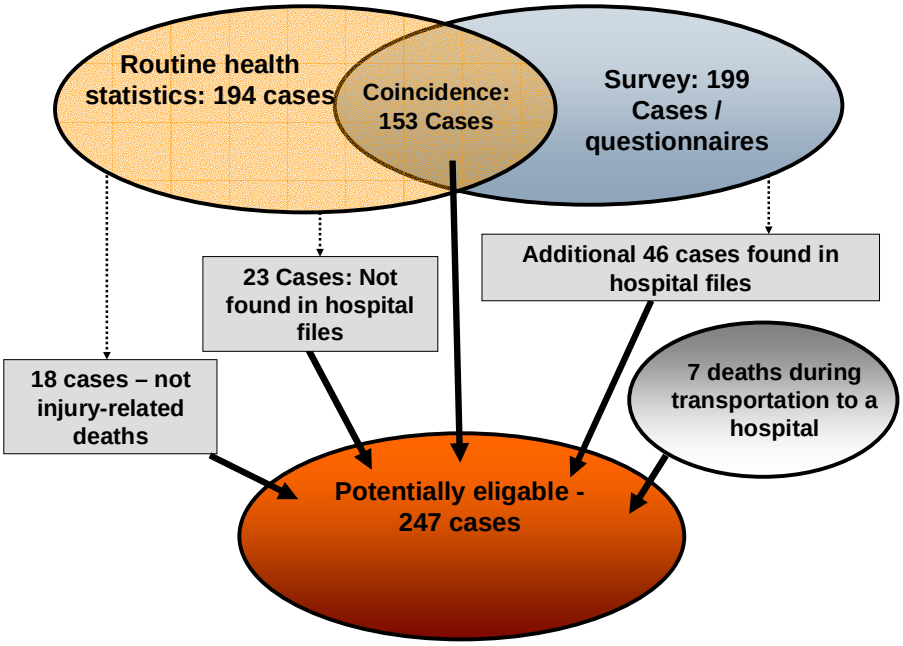
On the basis of the medical records review from medical records in hospitals' archives were completed 199 questionnaires. Of which, 153 cases were selected from the routine statistical database and additional 46 cases were not recorded in the form №IV-066, including the 7 deaths caused by trauma, where death happened during trasportation by ambulance. They were not inluded into the report. All cases were coded by the experts acting in accordance with standard coding rules. Two codes were used – trauma character code and external causes code.

On the second stage of the survey, 46 additional deaths, not included in the form №IV-066, were rechecked in the medical statistics database. On the basis of the recheck, 21 cases were identified with a wrong diagnosis (different diseases not associated with trauma), or with incorrect treatment outcome (recorded as discharged alive). 25 cases were not found in the medical statistics database. All above mentioned indicates the quality of statistical information collected from hospitals.

Table 5. Technical results of the field work

	number
Completed questionnaires	**199**
Were not sent to medical statistics	25
Codes of different disease sent to medical statistics	21
Additional cases (corpses) from logbooks	**7**

On the following stages both databases were reconciled and totally 247 potentially eligible cases were found.



Comparison with the health statistics database

Out of which, 7 cases (corpses, which were neither inlcuded in the medical statistics database, nor their medical records were found) were deducted from the total number. Thus 240 cases participated in the comparison of the health statistics database and the results of the survey. Of the above mentioned cases only 192 were registered in both databases.

In order to check the quality of the coding, all above mentioned cases have been rechecked again according to the 3 digital ICD-10 codes and compared with the codes received from the routine statistics. Incorrect coding represented the main problem revealed. The incorrect codes referred to diagnosis details, including the incorrectly assigned classes. For example, in the most of cases stroke (code 164) was coded as intracranial trauma (code S06).

Besides, there were mistakes in age identification and in the results of treatment – “discharged alive” or “recovered” instead of “died”. Such types of mistakes are frequently followed by distortion of age and morbidity and mortality structures.

Table 6. Assessment of the health statistics database

	Number	%
Cases in both databases (routine and survey)	**192**	**100.0**
Including:		
Incorrect codes (3 digit codes)	158	82.3
Incorrect in age	45	23.4
Incorrect treatment outcome	5	2.6

Comparison with the mortality database

Among 247 potentially eligible cases, 1 duplicate was discovered. After removing it from the database, 246 cases (190 males and 56 females) were compared with the database of the National Statistics Office.

The following parameters were used for case identification:

- Patient's name and surname;
- Age;
- Sex;
- Address;
- Date of birth;
- Date of death;
- Place of death.

After the indentification only 209 from 246 deaths were found in the database of the National Statistics Office.

Table 7. Comparison of the results of field work and database of the GeoStat

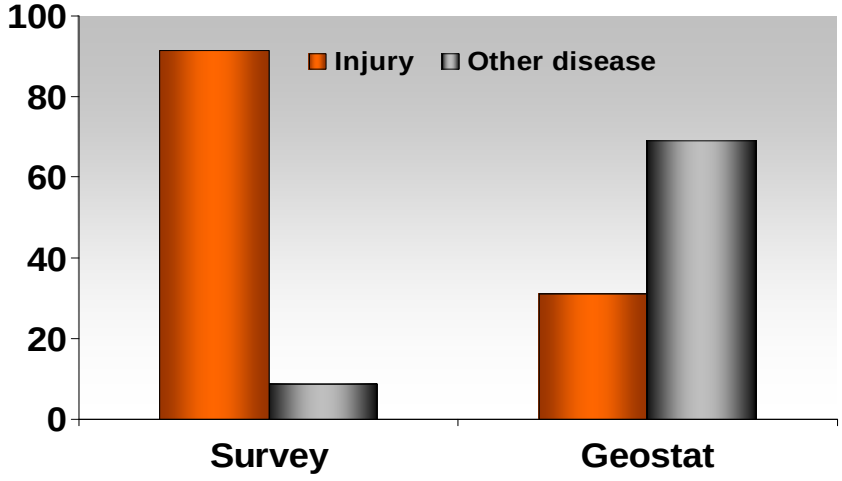
	Number of cases revealed during the filed work	Identified number of cases in GeoStat database	%
Total	**246**	**209**	**85.0**
Males	190	165	86.8
Females	56	44	78.6

The deaths caused by trauma was found in 91.4 % of 209 identified cases, according to the survey data, and in only 31.0%, according to the GeoStat.

Table 8. Structure of Identified Cases According to Death Causes

	GeoStat Database		Survey Database	
	Number	%	Number	%
Total	**209**	**100**	**209**	**100**
Death due to injury	66	31.0	191	91.4
Death due to other disease	143	69.0	18	8.6

Figure 9. Comparison of mortality structures according to the survey and Geostat, Tbilisi, 2010



Underlying causes of death are used to produce the mortality structure. Accoridng to the survey, only in 34,6% from 191 deaths, happened at Tbilisi hospitals, the underlying causes of death were correctly idefined. 125 cases of deaths due to trauma (65%) were miscoded in the SDS database due to either certifiers or coders' errors. The errors distribution is shown in the table below.

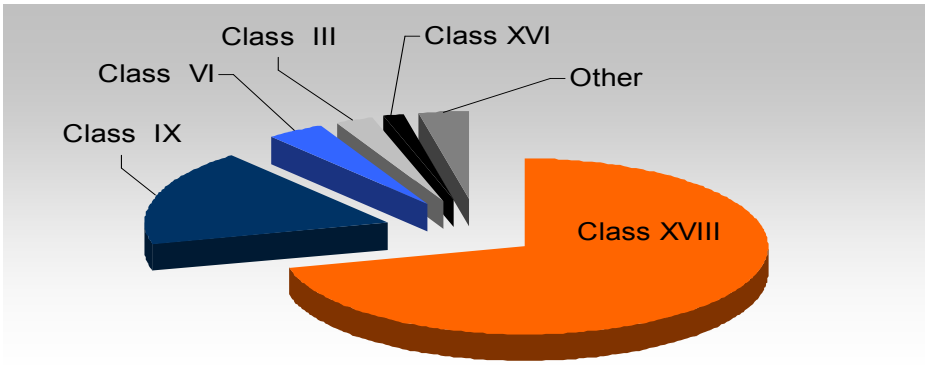
Table 9. Errors in the death certificates, GeoStat Database

Existing death cause	ICD-10 code	Number	%
Total		**125**	**100**
Ill-defined and unspecified causes of mortality	R99	89	71.2
Heart failure, unspecified	I50.9	15	12.0
Intracerebral haemorrhage, unspecified	I61	6	4.8
Hydrocephalus, Compression of brain, Encephalopathy	G93.5	5	4.0
Anaemia, unspecified	P64.9	3	2.4
Fetal death of unspecified cause*	P95	2	1.6
Bacterial foodborne intoxication, unspecified	A05.9	1	0.8
Pulmonary heart disease, unspecified	I27.9	1	0.8
Embolism and thrombosis of unspecified artery	I74.9	1	0.8
Respiratory failure, unspecified	I96.9	1	0.8
Code does not exist in the ICD-10	-	1	0.8

According to the table, the most frequent errors of miscoding are ill-defined and unspecified causes. These, unspecified causes, constitute 71.2% of errors. Fetal death of unspecified cause gives more 1.6%. Frequently symptoms or pathological condition are identified as the underlying causes. For example: respiratory or heart failure. In one of two cases the code of perinatal condition was assigned for the adult, and in another case – the non existing code was found in the mortality database.
In several cases "hydrocephalus and compression of brain" is defined as death the underlying cause. In these cases, supposedly, the codes of brain damage should refer to the other classes of disease.

* In the ICD-10 this rubric ***includes'*** Deadborn fetus NOS and Stillbirth NOS'

Figure 10. Coding errors of the injury-related deaths



Class III	**Diseases of the blood and blood forming organs**
Class VI	**Diseases of the nervous system**
Class IX	**Diseases of the circulatory organs**
Class XVI	**Certain conditions originating in the perinatal period**
Class XVIII	**Symptoms, signs and abnormal clinical findings**

Errors in coding might be resulted either from organizations issuing a death certificate, or from the coder. It is obvious, that, such kind of errors change the mortality structure essentially and complicate the decision-making process and planning of preventive measures against injuries.

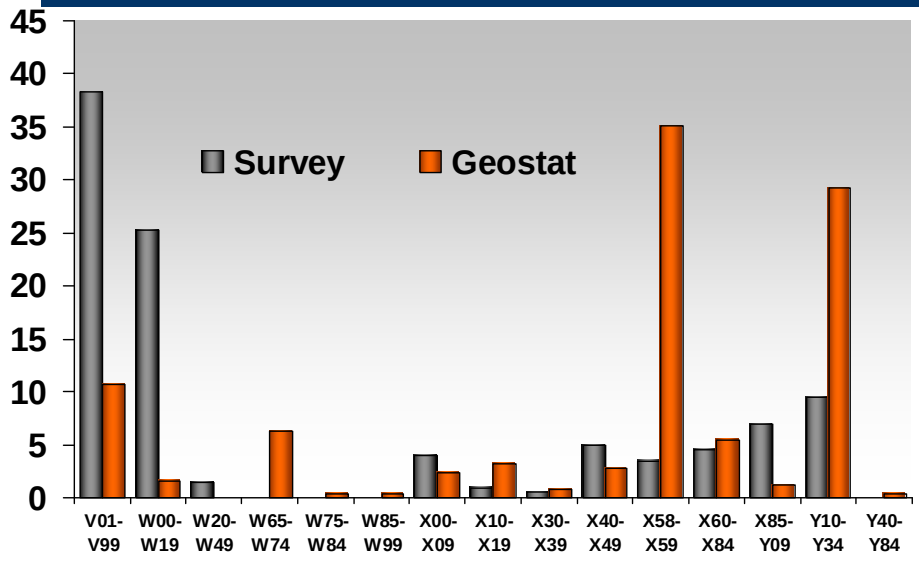
As mentioned above, codes of the ICD-10 XIX and XX classes are always used together. Besides, in case of fatal outcome, the class “external causes of mortality and morbidity”, has priority in use between these two classes, because the preventive measures of injuries and poisoning are aimed on the elimination of the external causes. The class of external causes is the only class, which is directly connected ot the preventing of fatal outcomes.

The results revealed the essential differences in the structure of external causes of injuries, according to the survey and the National Statistics Office databases. In the survey data the share of traffic accidents exceed three folds the same share in the GeoStat data. The difference in the coding of falls was 23,8%. It should be noted that in the GeoStat database, 64.3% referred to the categories of unspecified causes, such as trauma by uncertain intention or impact of the unspecified factors, covering 14% in the surveying database.

Table 10. Difference in structures of external causes of injuries, study and GeoStat databases

Death external causes	ICD-10 code	research 100%	GeoStat 100%
accidents	**V01-X59**	**79.0**	**63.7**
Transport accidents	V01-V99	38.3	10.7
Falls	W00-W19	25.2	1.6
Exposure to inanimated mechanical forces	W20-W49	1.5	0
Accidental drowning and submersion	W65-W74	0	6.3
Other accidental threats to breathing	W75-W84	0	0.4
Exposure to electric current, radiation and extreme ambient air temperature and pressure	W85-W99	0	0.4
Exposure to smoke, fire, and flames	X00-X09	4	2.4
Contact with heat and hot substancies	X10-X19	1	3.2
Exposure to forces of nature	X30-X39	0.5	0.8
Accidental poisoning by and exposure to noxious substancies	X40-X49	5	2.8
Accidental exposure to other unknown and unspecified factors	X58-X59	3.5	35.1
Intentional selfharm	**X60-X84**	**4.5**	**5.5**
Assault	**X85-Y09**	**7**	**1.2**
Event of undetermined intent	**Y10-Y34**	**9.5**	**29.2**
Surgical and other medical procedures as the cause of abnormal reaction of the patient, or later complication, without mention of misadventure at the time of the procedure	**Y40-Y84**	**0**	**0.4**

Figure 11. Structure of the external causes of injury-related mortality (%)



The differentiation between categories and subcategories of external causes is determined by correctly using of the 4th digit of the code. The 4th digit displays the place of accident, type of activity, traffic and non-traffic accidents and etc. The results of the study show that in 69% of the patient's medical records there was exact information necessary for putting the 4th digit. This information should be recorded in the death certificate. It is important to note that only 3 digit codes were used in death certificates and were reflected in the GeoStat database.

The study showed that the important share of mortality caused by external causes covers the young and active population (ages – 20-60). The mortality rate caused by external causes is high enough almost in all categories: traffic accidents, suicide and assault, poisoning and etc.

Conclusions

The following was revealed as a result of the research:

- Three main sources of data provide different statistical information of deaths caused by trauma;
- Statistical information provided by health institutions is incomplete;
- Incorrect and incomplete coding of the death certificates distort the mortality structure:
  - In majority of certificates only a type of trauma is indicated without inclusion of the external factors. This conflicts with the WHO recommendations and instructions on the use of the ICD-10 for mortality coding;
  - Due to the incomplete coding (use 3 digit codes) it is impossible to differentiate the injuries according to the international categories, such as professional injuries, type of traffic accidents, place of injury and etc.
- According to the actual situation, the share of the cases, which can be prevented by the different programs of the Public Health, is larger than it is identified by the official statistics.
- In Georgia the injury-related mortality rate is high and needs effective interventions in order to achieve positive dynamics of the tendency.

Recommendations

- To discuss with experts and representatives of the corresponding departments the ways of improvement of the completeness and accuracy of registration of injury-related mortality;
- To develop coordination between 3 state registering organizations and support the activities for the complete, timely and accurate registration in all acting databases;
- To make necessary changes in the online system of the death registration: the double coding and the using of 4th mark should be obligatory;
- To discuss the possibilities for use of the automatic coding system and make relative decisions;
- To provide trainings to medical personnel on the using of ICD-10 for reporting and for death certification according to the rules established by legislation;
- Inclusion the standard definition of deaths caused by injuries (including traffic accidents) at the legislative level;
- To arrange local and national preventive activities and to support relative programs.

Clients' and providers' perspectives on Caesarean sections: An operational investigation of the high Caesarean Section rate in Georgia

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1 Introduction

The current study on C-sections follows a series of assessments of perinatal care, which have been addressing current practice in perinatal care. One report (USAID/Core form 2009) rang the alarm bell on an absolutely insufficient utilization of antenatal services: in 2007 only 49.7% of pregnant women were registered for antenatal supervision before 12 weeks of gestation; 70.6% of these completed at least four visits, but only part of them underwent all the required investigations. Other studies (UNICEF/Curatio IF 2006) report dissatisfaction among pregnant women with the services obtained. Both studies found a high Caesarean Section rate of around 22% (rates ranging between institutions from 2 to 76%), more than half of which were emergency C-sections. Vacuum extraction and forceps were employed in less than 1% of all hospital-based deliveries.

Georgia is not unique in its rising trend of C-sections. World averages are as high as 40% in Eastern Asia, currently one of the places with the highest rates (Costa 2010)[1]. The current study intends to establish the trend over the years in Georgia and investigate the reasons underlying the high CS rate in Georgia, and to determine factors associated with the current practice. At the same time the study was conducted to strengthen the midwives' capacity in conducting (operational) research and enhance their analytical skills by involving them at all stages of the research. The findings of the research into current day attitude and practice in C-sections in Georgia would serve as an evidence base to be used by the MAG in their advocacy work for improvements in perinatal care, among others increased acknowledgement of clients' rights in maternal health, and the social and professional recognition of midwives.

2 Objectives

Overall research objective: To determine the reasons for the high rate of Caesarean sections in Georgia.

Analysis of existing records:

1. To identify the trend over the past 10 years in Caesarean section rates.
2. To identify regional/geographical variations in Caesarean section rates in Georgia.

Provider perspective:

3. To document the changes over time in the type of conditions that are considered 'obstetrical complications', and in particular those that require Caesarean sections.
4. To compare the profile of women who underwent CS with that of women who had a physiological delivery (10 medical categories; and in terms of other characteristics).
5. To ascertain perspectives of midwives and obstetricians/gynaecologists on C-sections: trends in general, situation in Georgia and in selected maternity houses/maternity units.

Client perspective:

6. To obtain the clients' perspectives on C-sections, including their current levels of information level and their attitudes, and the reasons why women themselves at times request for C-sections.
7. To find out at which stage of pregnancy the decision as to the type of delivery is being taken (physiological delivery or C-section).

[1] In contrast, in the African region the average CS rate is as low as 3.5%.

3 Methodology

Study type & populations, sample

The study is a cross-sectional comparative and descriptive study. The composition and the size of the sample of the Maternity Houses (MH) were determined by taking into consideration the following elements:

- regional spread including the Eastern, Western regions, and the capital;
- size of the MH: including small (<200 deliveries per year) and large size MHs (>200 deliveries per year);
- number of Caesarean sections: including MHs with high and low numbers of Caesarean sections;
- management structure of the MH: including private and (previously) public MHs.

Table 1: Study population and sample

Data collection instruments (objective)	Sample method and actual size
Checklist for retrieval of data from delivery log and patients cards (objective 4)	Purposive sampling Sample size: 19 MHs from 6 regions and Tbilisi
Interview with postpartum women, before their discharge from the MH (objective 5, 6, 7)	Convenience sampling in small facilities; systematic sampling in larger ones (7-8 per facility) Sample size: women with CS: 119, from 15 health facilities; women with VD: 175, from 19 health facilities
Interview with pregnant women (objective 5, 6, 7)	Convenience sampling at the Women's Consultation Centre Sample size: 171 women, from 15 health facilities
Interview with midwives (objective 4, 5)	Convenience sampling (3-4 per facility) Sample size: 83 (from 18 health facilities)
Interview with obstetricians/gynaecologists (objective 3)	Convenience sampling (2 per facility) Sample size: 109 (from 18 health facilities)

Although the sample of 19 facilities represents only 19% of all health facilities in Georgia that offer delivery services, they account for around 44% of all registered institutional deliveries in 2010, and for 43% of all C-sections nationwide (see table 2 below).

Table 2: Sample of 19 health facilities in relation to the total of 98 facilities in Georgia

	Georgia	Sample	%
Health facilities providing delivery services (including Caesarean sections)	98	19	19%
Obstetricians/gynaecologists	+/- 1700	109	6-7%
Midwives	+/- 900	83	9-10%
No of deliveries (2010)	61 653	27 137	44%
No of C-sections (2010)	*19 418*	*8 446*	*43%*

Source: NCDC data

Data collection

Prior to the data collection, the study administrator visited all selected health facilities to secure permission for the data collection. All selected facilities approved of the data collection in their MH/MU, and in addition some others were included. This is due to the fact that in the process of requesting permission some who initially refused gave permission at a

later stage. In one area all three – rather small – facilities were included instead of selecting one out of the three.

The data were collected using the following tools:

- **A checklist** for the retrieval of data from MH/MU. In case of a large facility, with more than 200 deliveries per month, the data for the last full month were retrieved. In case of a small facility, with less than 200 deliveries per month, the data for the last two months were retrieved. The checklist was constructed based on the 'Robson classification system of C-sections' (10 clinically relevant categories).
- **For the clients, three different questionnaires with semi-open questions** for each one of the following three categories of women:
  - postpartum women (with CS and VD, 1 or 2 days after the delivery);
  - pregnant women (between 25 and 32 weeks of gestation) visiting the antenatal clinics (within the MH/MU). For practical reasons partners of the pregnant women were not included in the study.
- **For the providers, 2different questionnaires with semi-open questions** one for the midwives and one for the Ob/Gyn.

The data collection took place from November 2010 to February 2011. The data collection teams each comprised of four research assistants (midwives) and one researcher (gynaecologist).

Findings and discussion

Georgia has seen an increase in the number of C-sections: a more than threefold rise of the national average, which increased over the past decade from 9.3% in 2000 to 31.5% in 2010. However, awareness or concern about these increasing rates among society, (future) clients and health professionals is not universal.

The study aimed to determine factors leading to the increased number of C-sections in the country, and how clients and providers perceive this increase. The study did not assess whether individual C-sections were medically indicated or not, and hence it did not seek to ascertain whether the observed increase was related to any increase in medical conditions predisposing to C-sections. Whilst there are no indications that such is the case, the study did look into determinants of C-sections in Georgia, in particular the demand and supply factors underlying those C-sections without an apparent medical need.

The claim of midwives and obstetricians/gynaecologists that one of the main reasons for the high CS rate is the increasing request by clients cannot be confirmed by the study. While the majority of pregnant women and a great number of those whose pregnancy resulted in a C-section do prefer a vaginal ('normal') delivery, it is true that quite a substantial number of women preferred a surgical delivery, or mentioned that the C-section took place at their own request, even if there was no medical indication. It was striking to note that 31% of women who underwent a C-section could not mention the reason why they had undergone surgery. It was even more striking that for more than two thirds of the women the decision on the C-section was taken during pregnancy; and for one third this decision was even taking during the first trimester of their pregnancy. Overall, the study findings illustrate a lack of information and a great deal of anxiety on the side of pregnant women about pregnancy and delivery, including fear for pain, which may trigger their preference for undergoing a C-section rather than have a normal delivery.

One of the issues the study touched upon is the financing issue. Having a delivery is a costly undertaking in current day Georgia. The price of a delivery averages around 400 GEL; the price of a C-section varies: from 400, up to 1700 GEL in case of C-section on maternal request in one health facility. A majority of the women in the study were not insured: close to three quarters of the pregnant women, 65% of the women with a VD, and 57% of the women who underwent a C-section. Moreover, not all insured women were freed of additional costs, because their insurance scheme did not cover the full costs of the delivery. The high out-of-pocket expenditures on health may have motivated some women (some even still in their twenties) to opt for a C-section in order to combine this procedure with tubal ligation. This practice illustrates how health financing issues directly impact upon medical practice, as

seen from the perspective of the client. Perverse financial issues may well be a determinant of the high CS rate in Georgia, though this is hard to substantiate because of the sensitiveness of the issue. Respondents were hesitant to elaborate on this, and therefore only a few anecdotal remarks can be made. Some providers mentioned that they had performed C-section on demand because they felt pressured by the clients, and did not want to loose them as clients.

One of the findings worth investigating more in-depth is the area of pain control/management during a vaginal delivery and anaesthesia during a C-section. Regarding the latter, providers seem to prefer endotracheal anaesthesia instead of regional (spinal) anaesthesia which is recommended by the WHO. Some 70% of the C-section was performed with endotracheal anaesthesia, and among this group the largest part was found in the regions. This finding does indicate many gaps among the providers when it comes to modern methods of anaesthesia, including in skills, information, training, and confidence.

A lack of information on pain control methods during a vaginal delivery, and possibly access to such methods, may also be a determinant of demand for C-sections among women. The study did find that quite a number of pregnant women consider a C-section less painful than a vaginal delivery, and that fear of pain is a reasonable argument for having a C-section. Midwives stated that fear of pain has motivated quite some women to have a C-section, however that such practices could be curtailed by providing access to and information on pain control and management (such as the use of epidural anaesthesia) during delivery. Overall, increased access to pain control methods may positively influence a woman's preference for a normal 'vaginal' delivery. On the other hand, such methods require specific skills/training, which may be the reason for their low use.

According to the midwives, the lack of information is a serious shortcoming in perinatal care. As midwives suggested, better-informed clients are significantly less stressed before or during childbirth thereby reducing the need for unnecessary medical interventions, hence the risks of bad maternal and/or neonatal outcomes. The antenatal period should be more than just a medical check-up, allowing women and their partners to prepare themselves for the delivery and their parenting role. Unfortunately the role of the midwife in the antennal period is limited or, as in most cases, practically non-existent. This has become the domain of the WCC's and within these centres that of the Ob/Gyn. Midwives make a claim for better birth-preparedness of pregnant women. One way in which this could be achieved is through the concept of 'Parents' Schools'. Study findings demonstrate the interest of midwives to broadening their scope of work to include antenatal and postnatal care. To a certain extent, they are supported by some of the obstetricians/gynaecologists, who would see an enhanced role for the midwife. This group however is still a minority.

Almost all Ob/Gyn know that the C-section rate in Georgia has increased, though not all see this as a cause for great concern. Those who do, generally have a better understanding of the international recommendations, and also tend to work in MH/MUs with lower CS rates. According to the group of Obs/Gyns, the main reason for this trend is the increased demand of clients, leaving them with few options to refuse for fear of losing clients, income. In addition, some feel legally unprotected and they are therefore inclined to performing C-sections. National guidelines and medical protocols are absent, and common (evidence-based) standards are not well known. As the analysis of the delivery log shows, a majority of the breech presentations results in C-section and also a substantial amount of multiple foetuses are seen as medical indications for delivering in a surgical manner. Lastly, the call for national guidance also stretches out to rules and regulations on the management side. The study has shown that facilities that introduced measures to curb the trend of increased CS rate, fail to achieve their goals because such measures can't be implemented in isolation.

Conclusions

The reasons for the high and increasing rate of C-sections in Georgia are multiple, and there are clear indications that the high rate is the result of the combined effects of:

(a) Women having little information about pregnancy and about the physiology of a natural delivery, and the associated fear for pain and for the possibility that something may go wrong.
(b) Service providers not having all the required technical knowledge and skills, not sufficiently adhering to professional standards and, in some cases, being sensitive to perverse financial incentives that easily make them resort to surgical interventions.

The exact weight of each of the above factors is not known for the time being. It would require more in-depth studies and / or different types of study (such as medical audits on management of pregnancy and delivery by medical professionals).

Some important conclusions however can be drawn in relation to the specific objectives that have guided the present study. Below an overview of the main conclusions organised around the 7 study objectives.

Objective 1: Trends in Caesarean section rates

- NCDC data illustrated that the rate of deliveries taking place through C-sections in Georgia increased from 9.3% in 2000 to 31.5% in 2010, which is more than threefold over a period of 10 years. The percentage of C-sections in the sample is higher than the national average of (32%). A slightly higher percentage of the C-sections are first deliveries (55%, against 45% repeat deliveries). In SLR the percentage CS is well below the averages nationally and in the sample (18%); this figure is higher in private facilities and JSC: 40% and 35% respectively.
- The rates vary greatly from one institution to the other, with some health facilities having C-section rates of well over 50%. Almost half of the C-sections are planned in advance, whereas the other 50% concerns emergency C-sections. This trend has not changed significantly over the past decade.
- The C-section rate in Societies with Limited Responsibility (previously public institutions) is much lower than that in private facilities and joint stock companies: 19.7% versus 32-33%.
- About 50% of all C-sections are planned in advance, that is before onset of labour. The other half involves emergency C-sections, which are decided upon after onset of labour. The distribution of planned versus emergency CS appears about equal (50%-50%) and relatively consistent over time.
- The percentage planned CS in case of a repeat delivery saw the highest increase over the past decade (compared to the other categories): from 20% in 2000 and 39% in 2010.

Objective 2: Regional/geographical variations in Caesarean section rates

- NCDC data show the wide variation in C-section rates in the country: in some regions the rate was 77%, whereas as low as 10% in other regions. Data from the delivery logs confirm these regional variations.

Objective 3: Obstetrical complications, reasons for Caesarean sections

- National data on deliveries do not state the reasons for the C-sections, making it impossible to distinguish which proportion of C-sections are conducted based on medical indications (and which type of medical indication).
- In none of the MHs the forceps is being used. Only nine vaginal deliveries were assisted through vacuum procedure. This figure is considered very low and may indicate lack of practical skills to perform this procedure. Correct implementation of forceps or vacuum assisted vaginal deliveries might have prevented surgical interventions.
- *Cephalic presentations beyond 37 weeks (without stimulation)*: 24% of such cases ended in CS (604 of the 2477). C-sections in this category are more frequent among first deliveries.
- The group with the lowest risk of C-section (on average 2-3%) is: repeated vaginal delivery, with a single foetus and cephalic pregnancy (>37 weeks gestation without stimulation and spontaneous delivery). The findings in this study show a percentage of 15% in this subgroup, which suggests that a more than average percentage of C-

sections in this subgroup was conducted without medical indication.

- Another group with a relative low risk of C-section (on average 14-15%) is: first vaginal delivery, with a single foetus and cephalic pregnancy (>37 weeks gestation without stimulation and spontaneous delivery). The main reasons for C-Section in this sub-group are complications during labour, such as dystocia or foetal distress. According to our study the percentage of C-Section in this sub-group is 32%, which suggests undue C-Sections, not justified by any medical indication.
- The percentage of stimulation in all groups of cephalic presentation > 37 weeks is significantly low (45 among first deliveries and 14 among repeat deliveries), which indicates that stimulation of delivery is not a common practice in Georgia.
- Almost all (one exception) of the 33 transversal presentations lead to C-section. The vast majority of the breech presentations (83%) resulted in C-section. This figure is even higher among breech presentations in case of a first delivery: 94%. In case of a breech presentation (repeat delivery) this figure is much lower with 67%.
- 66% of the multiple foetuses were delivered through C-section.

Objective 4: Comparison between pregnant women, those that underwent CS, and those who had a vaginal delivery

- The majority of the births are from mothers between 21 and 35 years of age (VD and CS). With increasing age, the number of C-section increases: from 30% in the under 20 year olds to 36% in the age group 21-35 years and 56% in the women over 36 years of age.
- A majority of the women in the study were not insured and had to pay for the delivery out of their own pockets. This percentage is the highest among pregnant women (72%); close to two thirds (65%) of the women who had a vaginal delivery and 57% of the women who underwent CS.
- A majority of the women (with VDs or C-section) deliver in private MHs, this trend is consistent among all the three age groups. Compared to women in the other two age groups, women over 36 years appear to prefer the private sector (private and JSC combined) for the delivery, whether for VD or CS. Among the women with CS there is also no major difference between the age groups in terms of type of facility, except for women over 36 years of age, where only one woman of that age group had a C-section in an SLR for the CS.
- Despite the fact that a vast majority of the women had visited a Women's Consultation Centre during her pregnancy, the overall level of information and birth preparedness is low and appears insufficient. Of the pregnant women 60% claimed to be well prepared, though a significant number stated to be afraid of the pain during delivery and have limited information. Less than half of the women who had a vaginal delivery indicated that the information was sufficient; some 28% indicated that they had received little information; and 9% was not informed at all.
- Despite the fact that a majority of the women (all three groups) have visited the Women's Consultation Centres, not all seem well prepared for the delivery. Almost all women who had a C-section could mention which type of anaesthesia was used. 70% of women with C-section received endotracheal anaesthesia instead of regional (spinal) anaesthesia, which is recommended by WHO. There are stark regional differences in the use of anaesthesia. In Tbilisi there is low endotracheal use, which in contrast in the regions is the preferred type of anaesthesia.

Objective 5: Providers' perspective on C-sections

Midwives

- The average age of the midwives in the study was 45, the youngest 23 and the oldest included was 68 years old (who had 35 years of experience and had worked for 42 years at the same facility). On average, midwives included in the study had 19 years of experience as a midwife. A majority of the midwives (74%) had participated in trainings.
- The midwives were asked to respond to the questions on their actual and preferred role during different stages in the perinatal period. Only a few respondent midwives are involved in more than one stage of perinatal care. Many are working under the

supervision of the Ob/Gyn, though quite a large number (38) indicate that they are trained and confident enough to work independently without supervision of the doctors. Less than 10% are currently involved in the antenatal period; though many (66%) do see a role for themselves in ANC. For a majority of the midwives their actual role during C-section is to receive a newborn, only a few (14 respondents) mentioned that they prepared pregnant women before the surgery. Midwives generally do not see an increased role for them in C-sections.

- Perception on C-section. A vast majority of the midwives (80%) see an increased trend in the number of C-section that is being performed at their MH/MU; most of them generally also know the reason why a C-section was performed. According to them, fear of pain during a 'normal' vaginal delivery is the main reason why the CS rate has increased. Some midwives had observed that in spite of efforts of Ob/Gyn to convince women on the possibility of delivering in a normal way, women still prefer CS. And although more than half of the respondents thought that many of the C-sections at their MH/MU could be avoided, only 21 explained how. Some of the midwives thought that unnecessary C-sections could be avoided in case of improved pain control methods and pain management; others saw the need to improve the level information among pregnant women. They were of the impression that many C-sections are being performed due to clients' demand mainly because of a lack of information on pregnancy and delivery. Almost a third (30%) of the midwives stated that pressure from the husband/partner was one of the main reasons for C-section.
- The midwives were asked to indicate areas for improvement in perinatal care. Three main areas mentioned were: need to establish Parents' Schools; implement new guidelines; increase awareness among the population on safe motherhood, delivery and C-sections.

Obstetricians/gynaecologists

- The average age of the Ob/Gyns was 49; the vast majority having more than 10 years of professional experience, with the oldest participant (75 yrs) practicing 50 yrs in the same MH/MU. A majority of the Ob/Gyn works in one health facility only; and about one third has never changed their workplace since they started practicing. A majority of the Ob/Gyn participated in trainings, predominantly trainings on contraception and family planning.
- Perspective on role of the midwife: Ob/Gyns indicate that they are hindered in their work by the lack of protocols and national guidelines (which would give them not only information but also some protection). Also, use of the partogram in health facilities is not universal, some 12% of Ob/Gyns do not use it. Close to half of the Ob/Gyn would not trust midwives to fill the partogram because of limited skills, however about a similar percentage trusts midwives to perform Active Management of the Third Stage of Labour independently and keep some steps of the 'warm chain'. A majority of the Ob/Gyn recognized that midwives have no a role in C-sections and 46 do also not see a role for them in this part of the work. Those who do see a role (64) mention for example preparing clients for the surgery, or receiving the newborn after the medical intervention. 77 thought that it is not possible to increase the participation of midwives in CS. On the questions regarding the role of the midwife in other aspects of perinatal care, the group was divided: half of the Ob/Gyn did not see a role for the midwife in the antenatal period, whereas the other half does encourage the involvement of midwives, for example in Parents' Schools. According to some, it is important to increase the independence of midwives, under conditions of supervision and monitoring by the Ob/Gyn; about one fifth see a role for midwives in the postnatal period.
- Perspectives on C-sections: The obstetricians/gynaecologists generally do not think there has been a change over time in the type of conditions that are considered 'obstetrical complications', and in particular those that require C-sections. But 12% do think that there has been a change, but could not substantiate it.
- Almost all Ob/Gyn thought that the number of C-sections in Georgia had increased during the last 5 years. 63% attributed this increase mainly to the demand of clients. Only one respondent does not believe that the rate has increased. On the question

regarding the knowledge on international recommendations of C-section rate, quite a number of respondents did not give a correct estimate. More than one third (37%) indicate that they know the recommended range, but do not concretise. 27% of the obstetricians/gynaecologists state that they do not know the international recommendation. Some 22% gave a correct answer (mentioning between 8% and 15%). 4% gave the wrong answer and another 4% was close to the right answer.

- 17% of the respondents did not know the CS rate in their own MH/MU. More than half mentioned percentages of 20% and beyond and some even mentioned figures up to 75%. On the follow-up question whether they considered the CS rate in their MH/MU a problem, interestingly quite a number of Ob/Gyn did not consider the CS rate a problem. On the other hand, some Ob/Gyn stated the high CS rate to be a problem, even when the rates in their own facilities were within the international recommendations. Overall, 60% considered the CS rate as a problem.
- The respondents were asked whether they would change anything in their MH/MU if they were in a position to make changes regarding perinatal/maternal health. One third would not make changes; however a majority would. Suggestions included: the establishment of Parents' Schools; improve information to pregnant women; monitor the C-Section rate; raise awareness within the society on C-sections. Some 10% indicated the need to clarify medical indications (i.e. on whether or not conduct C-section in case of breech presentation and repeated C-Section), and some see the need to implement the guidelines on CS.

Objective 6: To obtain the clients' perspectives on C-sections, including their current levels of information level and their attitudes, and the reasons why women themselves at times request for C-sections.

- It is striking to note that a relatively high number of women who underwent a C-section lacked information: among the women with C-section, 31% was not able to indicate the reason why they had the C-section. Only 40% of the women who underwent C-section reported to be satisfied with the information received. Of the remaining 60%, half had missed information and did not know what the C-section involved; and another 30% had received none, or just little information about the delivery. It is even more striking to report that those who report to be insufficiently informed it had been a planned C-section (67%).
- Of the group women who underwent a C-section, the level of being informed is the lowest in the regions as compared to women who delivered in Tbilisi. For a small majority of the women (58%), their main source of information had been their physician. Friends were the second largest source of information (21%), and the rest got their information through other channels. Only one woman mentioned the midwife as her source of information.
- Another striking finding is that 31% of the women who had undergone C-section could not state the reason for the surgical delivery. The reasons for the CS vary from medical conditions on the one hand (during pregnancy or during delivery) to other reasons such as fear of the delivery, and mostly fear for pain during the delivery. Some had opted for C-section because they had planned sterilization and hence could save on costs.
- Regarding their experience with the C-section, about half were happy with the decision because of the health problem. Some regret, and mention that if they would have had more information and are more prepared, they would have preferred a vaginal delivery. 13 women were happy at the beginning, but had changed their opinion after the delivery. Quite a few were happy with the surgery because it all finished quickly.

- A small majority of the women who underwent a C-section (59%) would like to have a vaginal delivery in case of a future pregnancy; the percentage opting for another C-section is relatively higher in the regions, as compared to those who delivered in Tbilisi. Of the pregnant women, the vast majority (81%) prefers a vaginal delivery. Of the remaining who preferred a C-section only 22% had a clear medical indication, 25% followed the doctor's advice and 53% was going to have the C-section because of their own request.
- An overwhelming majority of the women were very satisfied with the services (all three subgroups), and rated them with a high number. Almost half of the women who underwent a C-section mentioned at this stage of the interview (the end) that they wished they had delivered vaginally.

Objective 7: To find out at which stage of pregnancy the decision as to the type of delivery is being taken (physiological delivery or C-section).

- In 69% of the cases, the decision to perform a C-section was taken during pregnancy; for the other 31% during labour.
- Of those who had taken the decision during pregnancy, roughly one third had taken the decision during the first and second trimester, and for the remainder the decision was taken during the third trimester. This suggests that there is no medical indication, since the most frequent indications for C-sections (i.e. dystocia or failure to progress in labour, breech presentation, foetal distress) can be diagnosed only in the late stage of pregnancy or during labour.

Recommendations and plan of action

A set of recommendations follows from the main findings of the study. They are organised around interventions targeting:

- **Clients' and societal perspective**: increase information and reduce fear, and create demand for adhere to international standards
- **Providers' perspective**: increase professionalism, awareness and technical skills.

7 Recommendations

Clients' perspective, increase information and reduce fear through:

- **establishment of Parent's Schools**
- **strengthening ANC and PNC**

Societal perspective, adhere to international standards, through:

- **setting of national standards and guidelines**
- **creation of public awareness on C-sections and safe motherhood in general**

Stakeholders	Role / actions
Ministry of Labour, Health and Social Affairs; and the National Reproductive Health Council	• Support the establishment of Parent's Schools throughout the country (in MHs and WCCs). • Support an increased role of midwives in ANC and PNC, based on clearly defined and international recommended standards (such as the Essential Competences for Basic Midwifery Practice, ICM 2011[2]). • Include visits to the PS in the insurance package for vulnerable groups.
MAG	• Increase MAG's activities in the regions (IEC) for clients and midwives. • Develop training package on 'Safe Motherhood' for clients. • Support the establishment of Parent's Schools throughout the country (in MHs and WCCs), and lobby for the involvement of midwives in the PS.

[2] Outlining the key midwifery concepts, the scope of midwifery practice, and the required competences in six different aspects, from the community perspective to the role of a midwife in pre-pregnancy/FP, ANC, labour and childbirth, postpartum and PNC (ICM, 2011).

	• Liaise with other professional associations on improved perinatal care, public awareness on C-sections and safe motherhood. • Initiate a follow-up study on community, and male perspectives on safe motherhood, birth preparedness, C-sections etc. (jointly with GOGA).
GOGA	• Support the establishment of Parent's Schools throughout the country (in MHs and WCCs). • Support an increased role of midwives in ANC and PNC through increased support, advice of Ob/Gyn, and collaboration with midwives on the workflow. • Support the conduct of a follow-up study on community, and male perspectives on safe motherhood, birth preparedness, C-sections etc. (jointly with MAG).
Management of MH/MUs	• Establish PS within the health facility. • Negotiate with insurance companies on PS (content and access).
Insurance companies	• Include visits to PS in the insurance packages. • Negotiate with the private sector to include visits to PS in corporate packages. • Increase public information on the content of their insurance packages and invest in IEC for (future) clients.

Providers' perspective, increase awareness and skills through:

- **strengthening of Continuous Medical Education Programmes and skills training**
- **implementation of international standards and evidence-based practices**

Stakeholders	Role / actions
Ministry of Labour, Health and Social Affairs; and the National Reproductive Health Council	• In the context of the health reform process, clarify/reaffirm the status of the status midwives. • Elaborate a Continuous Medical Education Training Programme for midwives. • Monitor C-section practices, including anaesthesia, and increase access to modern management methods, based on international recommendations and standards. • Support providers' training on spinal/epidural anaesthesia (in case of vaginal deliveries).
MAG	• Lobby for CME for midwives. • Develop and provide training on PS and other relevant topics in perinatal care, according to Train the Trainers and Peer-to-Peer education methods. • Support GOGA with the development of guidelines and protocols on key topics, including AMTSL, cold chain, and so on. • Collaborate with professional associations on the development of task-shifting models, job descriptions etc (based on the ICM Essential Competences for Basic Midwifery Practice).
GOGA	• Based on the guidelines elaborated by MoLHSA, development of specific Protocols for midwives on selected key topics in perinatal health (AMTSL among others). • Elaborate and implement guidelines and protocols on C-section. • Establishment of CME programme for Gynaecologists, taking into consideration international recommendations, evidence-based practices and modern approaches to pregnancy and childbirth.
Management of MH/MUs	• Implementation of already elaborated guidelines and protocols in the MHs. • Evaluate and redefine staffing models taking into consideration role differentiation between Ob/Gyn, revised job descriptions.

	• Stimulate a learning environment and facilitate health professionals' participation in formal and non-formal training/education. • Establish budgetary allocations for CME of medical staff members.
Insurance companies	• Monitor providers' practice in C-sections, following international recommendations. • Inform providers on their policies regarding C-sections, and other aspects of perinatal care.

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