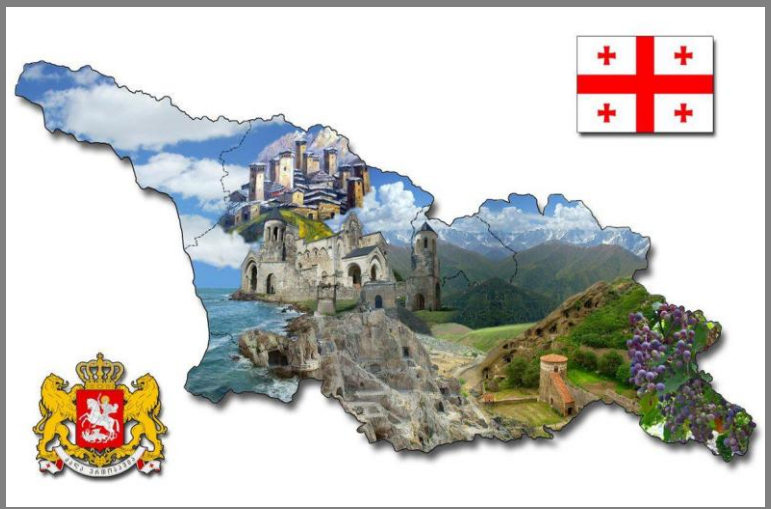
Health Care

HIGHLIGHTS



2016

Demographic and Socio-economic Indicators

Area, km²

69 700

Administrative units

11 regions, 64 raions

Capital

Tbilisi

Ethnical composition (according to the Census 2014)

Georgian - 86.8%, Azeri - 6.3%, Armenian - 4.5%, Other - 2.4%

Main religions (according to the Census 2014)

Orthodox Christian - 83.4%, Muslim - 10.7%, Armenian Apostolic - 2.9%, Catholic - 0.5%

State system

Parliamentary republic

Independence

Since 1991

National currency

Lari

Membership in international rganizations

International Monetary Fund, United Nations, World Health Organization, World Bank, International Trade Organization, etc.

Human development index

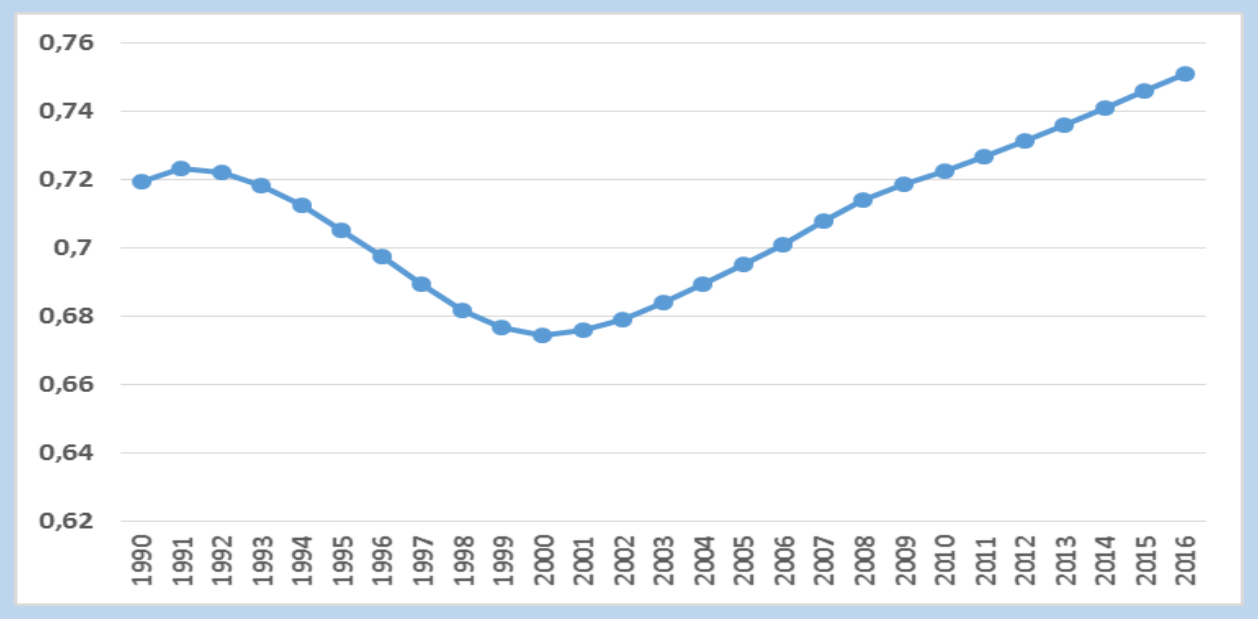
0.769 (2015)

Socioeconomic index[1]

0.75

[1] *Socioeconomic index reflects the education, income, and prestige associated with different occupations*

Socioeconomic index



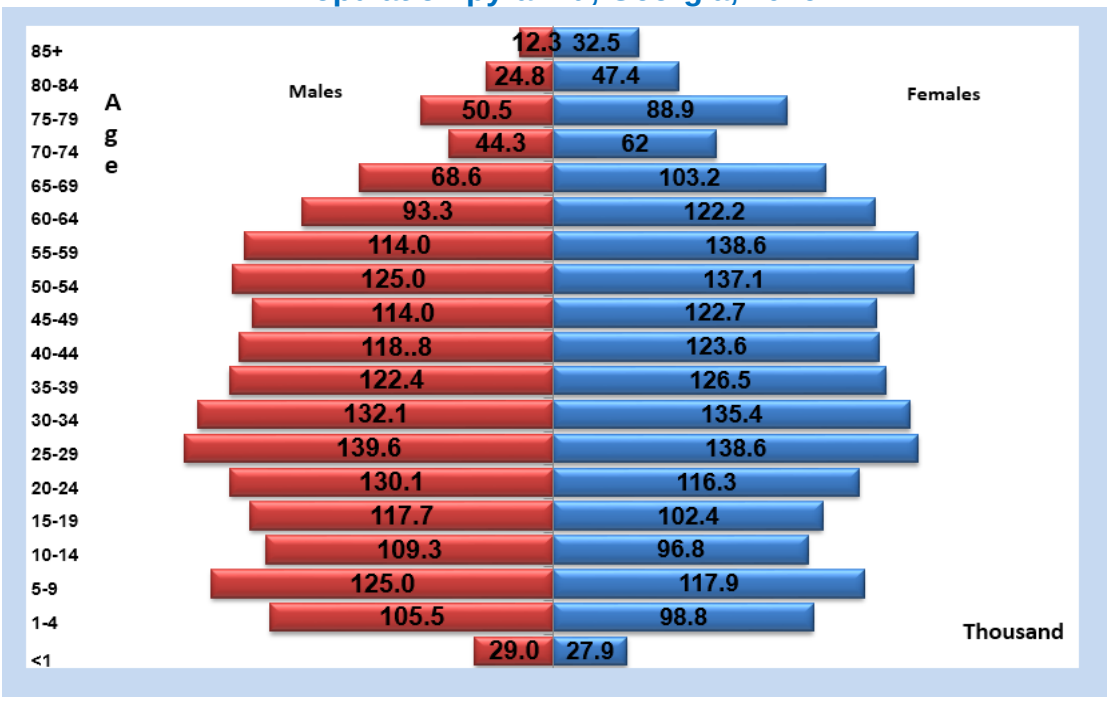
Source: Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016

Main demographic indicators, Georgia, 2016

Number of live births (birth rate per 1,000 population)	56 569 (15.2)
Natural population growth (natural population growth rate per 1,000 population)	5 798 (1.6)
Number of deaths (mortality rate per 100,000 population)	50 771 (13.7)
Number of still-births (still-birth rate per 1000 births)	558 (9.8)
Number of marriages (marriage rate per 1,000 population)	25 101 (6.7)
Number of divorces (divorce rate per 1,000 population)	9 539 (2.6)
Migration (migration rate per 1,000 population)	-8 100 (-2.2)

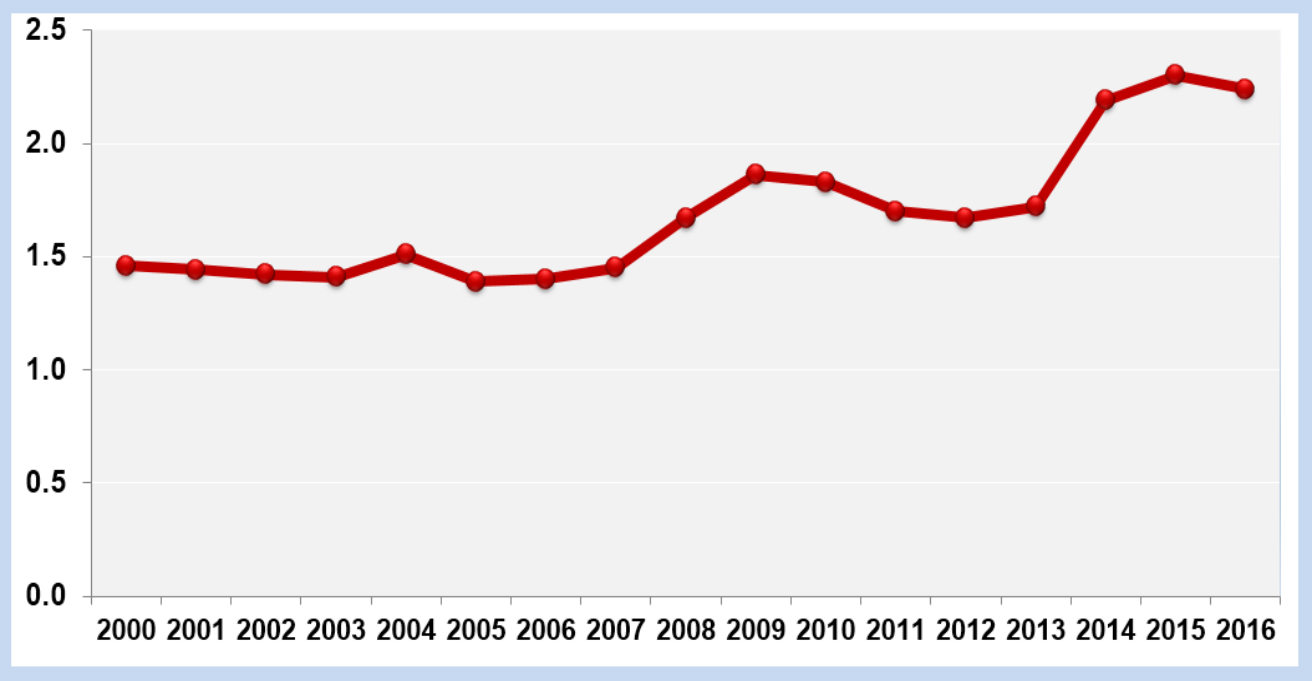
Source: NSO Georgia

Population pyramid, Georgia, 2016



Source: NSO Georgia

Total fertility rate (TFR), Georgia



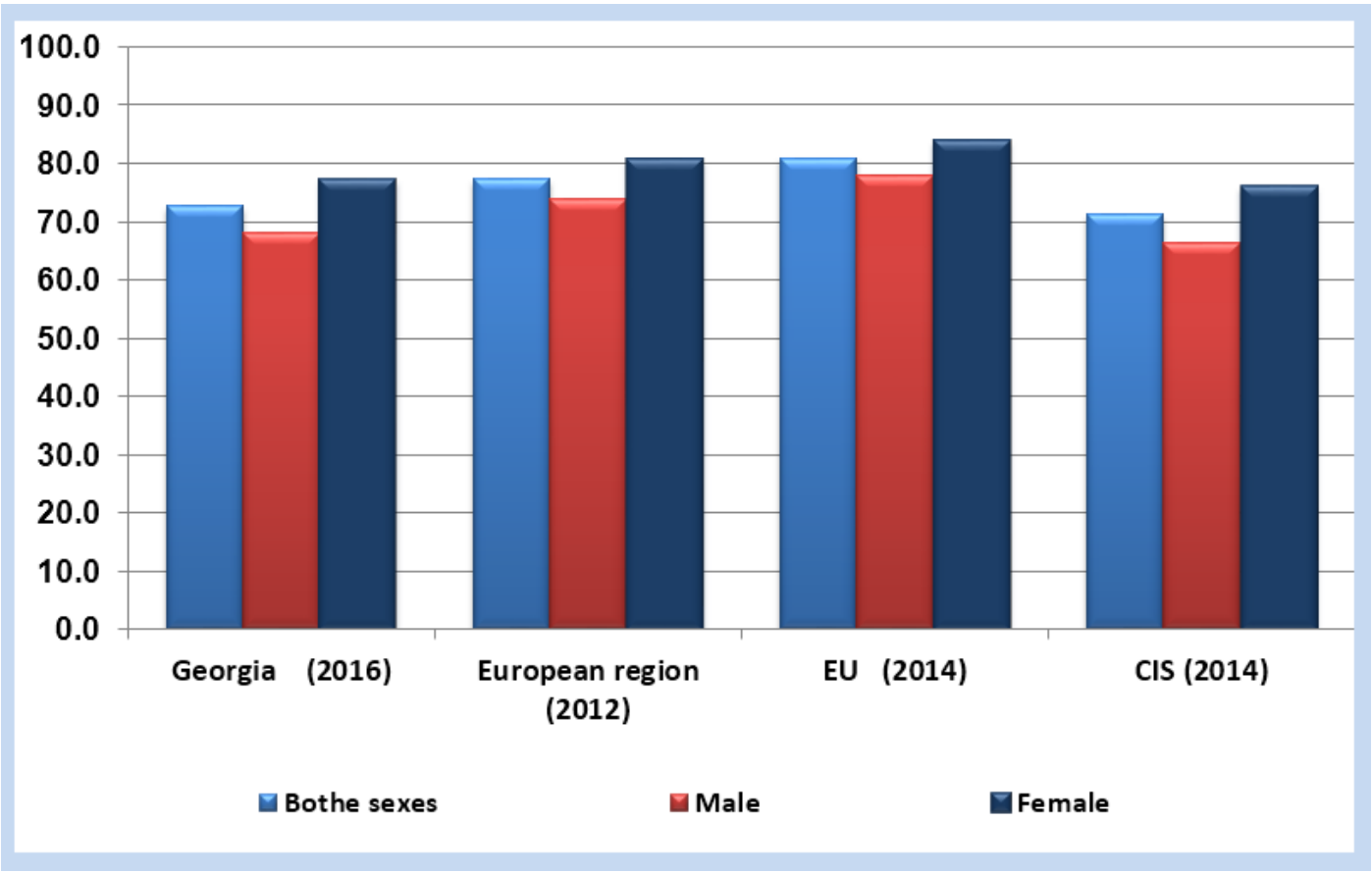
Source: NSO Georgia

Life expectancy at birth, Georgia

	1990	1995	2000	2005	2010	2015	2016
Both sexes	71.4	70.3	71.3	74.0	74.4	72.9	72.7
Male	67.5	66.3	67.5	70.0	70.0	68.6	68.2
Female	75.0	74.2	75.0	77.6	78.7	77.2	77.1

Source: NSO Georgia

Life expectancy at birth (Last available year)



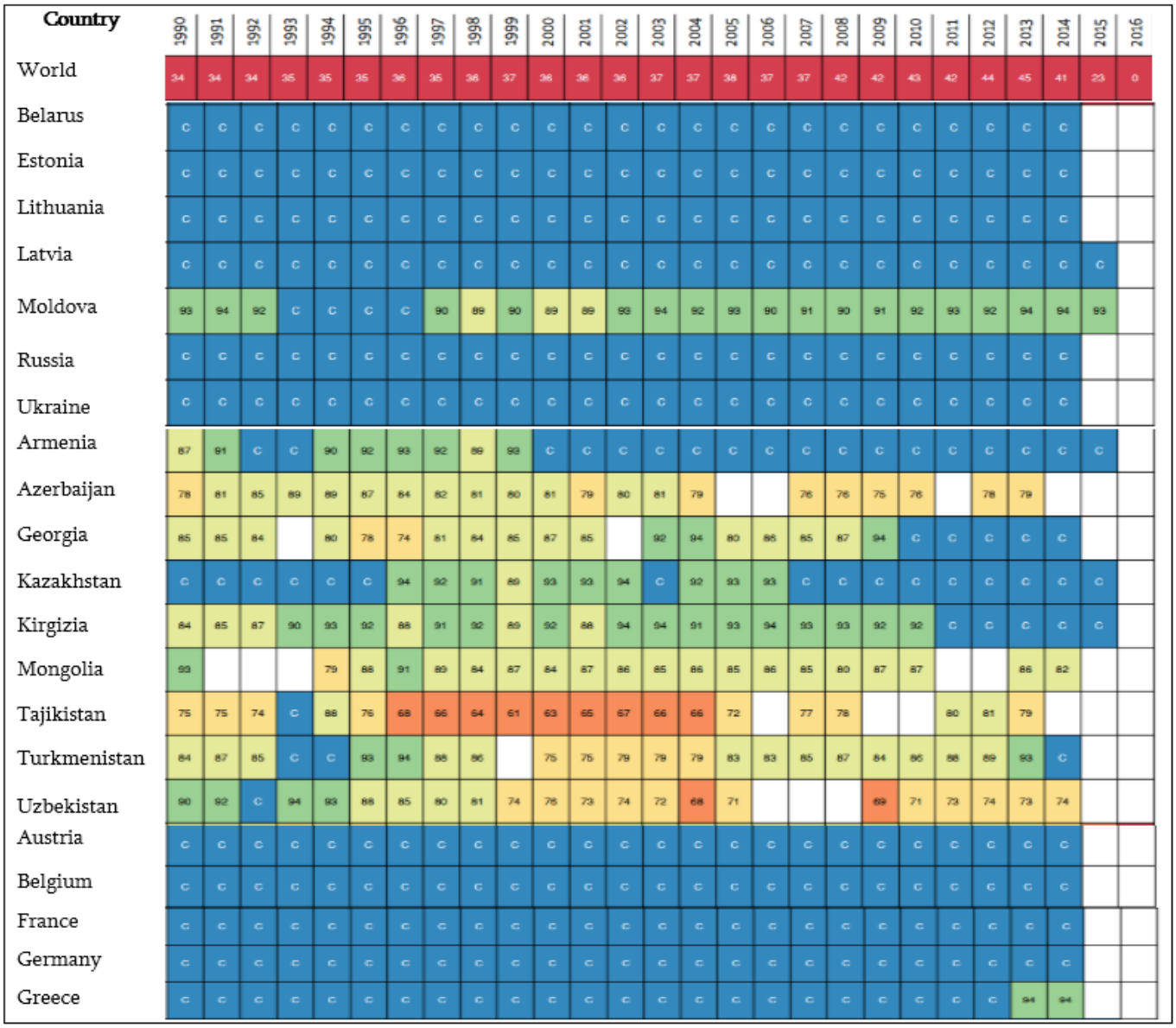
Source: HFA DB, 2016

Mortality

Last several decades, a decrease of global mortality and increase of global life expectancy at birth are mentioned. This change is partially associated with the increase of the share of noncommunicable diseases and the reduction of number of deaths caused by injuries, also with improved management and early detection of diseases and improved control of risk factors.

The completeness of death registration and correct identification of the underlying causes of death are the main criteria for mortality assessment. In Georgia, during recent years, there have been serious developments in this area, results of which have been proved by international evaluations. The completion of the registration in recent years is higher than 95%, although, the quality of identification of the underlying causes of death still remains a challenge.

Completeness of the mortality registration, 1990–2016



Completeness of registration

- 95%
- 90 to 94%
- 80 to 89%
- 70 to 79%
- 50 to 69%
- 0 to 49%

Source: Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016

Last three years, according the National Statistics Office of Georgia, the general mortality rate remains stable. Last 2 years the indicator fluctuations are within the statistically allowable range. Such changes of the mortality have already been observed several times during previous years. The same time, in Georgia, like in developed countries, the share of aged population is increasing, which is reflected on the mortality rate,.

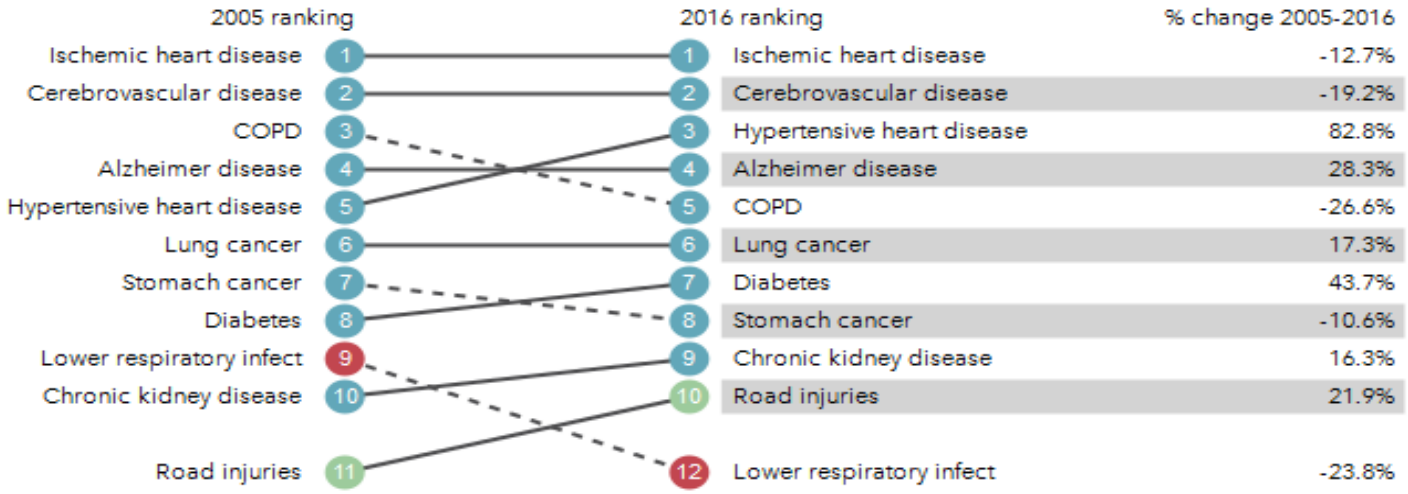
Mortality, main indicators, Georgia, 2016

	Number of deaths	Mortality rate per 1000 population	Number of deahs in children under-15	Mortality rate per 1000 children
Both sexes	50771	13.7	695	1.0
Males	26098	14.7	404	1.1
Females	24673	12.7	291	0.9

Source: NSO Georgia

In Georgia, like in the most countries the burden of mortality is mainly caused by noncommunicable diseases.

Main causes of death, Georgia



Source: Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016

Maternal health and mortality

In 2016, in order to improve the maternal and child health surveillance in the country, an „Electronic Module for Pregnant and Newborn Health Surveillance", so-called "birth" registry was introduced. Each pregnant woman, starting from the first antenatal visit, including childbirth, is continiously monitored through the electronic module.

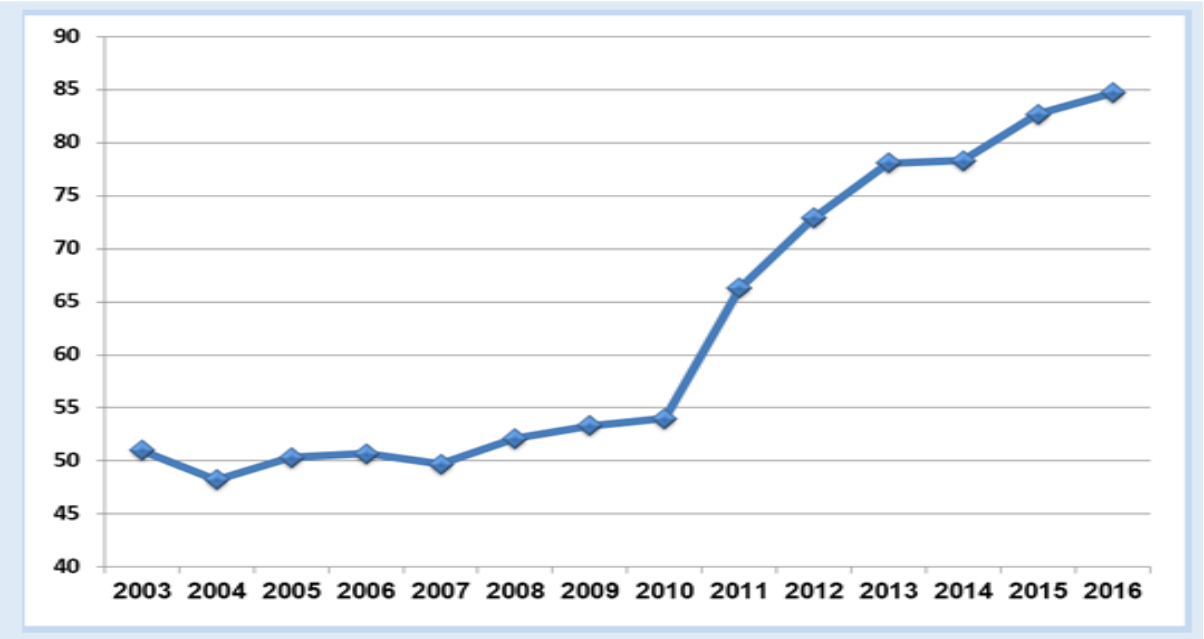
The system also records newborn's health status. For Georgia, considering the fact that globally there are only few countries, which have got „birth" registries, this initiative is a crucial step forward.

Main indicators of reproductive health

	2015	2016
Coverage with at least 4 antenatal care visits	88.3%	81.2%
Timely initiated antenatal care	82.7%	84.7%
Number of deliveries	58 830	55 940
Full term deliveries	82.1%	81.9%
Normal deliveries	55.0%	52.7%
Pathological deliveries (caesarean sections, forceps, vacuum delivery, all delivery process complication)	45.0%	47.3%
Adolescent pregnancy rate	48.6	43.6
Proportion of births attended by skilled health personnel	99.8%	99.9%

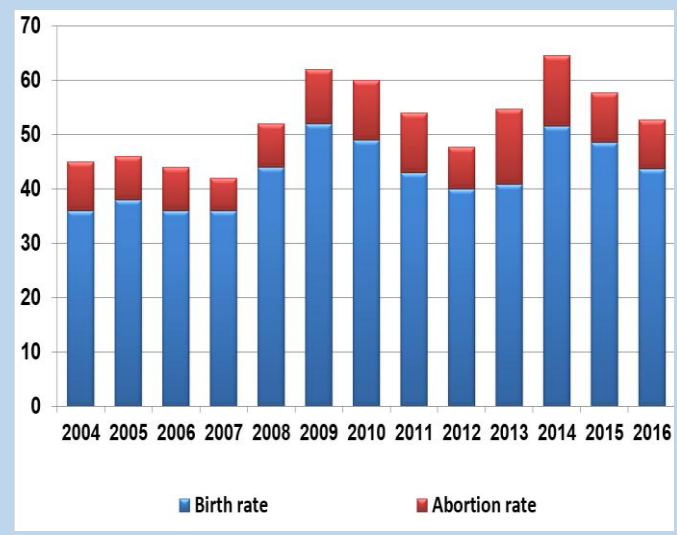
Source: NCDC

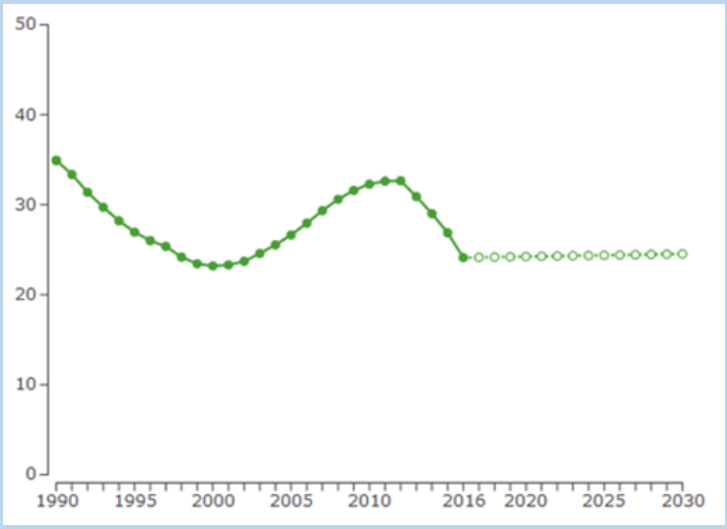
Share of pregnant women (%) initiating antenatal care within the 1st trimester



Source: NCDC

Adolescent pregnancy rate (rate per 1000 women aged 15-19)



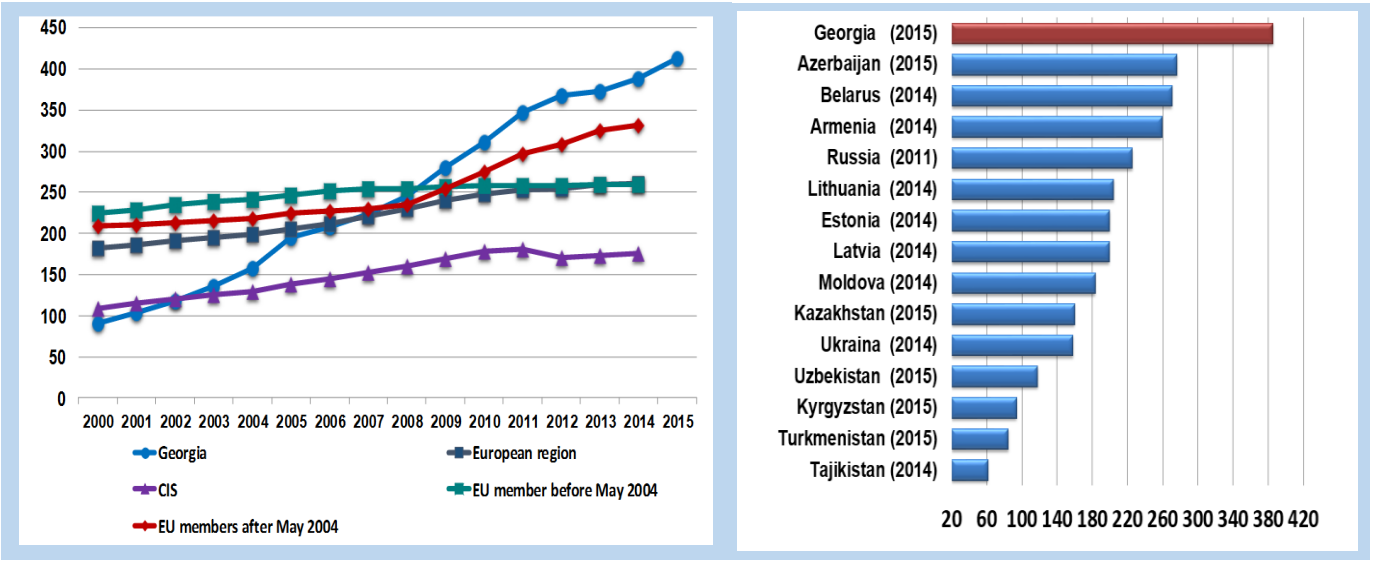


Source: NCDC

Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

Since 2000, in Georgia, a share of caesarean section deliveries has increased 4.3 times and reached 43.7% in 2016 although, in some medical facilities this percentage significantly exceeds the country average rate.

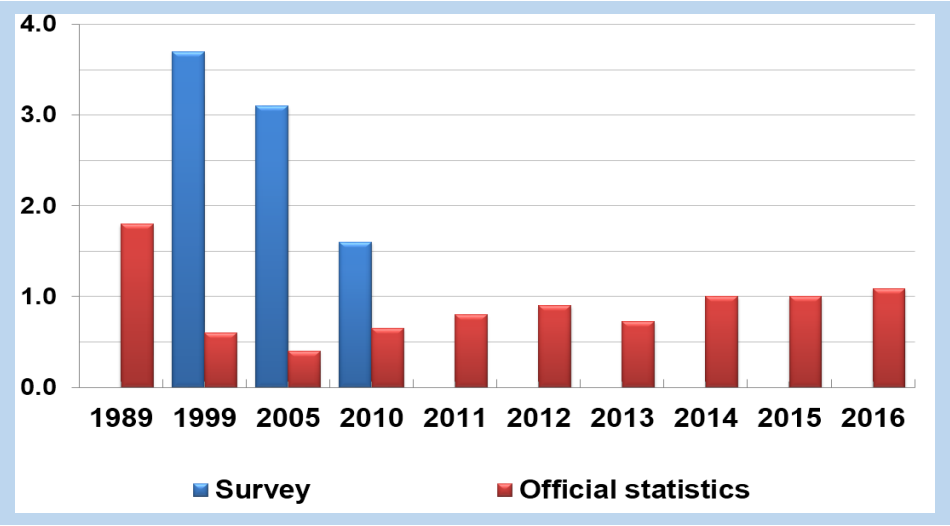
Caesarean sections (ratio per 1000 live births), last available data



Source: World Health Organization HFA DB

in 2016I, 28720 abortions have been registered (511.7 per 1000 live births), of which, induced abortions constituted 74%. Compared with the previous year, the total number of abortions decreased by 11% (in 2015 - 555.0 per 1000 LB). The total induced abortion rate (TIAR) is stable (fluctuates around 1). It is important that the share of abortions in women aged under-20 has decreased and equales 3.2% of the total number of abortions. Induced abortion rates were the most high in 25-29 and 30-34 age groups.

Total induced abortion rate (TIAR), Georgia



Source: NCDC, World Health Organization HFA DB

In the transition period from the MDG framework to Sustainable Development Goals (SDG), a complex assessment of maternal mortality is necessary to identify successful areas and address existing problems.

Globally only ten countries achieved the Goal 5 of the MDG (reduction of maternal mortality by three-quarters in 1990 – 2015). The same time 122 out of 195 countries have already achieved SDG 3.1 Goal (reduce maternal mortality ratio to less than 70 per 100 000 live births by 2030). In 2015 there were 24 countries where maternal mortality rate exceeded 400.

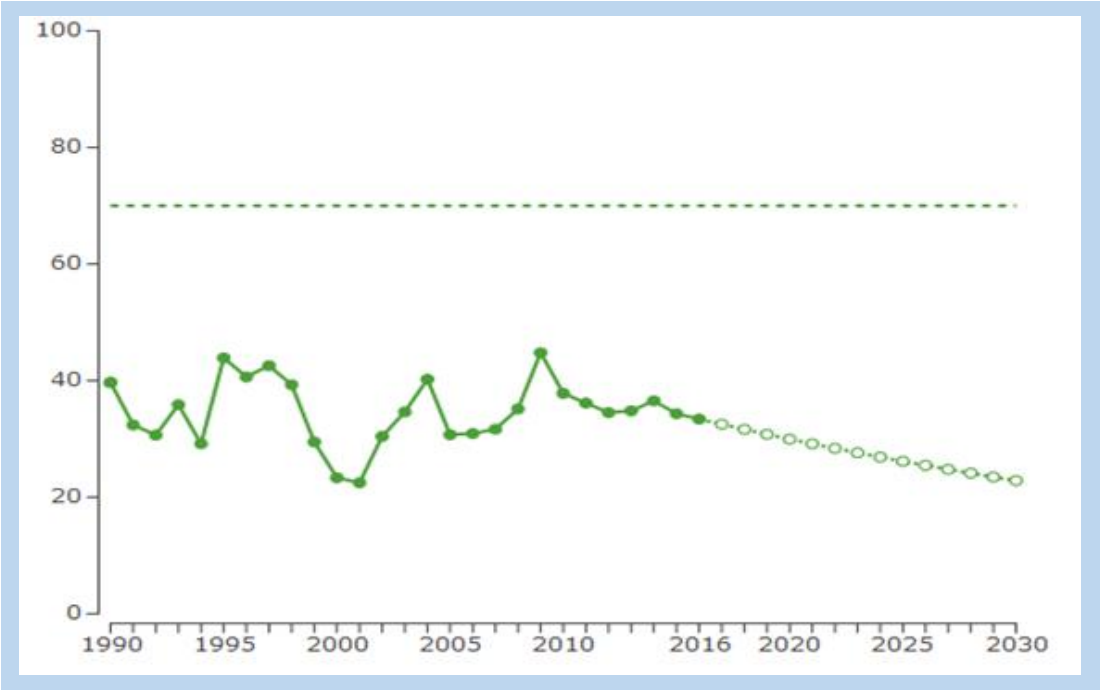
Achievement of SDG 3.1 will require 91% coverage of one antenatal care (ANC) visit, 78% of four ANC visits, 81% of in-facility delivery (IFD), and 87% of skilled birth attendance (SBA). For preventing HIV and syphilis mother-to-child transmission, at least 95% of pregnant women must be tested for these infections. The share of labor in a medical facility must be not less than 81%, the share of labor assisted by qualified medical personnel - 87%.

Different international orgaizations and agencies are producing maternal mortality estimates for different countries, e.g., the UN Maternal Mortality Estimation Interagency Group (MMEIG) and Institute for Health Metrics and Evaluation (IHME).

Maternal mortality ratio per 100 000 live births, Georgia

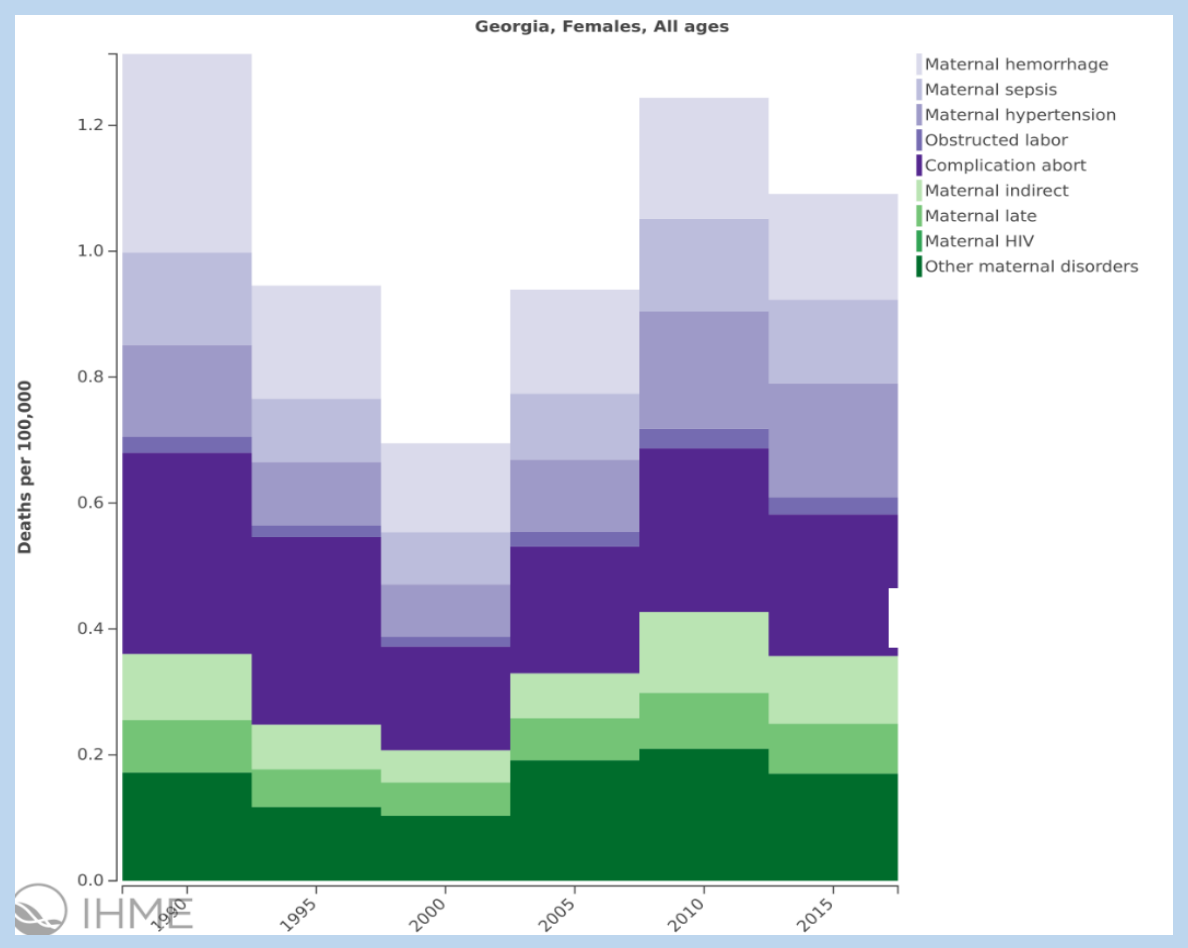
Source	1990	1995	2000	2005	2006	2010	2011	2012	2013	2014	2015	2016
Official statistics	40.9	55.1	49.2	23.4	23.0	19.4	27.6	22.8	27.7	31.5	32.1	23.0
MMEIG_2012	92	129	113	95	-	-	-	-	77	-	-	-
MMEIG_2013	50	67	60	48	-	-	-	-	41	-	-	-
MMEIG_2015	34	35	37	37	-	40	-	-	-	-	36	-
GBD	41.5	-	30.7	-	-	-	-	-	-	-	42.3	-
RAMOS	-	-	-	-	44	-	-	26	-	-	-	-

Maternal mortality ratio per 100000 LB, Georgia



Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

Maternal mortality by cause of death , Georgia



Source: GBD 2015

Morbidity and mortality in children under-5

Morbidity in children under-5

Top causes of morbidity in children under-5	Incidence per 1000 children aged under-5
Diseases of the respiratory system	731.8
Infectious and parasitic diseases	120.6
Diseases of the ear and mustoid process	62.7
Diseases of the skin and subcutaneous tissue	31.7
Diseases of the digestive system	28.6
Diseases of the eye and adnexa	22.5
Diseases of the blood and blood forming organs	20.5

Source: NCDC

Under-5 mortality

Globally, 5.8 mln children under age 5 died in 2015, representing a 52.0% decline in the number of under-5 deaths since 1990. Neonatal deaths and stillbirths fell at a slower pace since 1990, decreasing 42.4% to 2.6 mln neonatal deaths and 47.0% to 2.1 mln stillbirths in 2015. Between 1990 and 2015, under-5 mortality decreased at an annualised rate of decline of 3.0%, falling short of the 4.4% annualised rate of declinerequired to achieve MDG4.

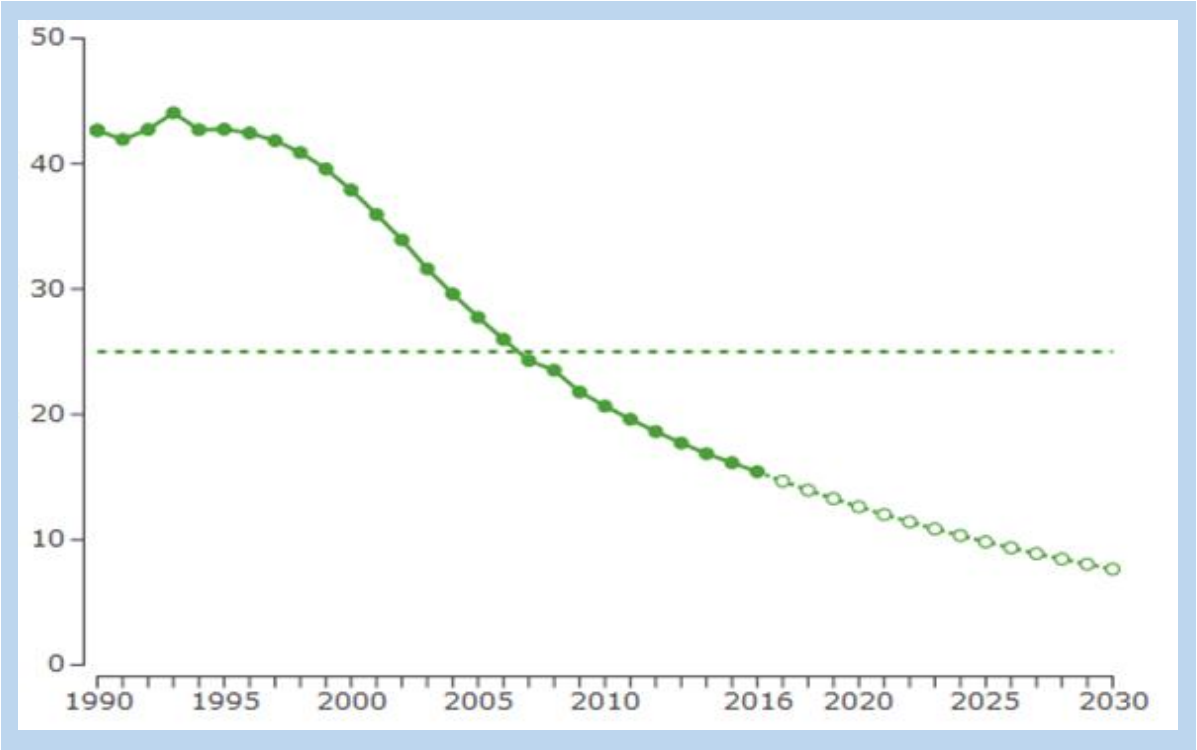
During this time, 58 countries met or exceeded the pace of progress required to meet MDG4.Yet since 2000, the time at which MDG4 was formally enacted, 28 additional countries, that did not achieve the 4.4% rate of decline of under-5 mortality from 1990, met the MDG4 goal.

In Georgia, the value of the under-5 mortality indicator, according to all sources, such as official statistics, international estimates (Inter-agency Group for Child Mortality Estimation - IGME) and surveys (Reproductive Health Survey - RHS) met the MDG4 Goal. Essential, that the GBD and IGME estimates for the global and regional levels are almost the same (matching level – 98%).

Under-5 mortality rate per 1000 live births, Georgia

Source	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
NCDC	27.2	20.3	20.1	19.4	19.7	15.6	16.0	15.4	13.4	12.0	12.4	12.0	9.5	10.2	10.7
NSO	24.9	27.6	26.4	21.1	16.9	14.4	18.0	16.0	13.0	13.8	14.4	13.0	10.9	10.2	10.7
IGME	35.3	28.7	26.5	24.5	22.6	20.8	19.2	17.7	16.4	15.2	14.1	13.1	-	-	-
GBD	36.2	-	-	28.0	-	-	-	-	21.8	-	-	-	-	17.4	-
RHS	45.8	-	-	25.1	-	-	-	-	16.4	-	-	-	-	-	-

Under-5 mortality rate per 1000 live births, Georgia



Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

In Georgia, according to the WHO latest available data, the under-5 mortality rate, despite the downward trend, still maintains the higher value, compared to the average indicator for the European Region and EU countries, and stays at the mid-position among the former Soviet Union countries.

Under-5 mortality rate per 1000 live births

	1970	1975	1980	1985	1990	1995	2000	2005	2010	2016
Central Europe, Eastern Europe, and Central Asia	**52.8**	**45.0**	**40.3**	**36.4**	**32.4**	**33.3**	**28.0**	**21.9**	**16.8**	**13.6**
Tajikistan	190.3	169.6	135.9	117.3	98.6	92.7	74.7	54.2	43.9	37.6
Turkmenia	180.4	149.6	124.4	106.1	92.4	88.3	80.9	65.8	50.0	37.0
Azerbaijan	126.6	96.4	89.5	85.7	77.6	76.1	62.9	51.1	38.6	30.0
Kyrgyzstan	135.9	111.9	94.8	81.1	66.2	56.4	49.8	41.9	35.5	28.9
Uzbekistan	92.6	75.4	67.9	61.1	48.9	50.9	42.6	37.7	30.6	23.5
Georgia	101.7	77.2	58.6	47.9	42.7	42.8	37.9	27.7	20.7	15.4
Kazakhstan	61.6	54.9	48.6	41.8	37.2	40.5	36.9	29.3	20.2	13.5
Armenia	107.7	82.9	68.4	56.2	45.5	43.2	30.7	23.7	17.0	12.1
Moldova	71.2	61.8	55.9	43.3	32.3	35.1	31.4	16.8	16.1	11.6
Ukraine	41.2	36.0	32.2	24.1	20.6	21.1	20.9	15.4	11.3	9.2
Russia	28.2	29.7	28.3	26.2	21.5	23.1	19.8	13.7	9.6	8.4
Belarus	36.1	30.1	26.3	23.9	20.6	18.7	16.1	11.7	8.0	5.5
Latvia	22.1	25.9	21.6	17.4	17.6	20.8	13.1	9.9	7.9	4.8
Lithuania	23.1	23.9	19.3	18.9	13.7	15.8	11.2	8.8	5.9	4.7
Estonia	21.8	22.2	22.7	20.3	16.9	18.5	11.3	7.3	4.8	3.2

Source: Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016

According to the WHO global data, almost 40% of under-5 deaths occurred in infants. In 2016, in Georgia, this share, according to the National Center for Disease Control and Public Health and National Statistics Office, was 83.9%. According to all sources, the infant mortality is declining.

Infant mortality rate per 1000 LB, Georgia

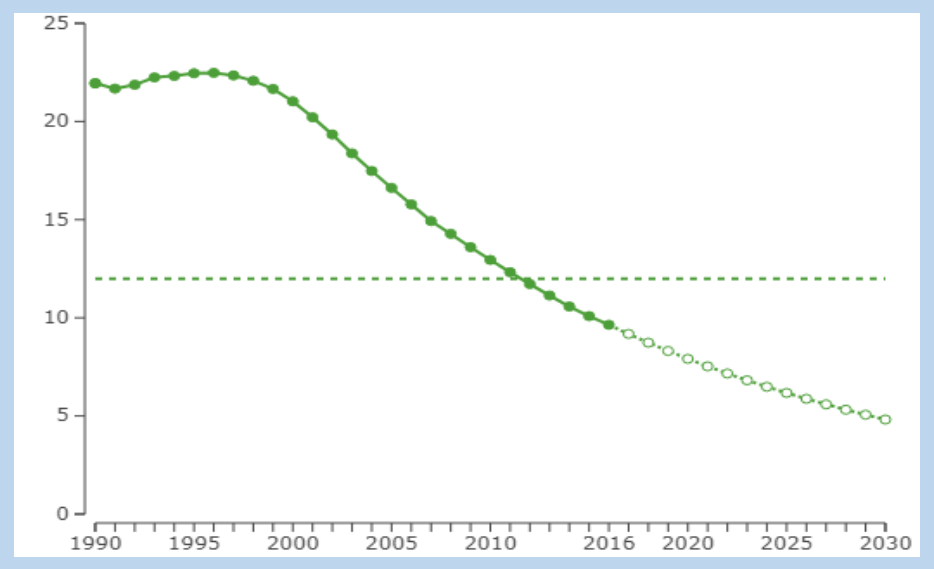
Source	2000	2005	2006	2007	2008	2009	2010	2012	2013	2014	2015	2016
NCDC	21.2	18.1	18.4	14.1	14.3	14.1	12.0	10.8	10.5	8.5	8.6	9.0
NSO	22.5	19.7	15.8	13.3	17.0	14.9	11.2	12.6	11.1	9.5	8.6	9.0
IGME	30.9	21.7	20.1	18.6	17.1	15.8	14.6	12.6	11.7	-	-	-
GERHS	41.6	21.1	-	-	-	-	14.1	-	-	-	-	-

Neonatal and perinatal mortality, Georgia

	Neonatal mortality rate per 1000 live births	Early neonatal mortality rate per 1000 live births	Late neonatal mortality rate per 1000 live births	Perinatal mortality per 1000 births
2010	9.6	6.6	3.0	17.4
2011	8.5	6.1	2.4	15.6
2012	9.2	6.6	2.7	17.7
2013	8.4	6.7	1.7	16.1
2014	7.2	5.1	2.1	15.5
2015	5.8	3.8	2.1	13.6
2016	6.3	4.1	2.2	13.8

Source: NSO

Neonatal mortality rate per 1000 live births, Georgia



Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

71.6% of mortal cases in infants were caused by conditions originating in the perinatal period. The largest share (70.7%) of the perinatal deaths comes from stillbirths.

In 2016, in Georgia, the stillbirth rate was 9.8 per 1,000 births (according to the latest available data: in the CIS - 9.3, in the EU - 5.3).

Communicable diseases

Hepatitis C

Georgia, according to international estimates, belongs to countries with high prevalence of hepatitis C.

In April 2015 Georgia started unprecedented program, aimed at hepatitis C elimination in the country. All people infected with hepatitis C are covered by the program and can receive treatment independent of the degree of hepatic fibrosis. Since the beginning of the program to June 2017, 36188 patients were involved in the treatment process, of which 31840 patients who already completed their treatment. In patients, tested for sustainable virologycal response, cure rate with sofosbuvir was 82%, while with harvoni - 98%.

A long-term strategy for elimination of hepatitis C (2016-2020), which covered various directions, such as awareness raising, surveillance, prevention, screening, diagnostics, and treatment, has been developed to achieve the ultimate goal of eliminating the hepatitis C. By 2016, any citizen of Georgia was provided with free screening and medicines, covered by the program.

The screening coverage area was expanded, and a screening protocol was developed and subsequently approved, in order to increase a chance of involvement in the hepatitis C elimination program. In 2015-2017, screening was provided to 988 859 citizens, tests were positive in about 7% of cases. Mobile application for hepatitis treatment has been prepared based on the Sanford Guide/

In 2016, according to the Electronic Integrated Disease Surveillance System data, 6283 cases of viral hepatitis C were reveiled in Georgia (incidence – 168.9 per 100000 population), including 6 cases in children (incidence - 0.8 per 100000 children).

HIV/AIDS

Georgia is considered as a country with low prevalence of HIV/AIDS. However, in recent years incidence of HIV/AIDS is charactirized by the growing trend. In 2016, in Georgia, 719 new cases of HIV were registered (incidence per 100,000 population – 19.3).

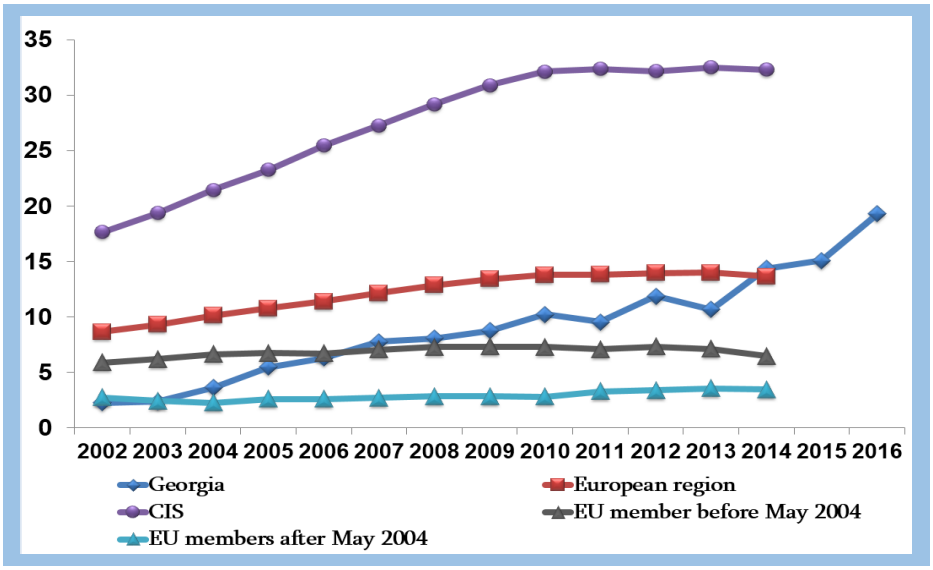
With respect to the first “90” target from the UN three 90s targets (90-90-90) – timely diagnosis of people living with HIV is problematically low in the country. Accordingly, 37.4% of the new HIV cases are diagnosed at the AIDS stage.

In comparison with other countries of the region, Georgia has reached high performance levels in achieving the second and the third UN 90s targets: involvement of HIV patients in antiretroviral treatment, and viral suppression, which constitutes 81% and 85% respectively (percentages are calculated using potential 9 600 cases of HIV infection for 2016).

Over the last years, within the frame of the different state programs (Maternal and child health, Safe blood, HIV / AIDS state programs) voluntary testing for HIV / AIDS, of pregnant women, blood donors, behavioral high-risk and other groups, including prisoners of the penitentiary system

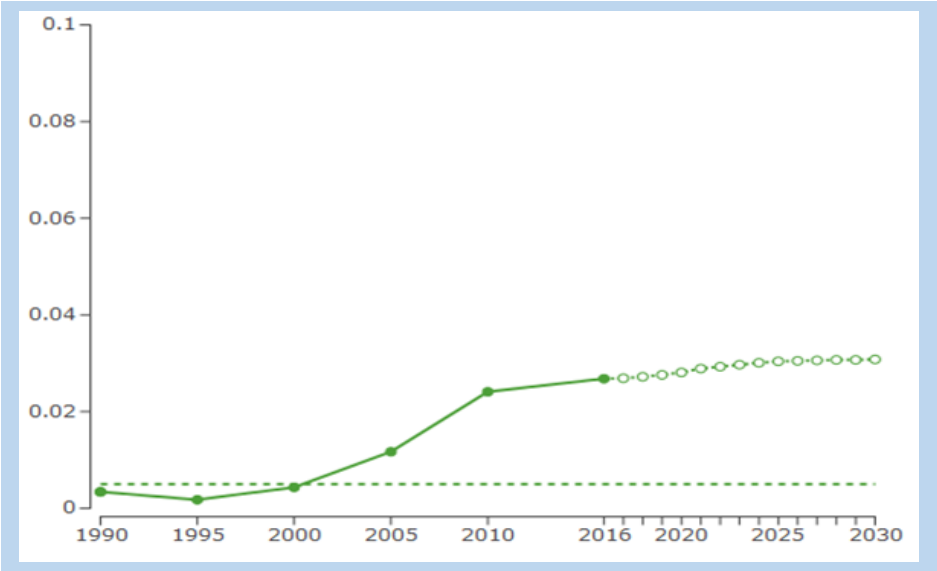
(accused / convicted), took place. Also behavioral high-risk groups (IDUs, CSWs, MSM) received the services, defined by the HIV prevention package, including HIV voluntary counseling and testing, within the framework of the Global Fund Program.

HIV incidence per 100000 population



Source: World Health Organization HFA DB

HIV incidence per 100000 population, Georgia



Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

Universal access of the HIV / AIDS patients to antiretroviral drugs, is funded by the State and the Global Fund. Georgia is the first country in the region, to implement a "treatment for all" strategy, which is aimed on the treatment of HIV / AIDS patients independently of the number of CD4 cells and significantly improves the treatment outcomes and promotes HIV / AIDS proliferation in the country.

HIV, new cases by mode of transmission in %, Georgia, 2016

Mode of transmission	%
Injecting drug use	30.3
Heterosexual contacts	51.5
Homosexual contacts	16.8
Vertical transmission	0.6
Blood or blood products transfusion	0.3
Unidentified	0.6

Source: Center for infectious pathology, AIDS and clinical immunology

Following trends have been observed in 2016, compared to 2015,:

- 1.3% increase of the number of heterosexually transmitted new cases;
- 3% decrease of the homosexually transmitted new cases;
- 2.3% increase of the number of new cases transmitted by injected drug use;
- 0.2% decrease of the number of new cases transmitted vertically (from mother to child).

Tuberculosis

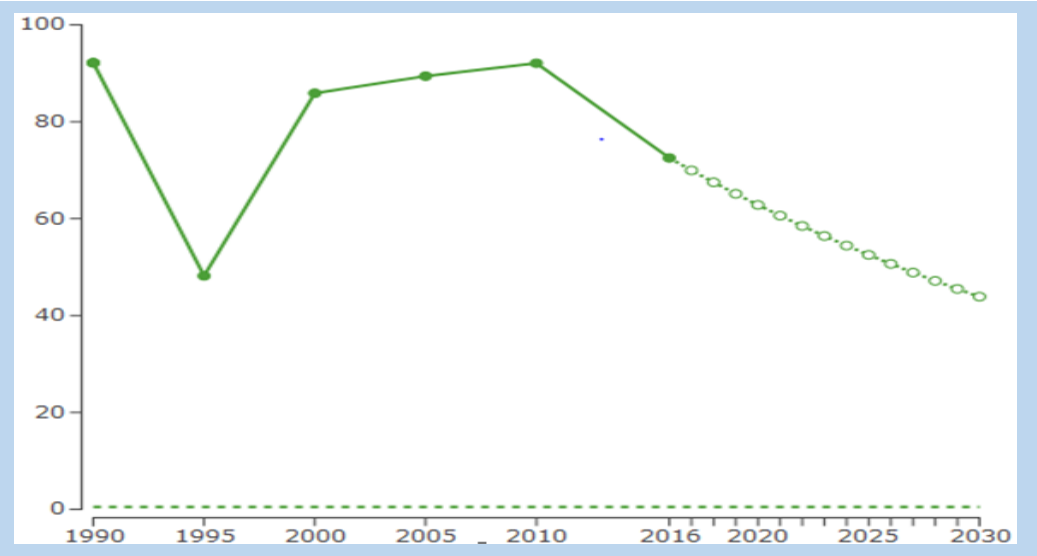
According to the World Health Organization estimates, there is a trend for decrease of tuberculosis morbidity in Georgia, although, indicators are high, compared to the European region and the EU countries.

In 2016, there were 3329 cases of tuberculosis registered, including 2462 new cases. The prevalence rate of all forms of tuberculosis was 89.5 per 100 000 population; incidence rate – 66.2.

2.1% of new cases and relapses was registered in penitatiary system. The share of pulmonary tuberculosis constitued 77.2% of all new cases.

In 2016, according to the National Statistics Office of Georgia, mortality caused by tuberculosis was 2.2 per 100,000 population.

Tuberculosis incidence rate per 100000 population, Georgia



Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

The “successful treatment” of the new cases of pulmonary BK+ tuberculosis repersents a good assessment characteristic of the tuberculosis control and management. In 2005, “successful treatment” of new cases of pulmonary BK+ tuberculosis showed only 64.1%. In 2014 and 2015, this indicator increased up to 81% (cohort of 2013), in 2016 – up to 85.9% (cohort of 2015).

The share of extensively resistant tuberculosis (XDR-TB) among MDR-TB cases equals to 10%, but has got a growing tendency and, according to the latest data, has exceeded 15%. The share of HIV co-infection in new MDR cases is 4.6%.

In 2016, the share of new and retreated M/XDR cases constituted 40% of the total number of tuberculosis cases.

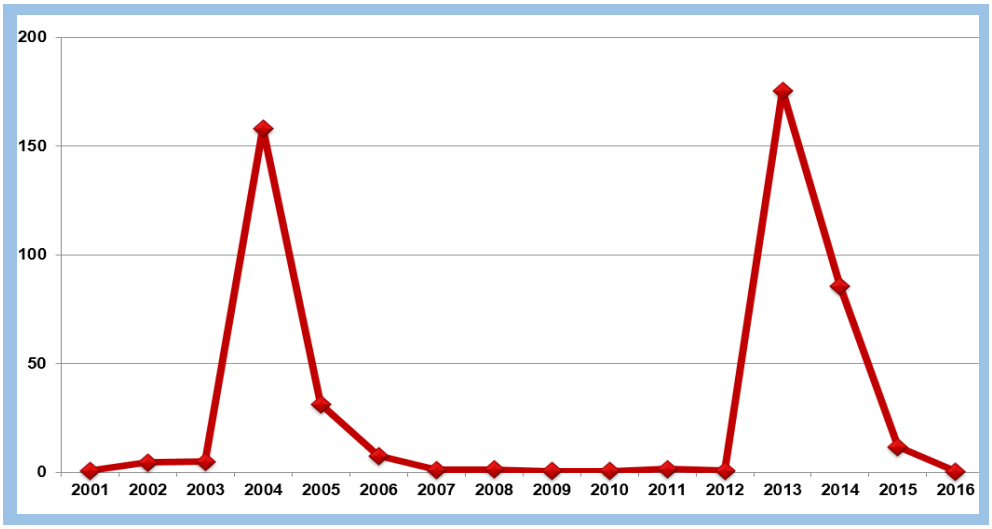
In the country, access to the first and the second line drugs is universal. New TB drugs (Delamanid and Bedaquiline) are available within the TB State program.

Measles

In Georgia, measles registration and epidemiological surveillance are obligatory. In 2004 and 2013 peaks of the measles morbidity were registered. The 2013 peak was caused by the failure of the mass immunization campaign in 2008, resulting in the accumulation of a non-immune layer of the population, which escalated conditions for a measles epidemic. The heaviest burden of morbidity mainly registered in under-1 and 15-30 years-old age groups.

Since 2013, additional campaigns have been implemented to seize the epidemic: the completion of the anti-measles vaccination course for children aged 14; provision of additional vaccination to population aged 15-30, health professionals and some other specific groups. In 2013-2014, about 150,000 people were vaccinated. As a result, the number of cases of measles in the country significantly decreased: in 2015 there were registered 431 cases of measles; in 2016 - 14 cases.

Measles, incidence per 100000 population

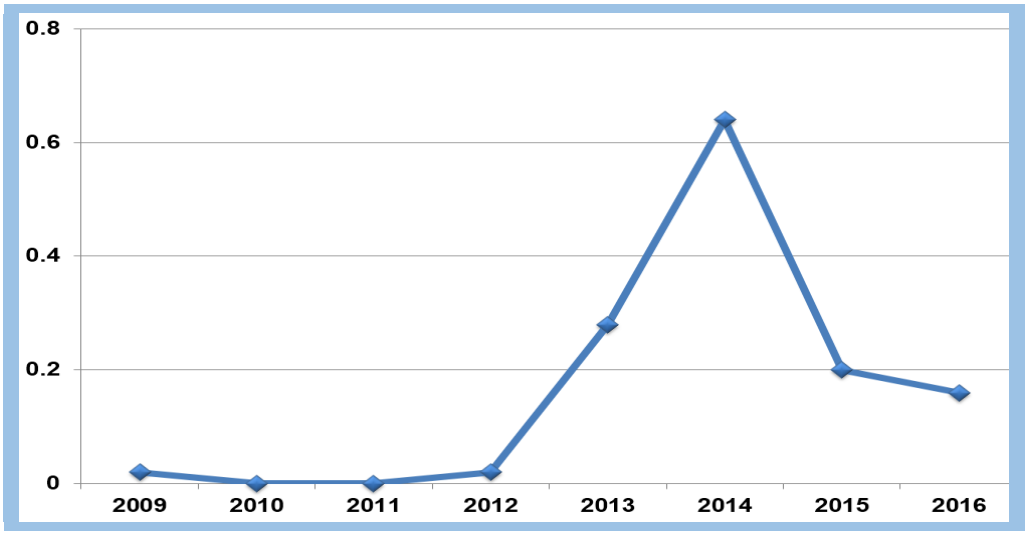


Source: NCDC

Crimean-Congo fever

In 2014, in the East part of Georgia there was an outbreak of Crimean-Congo fever. Total number of registered cases was 24 (incidence per 100000 population – 0.6); 4 cases were fatal (case fatality rate – 16.6). In 2016, a surveillance system revealed 41 suspicious cases of hemorrhagic fever, in 6 cases the diagnosis of the Crimean-Congo hemorrhagic fever was confirmed, 2 of which were fatal (both in foci - Ambrolauri and Terjola). Compared to the previous year, the number of cases has decreased (in 2015, 9 cases of Crimean-Congo hemorrhagic fever were registered, including 1 fatal), although the spread area increased.

Crimean-Congo fewer, incidence per 100000 population, Georgia

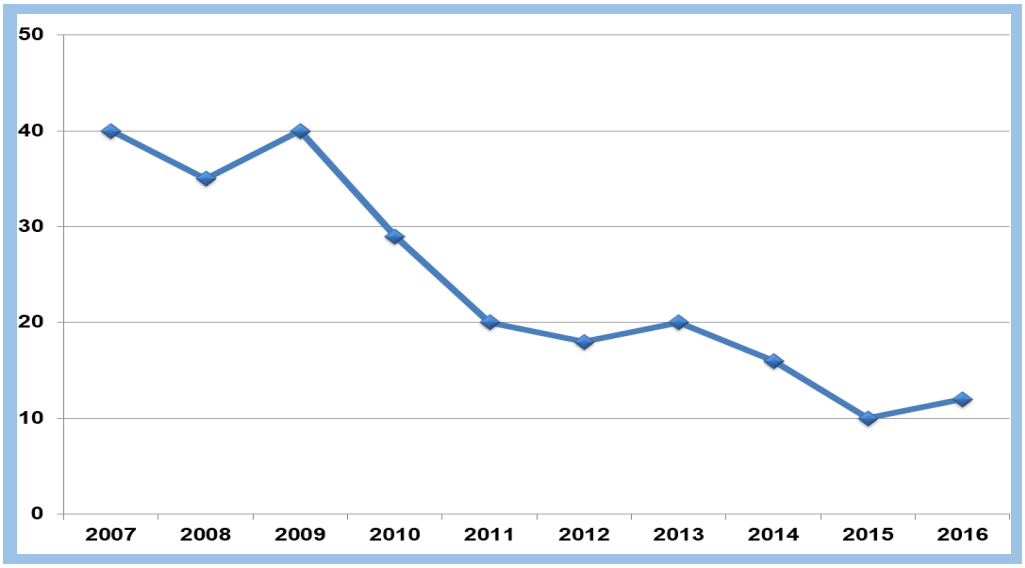


Source: NCDC

Rotaviral infection

After the implementation of rotavirus vaccine in the country, according to the sentinel surveillance data, there was a decrease of the rotaviral diarrhea cases in the tested patients. In 2013, coverage with two doses of rotavirus vaccine was 56%, in 2014 - 69%, in 2015 - 72%, and in 2016 - 75%. In the tested patients, during this period, the share of rotaviral diarrhea has reduced 2-fold.

Share of rotaviral diarrhea In the tested patients in %, Georgia, sentinel surveillance data

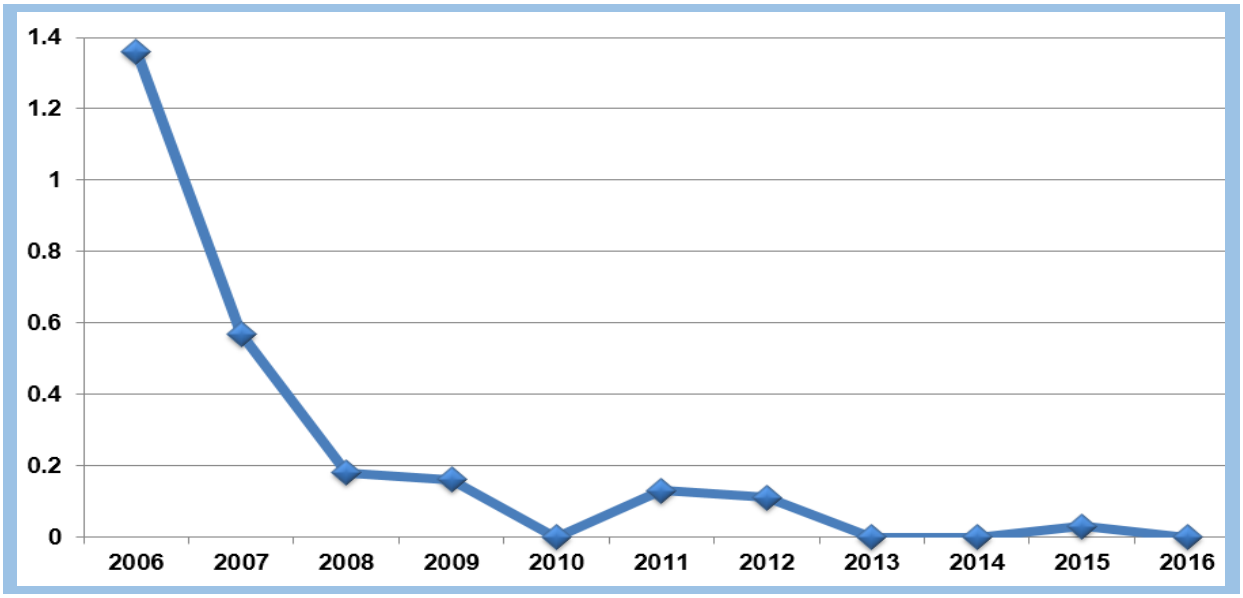


Source: NCDC

Malaria

Since 2002, malaria incidence has been substantially reduced, reaching zero point in 2013 – 2014. In 2016, there were no local cases of malaria registered. Although, surveillance system revealed 18 suspected cases, out of which 7 cases were confirmed (all of them – imported). During recent years there were no deaths, caused by malaria registered in Georgia.

Malaria incidence per 100000 population, Georgia

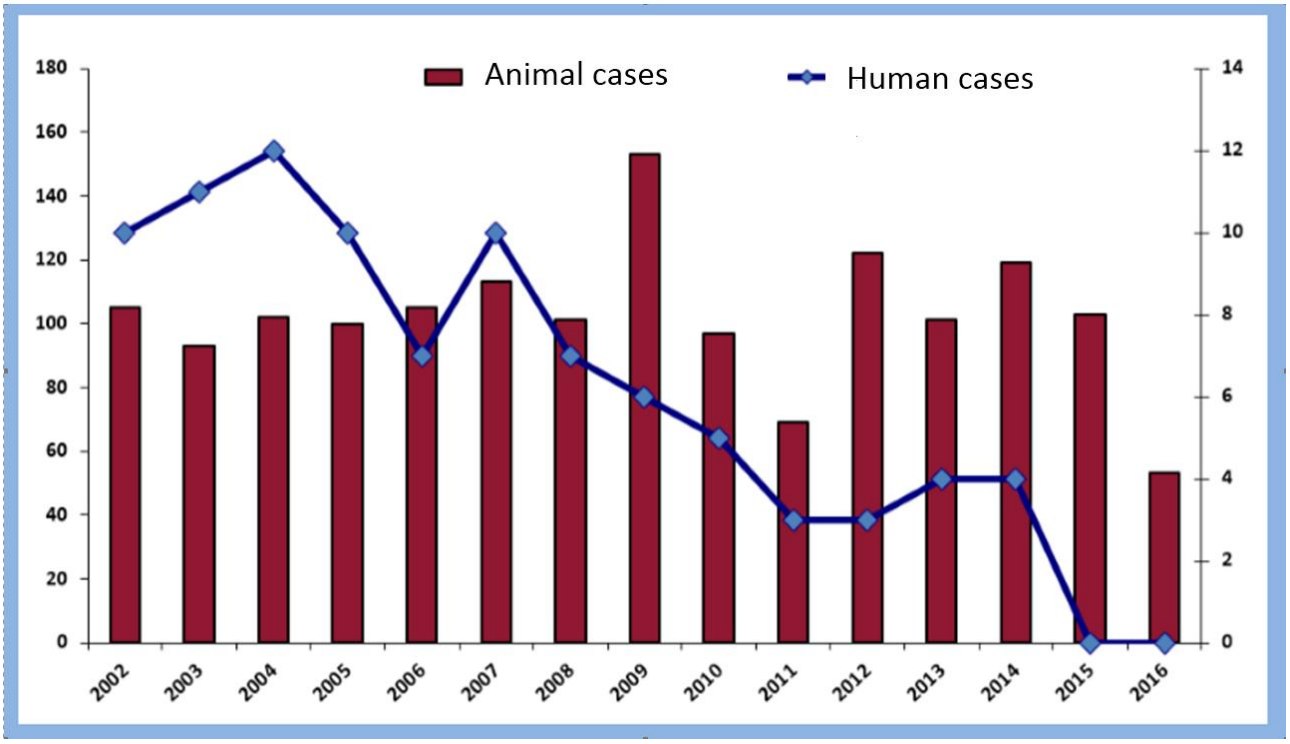


Source: NCDC

Rabies

Continious provision of the anti-rabies serum (immunoglobulin) and vaccines provided good background to reach the zero incidence of rabies rate in humans. In 2015, this happened the first time starting from 1990. In 2016, this sustained.

Number of cases of rabies, Georgia

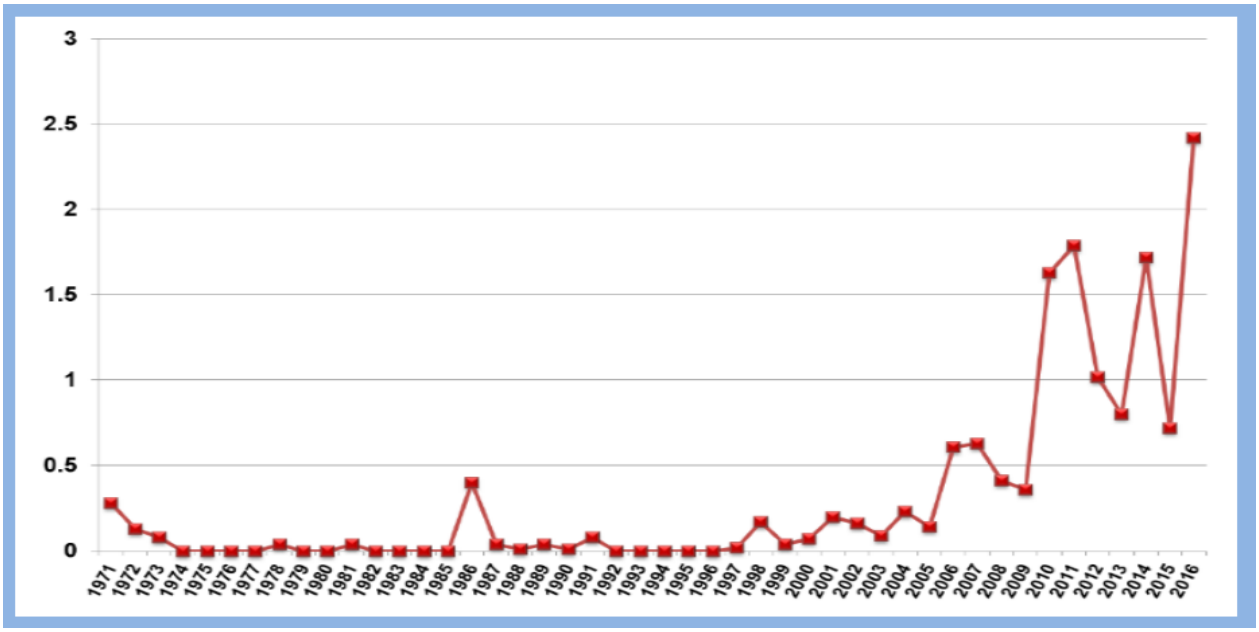


Source: NCDC

Leptospirosis

2016 was characterized by unusual increase of leptospirosis incidence, which, along with the cyclic increase of the epizootic processes, should be also associated with the development of surveillance and laboratory diagnostic capacities.

Leptospirosis incidence rate, Georgia



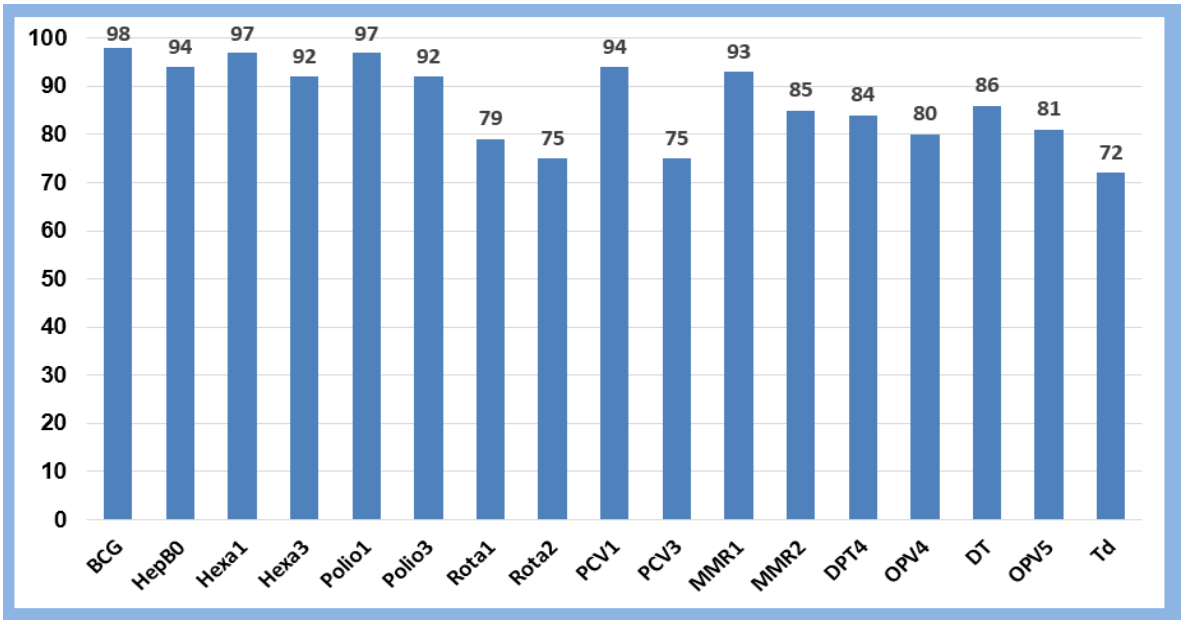
Source: NCDC

Immunization

All vaccinations included into the National vaccination calendar are free of charge for the population. To guarantee high quality and safe immunization, for immunization of the population State purchases vaccines, which are prequalified by the World Health Organization.

In 2016, compared to 2015, in the frame of the State immunization program, the vaccination coverage rates for most antigens is higher, athough, coverage rates for all vaccines have not yet reached 95%.

Immunization coverage (%), Georgia



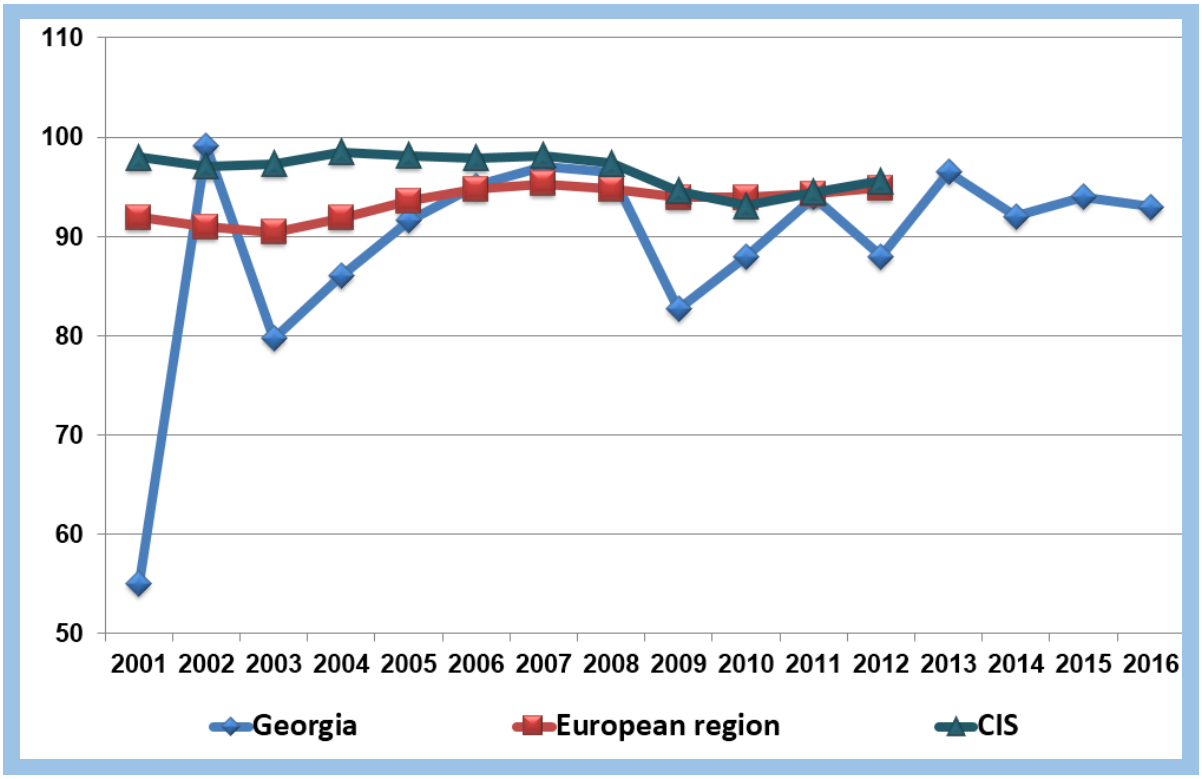
Source: NCDC

Coverage of the population with 8 vaccines, (DPT, Polio, HepB, MMR) in %, Georgia

Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

In Georgia, an increase of the coverage of immunization against measles has been registered over the last years, except for the year 2009, when the decrease can be explained by the longtime shortage of the vaccine in the country. In 2015, the coverage rate exeeded the level, recommended by the WHO (95%), and reached 96.5%.

Share of children (%) aged under-2, vaccinated against measles



Source: World Health Organization HFA DB, NCDC

Since April 18, 2016, Georgia, following the action plan of Global Polio Eradication Initiative, successfully replaced the oral trivalent polio vaccine with the bivalent.

A mobile application on vaccination for parents (uses iOS and Android platforms) was developed. Thanks to the application, parents are able to receive information about the National vaccination calendar, vaccines, vaccination contraindications, and false contraindications, warnings, recommendations about vaccination, and vaccine preventable diseases. A reminder for parents about the date of the vaccination and types of the vaccines is one of the features of the application.

Noncommunicable diseases

Noncommunicable diseases (NCDs) kill 38 million people each year. Almost three quarters of NCD deaths - 28 mln - occur in low- and middle-income countries. Sixteen mln NCD deaths occur before the age of 70; 82% of these "premature" deaths occurred in low- and middle-income countries.

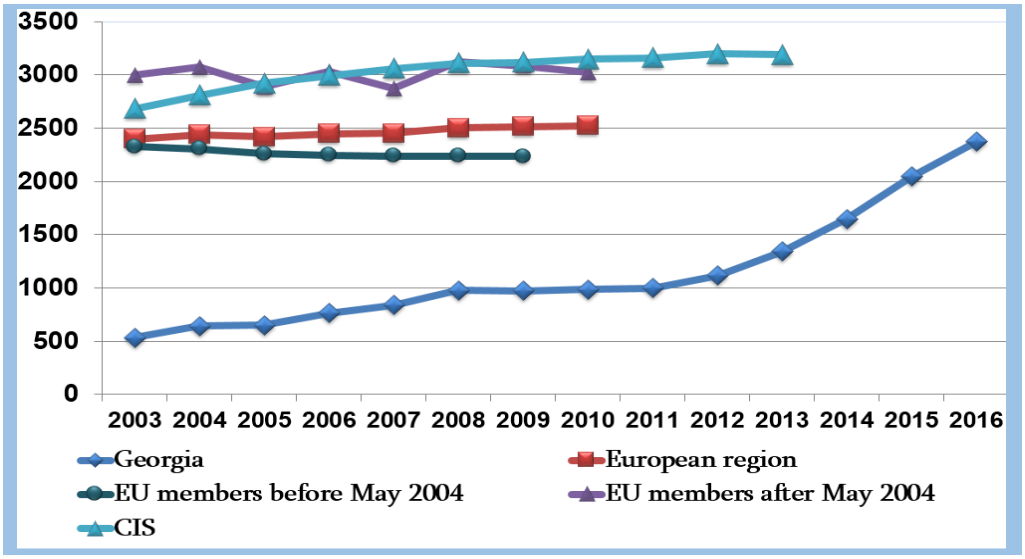
According to the WHO report (2014), 97% of mortality in Georgia is caused by noncommunicable diseases and injuries. In addition, diseases of the circulatory system constitutes 69% of mortality, cancers – 14%, diabetes – 1%, cronic respiratory diseases – 4%, other noncommunicable diseases – 6%, and injuries – 3%.

In 2017, the State launched a program for socially vulnerable population, which considered provision of medicines for chronic noncommunicable diseases (ischemic heart disease, hypertension, heart failure, asthma, diabetes type 2, and thyroid gland diseases) .

Diseases of the circulatory system

Diseases of the circulatory system constitute 15.5% of all registered cases and 8.6% of all new cases of diseases in the country. Hypertension, ischaemic heart diseases, and cerebrovascular diseases are characterised with high morbidity and mortality. In 2000 – 2016, in Georgia, .the prevalence of circulatory system diseases had an increasing trend.

Diseases of the circulatory system, hospitalization rate per 100000 population



Source: World Health Organization HFA DB

Hypertension

The share of hypertension in Georgia constitutes about 59% of all cardiovascular diseases (2016). According to the noncommunicable diseases risk-factors survey (STEPS-2016), 37.7% of the population suffers from hypertension. While, according to the previous similar survey data (2010), this share was 33.4%.

Ischaemic heart diseases

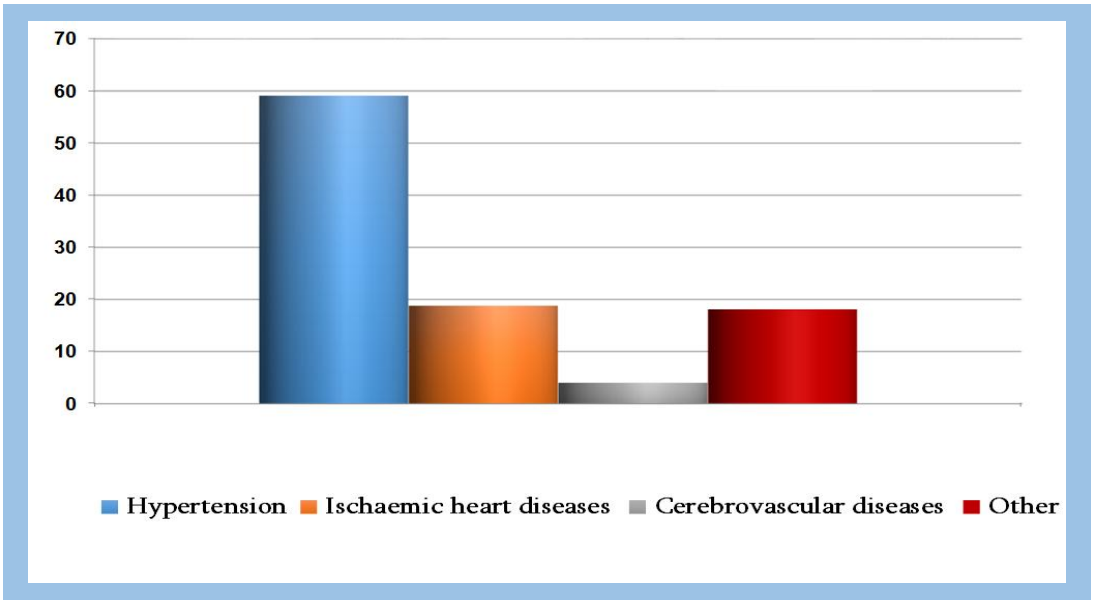
Ischaemic heart diseases constitute about 18% of all diseases of the circulatory system: angina pectoris – 6.8%; acute myocardial infarction – 1.0%, other acute ischaemic diseases – 1.6%.

In 2016, 52.8% of patients with acute myocardial infarction were admitted to hospital timely (within the first 24 hours from the onset of symptoms).

Cerebrovascular diseases

Cerebrovascular diseases occupied the third place among diseases of the circulatory system. Over the past years the prevalence of the cerebrovascular diseases had an incrieasing trend.

Diseases of the circulatory system, structure (%), Georgia, 2016

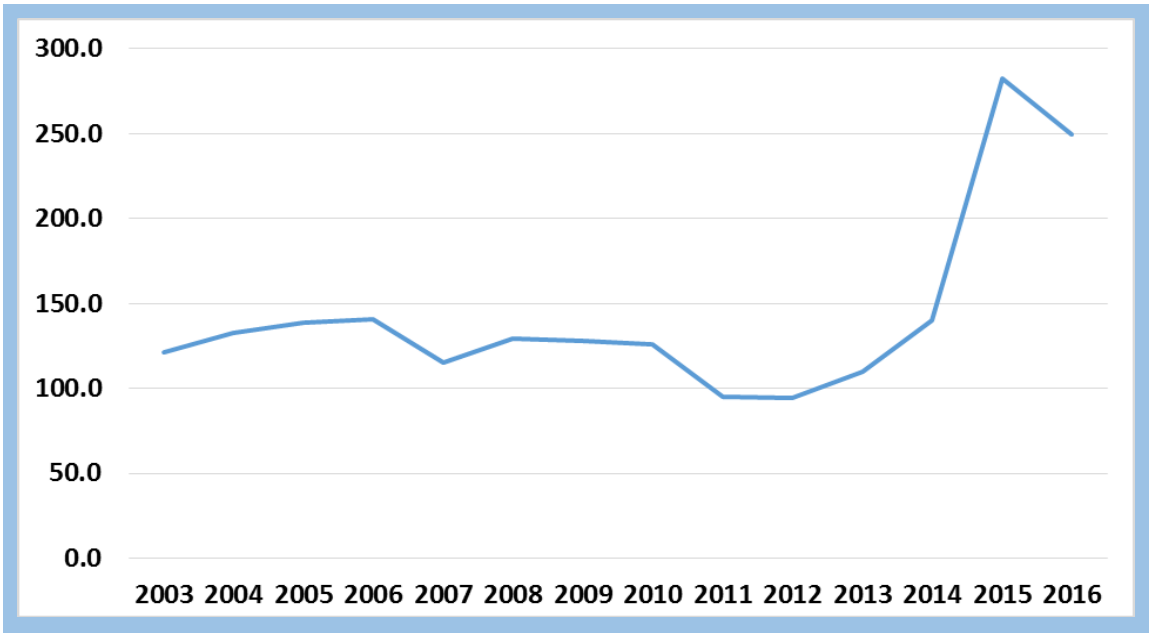


Source: NCDC

Malignant neoplasms

In Georgia, since 2015, January 1, a Population Cancer Registry (PCR) has been implemented. According to the PCR data, 10506 new cases of malignant neoplasms, including non-melanoma skin cancers and cancers in situ were registered in 2015 (incidence rate per 100 000 population – 293.4). In 2016, there were 10097 registered cases (incidence rate per 100000 population – 271.5).

Malignant neoplasms, incidence per 100000 population, Georgia, 2003-2016



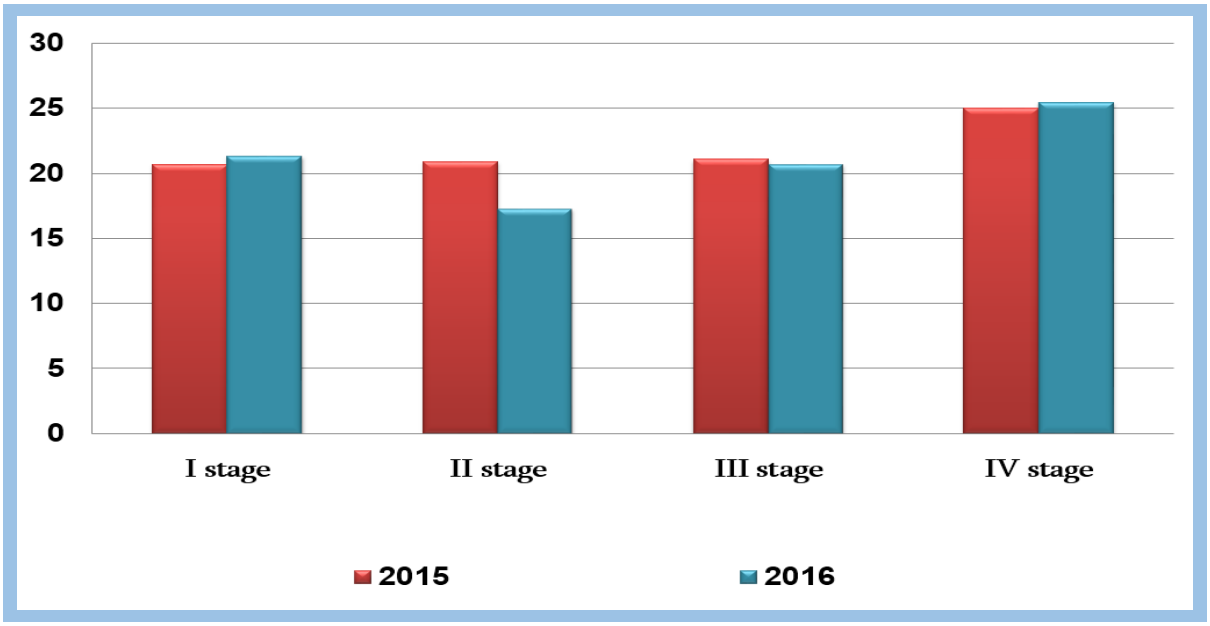
Source: NCDC

In 2015-2016, 56% of all new cases were registered in women, although, 44% - in men.

72.2% of all new cases are registered in the working age group (30 – 70 years); about 24% - in the population aged 70; 1% - in children (under15), and 0.5% - in adolescents (15 – 19).

In 2015-2016, according the cancer registry data, the share of cancers, diagnosed at the I and II stages, constituted 39%. Although, the share of cases diagnosed at III and IV stage is high (in 2015 - 50%; in 2016 - 46.2%).

New cases of cancer by stages (%), Georgia, 2015-2016



Source: NCDC

Top 5 sites of cancer in women, Georgia, 2016

Site	Number of new cases	Percent from the total number of all new cases
Breast	1 756	33.5%
Thyroid	757	14.4%
Cervix uteri	371	7.1%
Corpus uteri	351	6.7%
Colorectal	342	6.5%

Source: NCDC

Top 5 sites of cancer in men, Georgia, 2016

Site	Number of new cases	Percent from the total number of all new cases
Trachea, bronchus and lung	676	16.7%
Prostate	406	10.0%
Bladder	398	9.8%
Colorectal	389	9.6%
Stomach	278	6.9%

Source: NCDC

Since 2011, the following cancer screening programs have been implemented in the country:

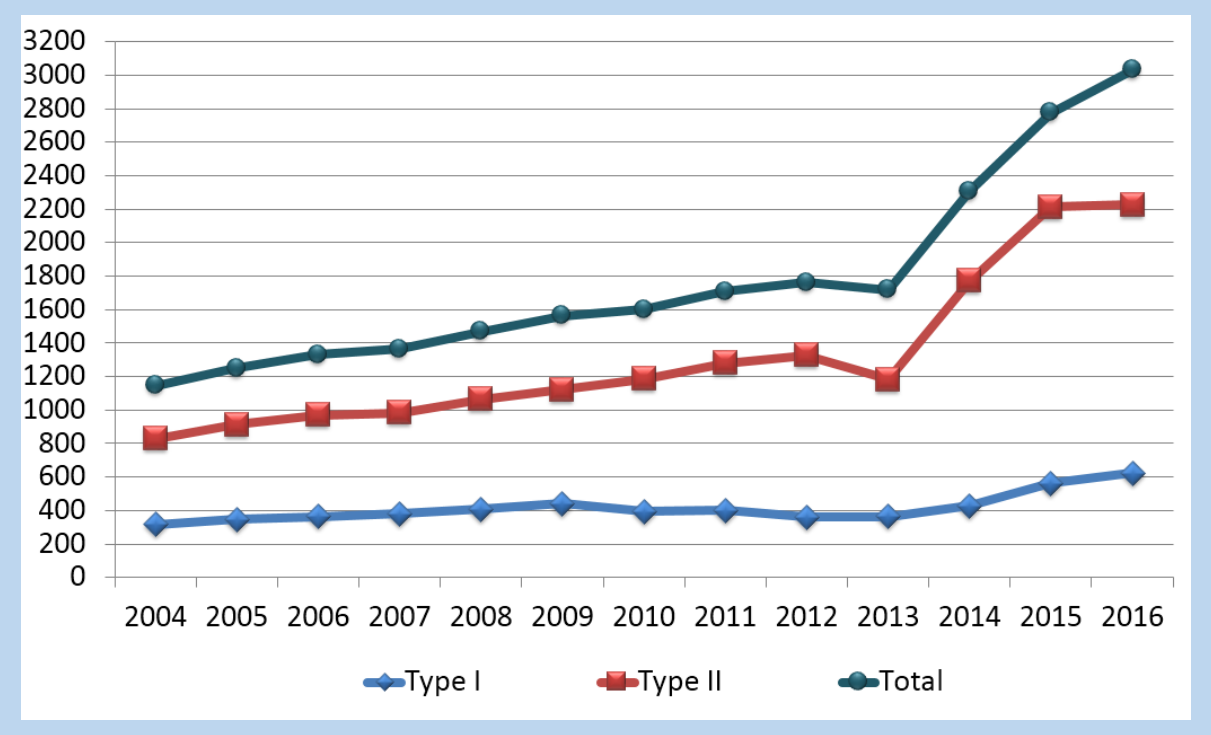
- Breast cancer screening for 40-70-year-old women;
- Cervical cancer screening for 25-60-year-old women;
- Prostate cancer management for 50-70-year-old men;
- Colorectal cancer screening for 50-70-year-old population.

According to the data of the noncommunicable diseases risk-factors survey (STEPS-2016), the lifetime prevalence of cervical cancer screening in 30-49 years old women is only 23.9%.

Diabetes Mellitus

An upward trend of diabetes mellitus has been registered in recent years in Georgia, mainly caused by increasing of the diabetes type 2 cases. In 2016, 3.2% of new cases of diabetes type 1 were registered in children under-15. There were only 17 cases of diabetes type 2 registered in children. According to the STEPS-2016 data, 2% of 18-69 years old population had impaired fasting glycaemia (6.1 – 7.0 mmol/l), and 4.5% - raised fasting blood glucose (>7.0 mmol/l).

Diabetes Mellitus, prevalence by type, Georgia, 2004-2016



Source: NCDC

Chronic Respiratory Diseases (CRD)

Chronic respiratory diseases (asthma, respiratory allergic diseases, chronic obstructive pulmonary diseases, occupational lung diseases, pulmonary hypertension) constitute the main share of diseases of the respiratory system.

In 2016, chronic obstructive pulmonary diseases (COPD) contributed 73.8% of all registered cases of lower respiratory diseases.

Tobacco smoke (including passive smoking) is the main cause of chronic pulmonary diseases. Indoor air contamination, outdoor air pollution, occupational dust and chemicals also represent risk factors.

Risk factors

According to the data of the noncommunicable diseases risk factors survey (STEPS-2016):

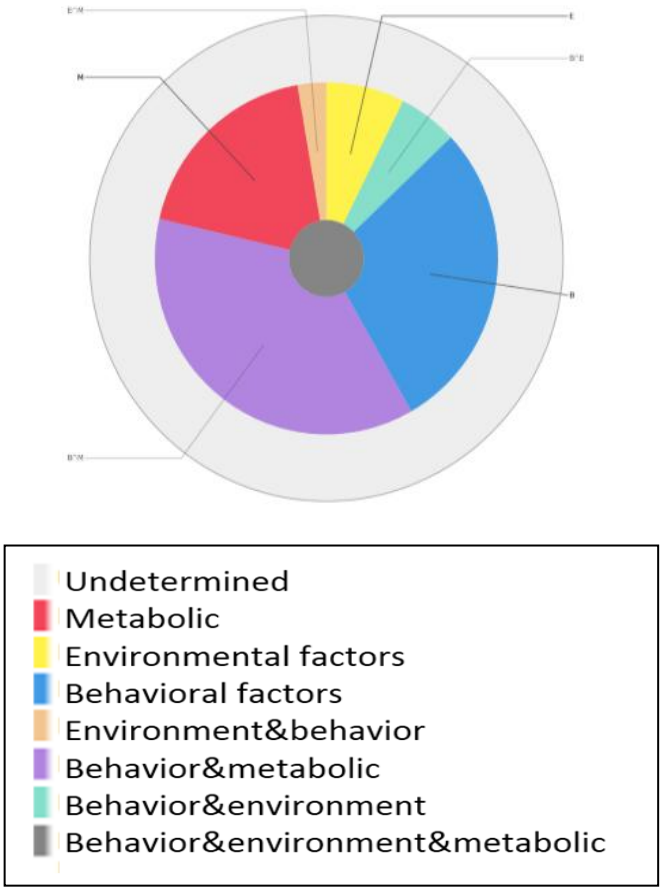
Standardized rates in 18-69 population	Both sexes	Males	Females
Tobacco consumption			
Percentage who currently smoke tobacco	31.0%	57.0%	7.0%
Percentage who currently smoke tobacco daily	28.0%	51.5%	6.2%
For those who smoke tobacco daily			
Average age started smoking (years) among current daily smokers	18.3	17.8	22.4
Percentage of daily smokers smoking manufactured cigarettes	98.6%	98.4%	100.0%
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	21.3	22.2	14.4
Alcohol consumption			
Percentage who are lifetime abstainers	10.4%	3.9%	16.4%
Percentage who are past 12 month abstainers	20.1%	11.4%	28.1%
Percentage who currently drink (drank alcohol in the past 30 days)	39.1%	58.9%	20.8%
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	18.3%	35.3%	2.6%
Diet			
Mean number of days fruit consumed in a typical week	5.3	5.1	5.4
Mean number of servings of fruit consumed on average per day	2.0	2.0	2.1
Mean number of days vegetables consumed in a typical week	6.0	5.9	6.1
Mean number of servings of vegetables consumed on average per day	2.4	2.4	2.4
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	63.0%	63.8%	62.4%
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	26.7%	33.4%	20.6%
Percentage who always or often eat processed foods high in salt	14.3%	18.9%	10.1%
Physical activity			
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	17.4%	16.2%	18.4%
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	137.1	158.6	173.8
Percentage not engaging in vigorous activity	82.4%	72.2%	91.8%
Cervical cancer screening			
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer	-	-	23.9%
Physical measurements			
Mean body mass index - BMI (kg/m^2)	28.1	27.9	28.3
Percentage who are overweight (BMI ≥ 25 kg/m^2)	64.6%	65.5%	63.8%
Percentage who are obese (BMI ≥ 30 kg/m^2)	33.2%	30.2%	36.0%
Average waist circumference (cm)	129.4	132.6	126.5
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	82.2	83.0	81.4
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	37.7%	38.6%	36.9%
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	55.4%	64.2%	47.2%

Biochemical Measurement			
Mean fasting blood glucose, including those currently on medication for raised blood glucose [mmol/L]	4.4	4.4	4.4
Percentage with impaired fasting glycaemia as defined below plasma venous value ≥6.1 mmol/L and <7.0 mmol/L	2.0%	2.0%	1.9%
Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose plasma venous value ≥ 7.0 mmol/L	4.5%	4.7%	4.3%
Mean total blood cholesterol, including those currently on medication for raised cholesterol [mmol/L]	4.3	4.1	4.5
Percentage with raised total cholesterol (≥ 5.0 mmol/L or currently on medication for raised cholesterol)	27.7%	21.9%	33.0%
Mean intake of salt per day (in grams)	8.5	9.7	7.4

Source: NCDC

The Institute for Health Metrics and Evaluation (IHME) at the University of Washington in the publication "Systematic analysis for the Global Burden of Disease Study 2016" show the following:

Loss of healthy life (DALYs) attributable to all risk factors, Georgia, 2015



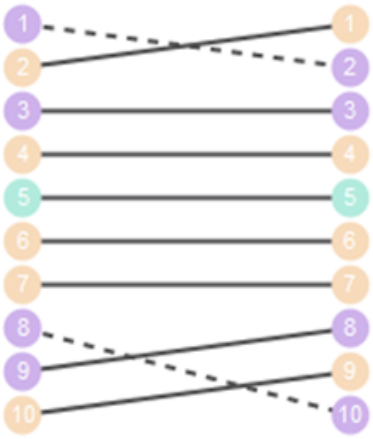
Number of smokers by country, 2015

Country	Number of smokers
Russian Federation	33 000 000
Germany	16 000 000
Turkey	15 000 000
France	12 000 000
England	11 000 000
Ukraine	11 000 000
Kazakhstan	2 900 000
Belarus	2 400 000
Uzbekistan	2 100 000
Azerbaijan	1 800 000
Sweden	990 000
Kyrgyzstan	790 000
Georgia	750 000
Moldova	710 000
Norway	700 000
Lithuania	650 000
Tajikistan	630 000
Armenia	570 000
Latvia	540 000
Turkmenistan	310 000
Estonia	270 000

Source: IHME

Main risk factors for death and disability, Georgia

Ranking 2005	Ranking 2016	Change in %
Nutrition	High blood pressure	-19,5
High blood pressure	Nutrition	-23,5
Smoking	Smoking	-13,5
Overweight	Overweight	-8,1
Air pollution	Air pollution	-32,1
High level of cholesterol	High level of cholesterol	-17,9
High level of glucose	High level of glucose	-0,4
Insufficient nutrition	Alcohol / drug abuse	25,9
Alcohol / drug abuse	Diseases of a kidney	-12,5
Diseases of a kidney	Insufficient nutrition	-40,8



Metabolic risks

Environmental risks

Behavioral risks

Source: Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016

Strengthening of tobacco control in Georgia

On May 17, 2017 a legislative package on Tobacco Control was approved by the Parliament of Georgia with the third hearing. On May 30, 217. The President of Georgia signed the package. Amendments were made in the following laws: "On Tobacco Control", "On Advertising", "On Organizing Lotteries, Games of Chance and Other Prize Games", "On Broadcasting" and in the Administrative Offenses Code of Georgia.

Main amendments:

- Exclusion of the interests of tobacco industry and transparency in relationship between tobacco industry and public organizations/individuals in the process of preparation, adoption and establishment of health care decisions
- Smoke-free public places (except casinos, cigar bars, and airport) - from May 1, 2018
- Complete prohibition of all types of advertisement (including through Internet) of tobacco products and accessories, promotion and sponsorship - from May 1, 2018
- Ban on placement of tobacco products, its accessories and consumption devices display on outer vitrines and windows of the store - from September 1, 2018
- Smoke-free stadiums - from May 1, 2020
- Ban on placement of tobacco products, its accessories and consumption devices display on internal vitrines - from January 1, 2021.

Colaboration project "Strengthening of micronutrients deficiency surveillance systems"

Since 2015, CDC/Altanta and NCDC Georgia have started development and strengthening of nutritional surveillance under the collaborative project "Strengthening of micronutrients deficiency surveillance systems".

The surveillance system includes blood and urine laboratory component to detect iron, folate and iodine deficiency in children and pregnant women. During the project period quite interesting results have been got on nutritional status of the population, namely on the prevalence of micronutrients deficiencies. According to the data, about 34% of children aged 12-23 months have anemia, about 80% of children aged 12-23 months and 60% of pregnant women suffer from iron deficiency; 26% of pregnant women are affected by folic acid deficiency. The prevalence rate of neural tube defects is high (2.7 per 1000 live births). No iodine deficiency cases were revealed in the studied population, also no significant malnutrition problems were observed in children.

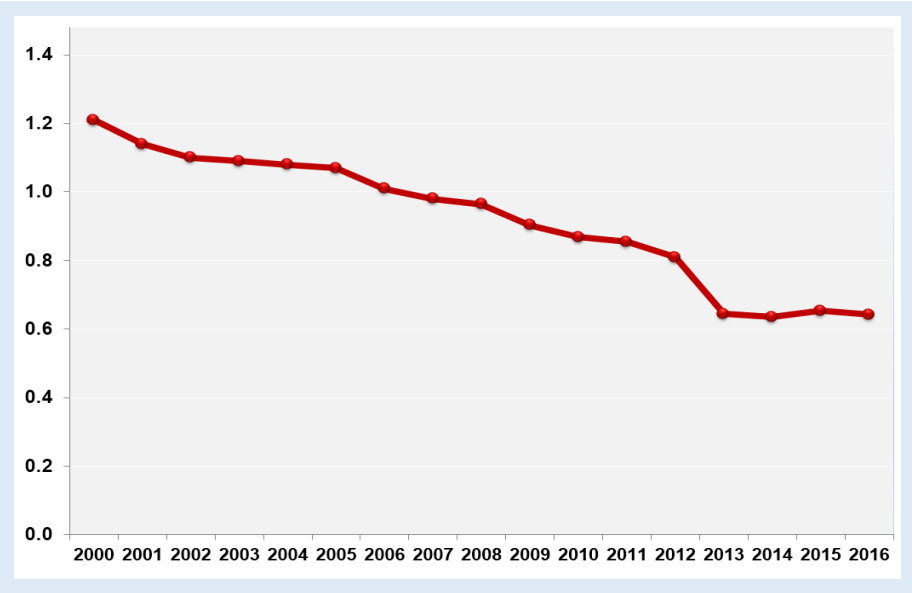
Healthcare resources

Healthcare resources, Georgia, 2016			
Number of physicians (including dentists)	29895	In-patient facilities	278
Number of physicians per 100000 population	803.8	Out-patient facilities	1043
Nurses	19376	Antenatal care centers	274
Number of nurses per 100000 population	521.0	Ambulance stations	79
Number of hospital beds	13840	Blood transfusion facilities	19
Number of hospital beds per 100000 population	372.1	Baby nurseries	1
Encounters with physicians	12081494	Scientific research institutes	5
Home visits of physicians	272910	Rural physician-entrepreneurs	1258

Source: NCDC

Last years the ratio of numbers of nurses to physicians has a downward trend.

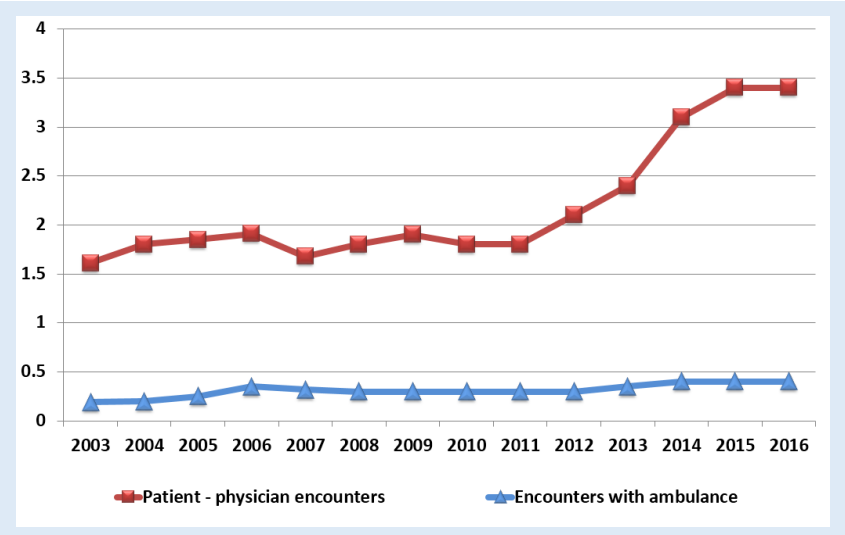
Ratio of nurses to physicians, Georgia



Source: NCDC

According to the WHO latest available data, the average number of out-patient encounters in the European Region is about 6 per capita. In Georgia, during last 2 decades, this indicator did not exceed 2.2. In the frame of the UHC programme the numbers of out- and in-patient encounters continued to grow due to increased accessibility of healthcare services. In 2016, the number of contacts with out-patient facilities per capita reached 3.9.

Annual number of out-patient encounters per capita, Georgia



Source: NCDC

The ambulance system is providing free emergency medical care for the population. In 2016, the ambulance services completed 1617704 emergency visits; this 0.4 encounters per capita.

In 2016, 86707 donations of blood were collected, including 80361 doses within the Safe Blood Program. About 31% of all donations were free donated.

Universal Healthcare

Universal Health Coverage (UHC) of the population is the major Global Health priority and means that all people have access to health services they need without the risk of financial hardship when paying for them. This requires an efficient health system that provides the entire population with access to high quality services, health workers, medicines and technologies. It also requires a financing system to protect people from financial hardship and impoverishment from health care costs.

Since 2013, the Government of Georgia has laid the foundation of the health policy oriented on the popultaion health and well-being, and, introducing the universal health care program, initiated universal coverage of state-funded medical services. Universal health care reform provided improved access to health care services, reducing financial barriers, and out-of-pocket spending, increased financial security. In 2016, 50.2% of all cases, covered by the Universal healthcare program, represented urgent ambulance calls, 12.7% - immunization, 8.6% - elective surgery, 3.6% - childbirth, 3.6% - chemotherapy treatment, 0.3% - cardiac surgery, and 0.2% - radiotherapy. *(Source: Ministry of Labour, Health and Social Affairs).*

Healthcare expenditures

In Georgia, the total health care expenditures are growing each year, indicating increased demand for health services and the growth of the population's solvency. The share of the total health expenditures in GDP (%) is fairly high among other countries of the European Region. Georgia, from own economy, spends on healthcare almost as much, as the European Region's high income countries (8%-9%).

Since 2013, the Government of Georgia has laid the foundation for public health and welfare oriented health policy. Last years the state budget allocations for the health sector substantially increased (in 2012 - 450 million GEL; in 2015 - 913 million GEL). State expenditure on health, as a share of the GDP is growing annually (in 2012 - 1.7%, in 2015 - 2.9%), although, this share is still lower than in the Western Europe (EU15) - 8%, EU (EU28) – 7.3%, and the average for European 53 countries – 5.7%.

In 2014-2015, the State spending on health per capita substantially increased: in 2014 - 186 GEL; in 2015 - 246 GEL. This, on the one hand, could be explained by reduction of the number of population, registered by the general census, and, on the other hand, by the increased State funding on health. According to the WHO and the World Bank, the country has improved access to health care and provided better financial protection for the population by implementing cost-effective reforms.

In 2012-2015, the sources of healthcare financing were distributed as follows: State (in 2012 - 21%; in 2015 - 36%), private (in 2012 - 77%; in 2015 - 62%), international aid and grants (in 2012 - 2.3%; in 2015 - 1.8%). To compare the trends, in 2015, a cost of hepatitis C treatment drugs provided by a pharmaceutical company Gilead to the country, (1,2 billion lari) was not included into the National Health Report.

Out-of pocket payments constituted the highest share of private expenditure, of which only 7% was spent on direct insurance payments, the rest funds were spent on healthcare services. The share of the out-of-pocket payments in total health expenditures has significantly decreased from 73% (in 2012) to 57% (in 2015), mainly due to the lower cost of hospitalization, which is a direct consequence of the universal healthcare program.

In 2015, for the first time, the share of the State expenditures in hospital services (71%) exceeded out-of-pocket payments (29%), this was another major achievement of the Universal Healthcare program, and a significant relief for the minimal consumer basket.

Since 2013, the share of pharmaceutical expenditures has been gradually decreasing (from 47% in 2012, to 38% in 2015), this is a result of the universal access to healthcare, reduction of selftreatment, and controlled drug prescription policy. Among countries of the European region, Moldova, Hungary, and Georgia have the highest share of pharmaceutical expenditures.

Healthcare expenditures, Georgia

	2012	2013	2014	2015
GDP, mln GEL	26167.3	26847.4	29150.5	31755.6
Total expenditure on health, mln GEL	2190.5	2254.3	2460.2	2518.7
Health expenditure, total (% of GDP)	8.4%	8.5%	8.5%	8.5%
Health expenditure**,** public, mln GEL	450.3	547.9	693.2	914.0
Health expenditure**,** public (% of total health expenditure**)**	20.6%	24.3%	28.2%	36.3%
Health expenditure, public (% of GDP)	1.7%	2.0%	2.4%	2.9%
General government expenditure on health as a percentage of total State budget	5.3%	6.3%	7.2%	8.6%
Health expenditure, private, mln GEL	1689.7	1655.5	1720.4	1558.9
Health expenditure, private (% of total health expenditure)	77.1%	73.4%	69.9%	61.9%
Direct out-of-pocket health expenditure, mln GEL	1608. 8	1 557.0	1623.4	1443.8
International aid for healthcare, mln GEL	50.5	50.9	46.5	45.8
International aid for healthcare, (% of total health expenditure)	2.3%	2.3%	1.9%	1.8%
Total expenditures on health per capita, GEL	488	502	660	677
Total expenditures on health per capita, USD	295	302	374	298
Total expenditures on health per capita, international dollars	571	601	772	792
Public health expenditure per capita, GEL	100	122	186	246
Public health expenditure per capita, USD	61	73	105	108
Public health expenditure per capita, international dollars	117	146	218	288
Out-of-pocket expenditure on health per capita, GEL	376	369	462	419
Out-of-pocket expenditure on health per capita, USD	228	222	261	185
Out-of-pocket expenditure on health per capita, international dollars	440	441	540	490
International aid for health per capita, GEL	11	11	12	12
International aid for health per capita, USD	7	7	7	5
International aid per capita on health, international dollars	13	14	15	14

Source: Ministry of Labour, Health and Social Affairs

Public health network and State programs

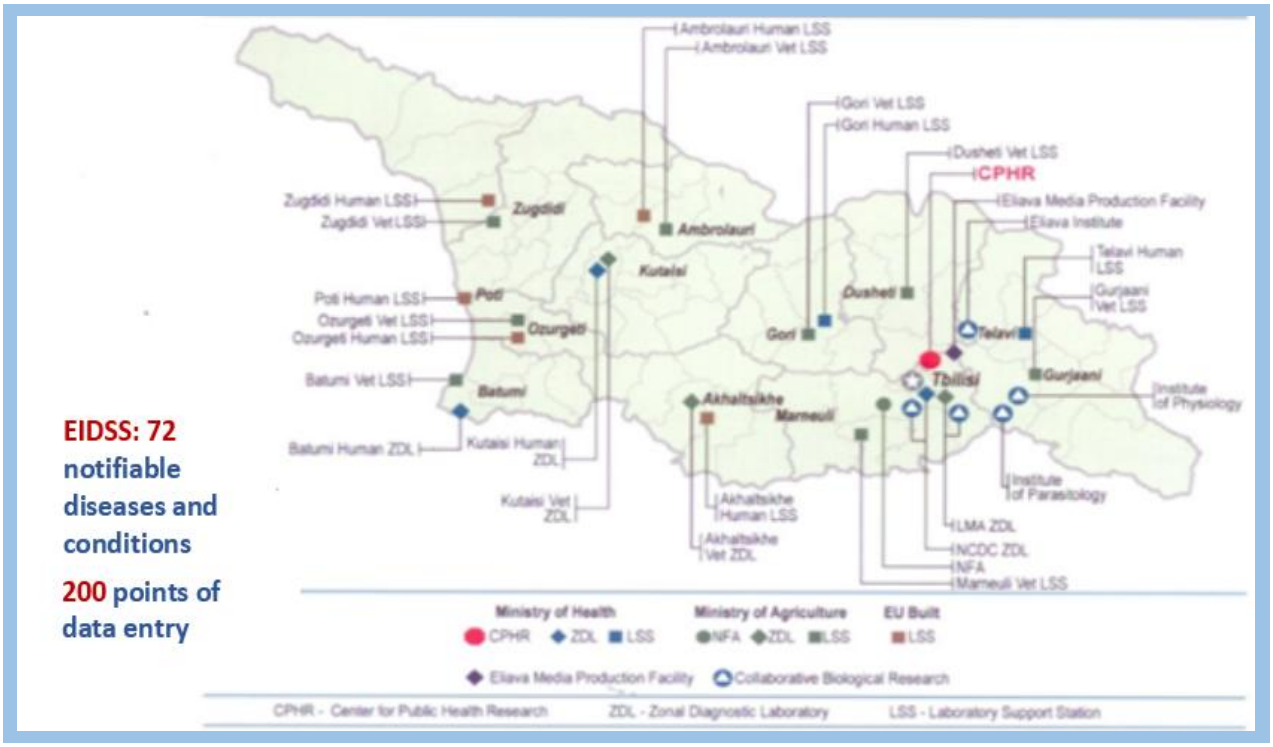
The National Center for Disease Control and Public Health with 9 regional branches represents the central level of the Georgian public health network, and municipal health centers, under the local governments - local level.

Within the framework of the Cooperative Biological Threat Reduction Program under the support of the US Government, the regional laboratory network started operation (2004-2012) which is BSL 2 level network incorporating 2 Zonal Diagnostic Laboratories (ZDL) and 7 Laboratory Support Stations (LSS - EU participated in funding as well). They represent regional part of the NCDC that provide support to municipal centers as well and act in line with “One Health” principle. They also have close cooperation with 11 veterinary labs under the Ministry of Agriculture. In this process the R. Lugar Center for Public Health Research plays a key role, as it has a BSL 3 level lab – a unique in the South Caucasus Region.

The system accumulates operational information on 72 notifiable diseases and conditions through EIDSS (Electronic Integrated Disease Surveillance System).

61 territorial centers with 1020 staff represent local municipal offices subordinated to self-government.

“One health”



Administration of state public health programs and activities is an important function of the National Center for Disease Control and Public Health. The NCDC is carrying out 10 State programs directed on health promotion, healthy lifestyle establishment, and prevention of diseases, which contribute to infectious diseases and cancer prevention and early detection, which ensures public protection and has a significant impact on the costs optimization.

The programs / components implemented by the Center are:

- Early detection and screening of diseases
- Immunization
- Surveillance
- Safe blood
- Prevention of occupational diseases
- TB management
- HIV / AIDS management
- Mother and child health
- Health promotion
- Hepatitis C management.

Tbilisi

Population

Total - 1113800, Urban - 1083100, Rural - 30700

Live births

Total - 16784, rate per 1000 population – 15.1

Stillbirths

Total - 316, ratio per 1000 births – 18.5

Under-5 mortality rate

Total - 376, 0-5 mortality rate – 22.4

Under-1 mortality rate

Total - 327, 0-1 mortality rate – 19.5

Obstetric care

Number of deliveries - 25559
Number of cesarean sections - 11021, ratio per 1000 LB – 429.3

Abortions

Total - 11339
Ratio per 100 LB – 44.2

Healthcare network

In-patient facilities - 134
Out-patient facilities - 489
Ambulance stations - 10
Blood transfusion stations - 8

Human resources in Health

Number of physicians - 15281
Number of nurses - 8138

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 7640214
Number of enrollements per capita per year - 6.9

Hospital beds

Total - 6956, density per 100000 population – 624.5

Ajara

Administrative units:

Batumi
Keda
Kobuleti
Shuakhevi
Khelvachauri
Khulo

Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Ajara	**338 000**	**5977**	**17.7**
Batumi	155 000	2762	17.8
Keda	16 900	292	17.3
Kobuleti	75 400	1216	16.1
Shuakhevi	15 100	255	16.9
Khelvachauri	52 000	982	18.9
Khulo	23 600	470	19.9

Source: NSO Georgia

Stillbirths

Total - 44
Ratio per 1000 births - 7.3

Under-5 mortality rate

Total - 54
Ratio per 1000 LB – 9.0

Under-1 mortality rate

Total - 48
Ratio per 1000 LB – 8.0

Obstetric care

Number of deliveries - 6255
Number of cesarean sections - 3230, ratio per 1000 LB – 512.7

Abortions

Total - 3783
Ratio per 100 LB – 60.0

Healthcare network

In-patient facilities - 20
Out-patient facilities - 132
Rural doctors - 107
Ambulance stations - 5
Blood transfusion stations - 3

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Ajara	**2122**	**627.8**	**1879**	**555.9**
Batumi	1774	1144.5	1577	1017.4
Keda	39	230.8	31	183.4
Kobuleti	162	214.9	139	184.4
Shuakhevi	31	205.3	28	185.4
Khelvachauri	77	148.1	58	111.5
Khulo	39	165.3	46	194.9

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 1129838
Number of enrollements per capita per year - 3.3

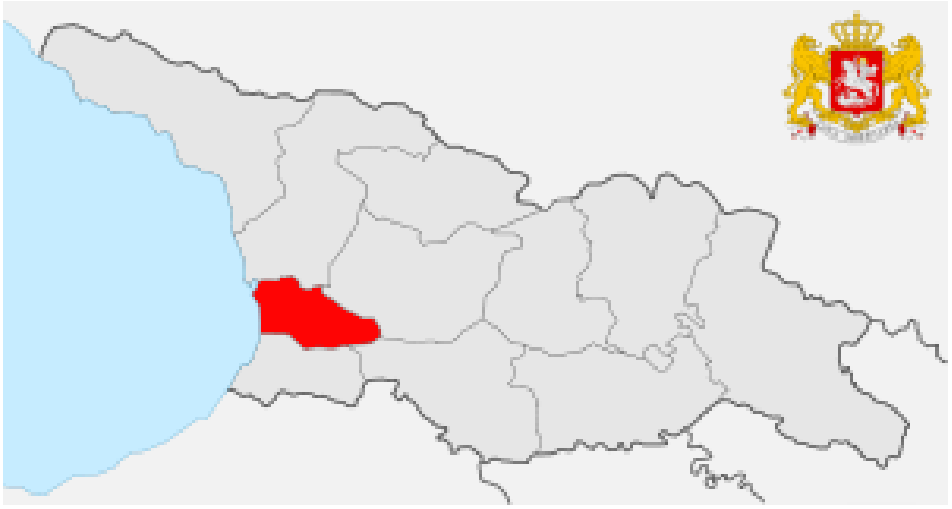
Hospital beds

Total - 1305, density per 100000 population – 386.1

Guria

Administrative units:

Ozurgeti
Lanchkhuti
Chokhatauri



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Guria	**112800**	**1535**	**13.6**
Lanchkhuti	31300	396	12.7
Ozurgeti	62600	719	11.5
Chokhatauri	18900	249	13.2

Source: NSO Georgia

Stillbirths

Total - 5, ratio per 1000 births – 3.2

Under-5 mortality rate

Total - 7, 0-5 mortality rate – 4.6

Under-1 mortality rate

Total - 3, 0-1 mortality rate – 2.0

Obstetric care

Number of deliveries - 667
Number of cesarean sections - 213, ratio per 1000 LB – 317.9

Abortions

Total - 192
Ratio per 100 LB – 28.7

Healthcare network

In-patient facilities - 6
Out-patient facilities - 10
Rural doctors - 75
Ambulance stations - 3
Blood transfusion stations - 1

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Guria	**391**	**346.6**	**279**	**247.3**
Lanchkhuti	131	418.5	82	262.0
Ozurgeti	176	281.2	152	242.8
Chokhatauri	84	444.4	45	238.1

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 246038

Number of enrollements per capita per year - 2.2

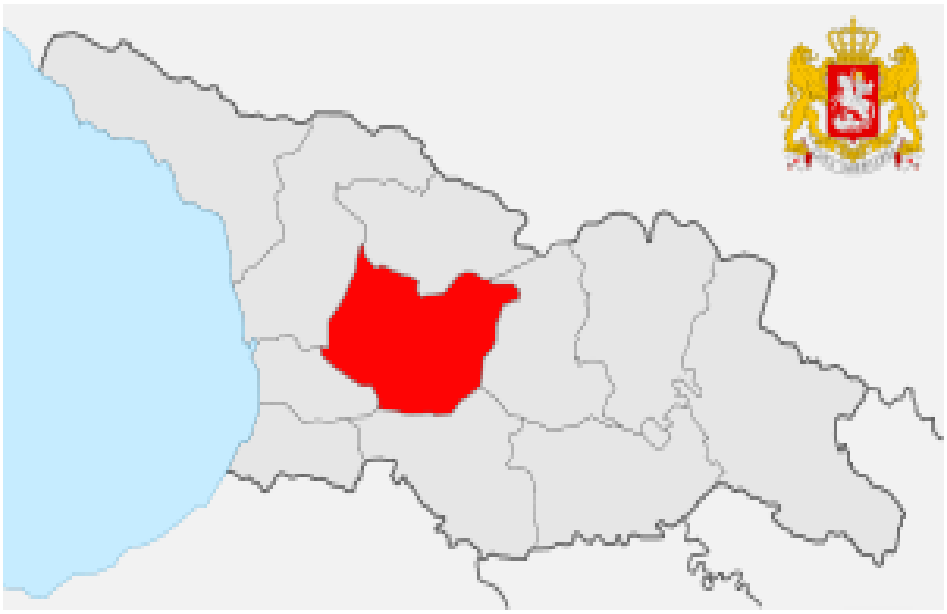
Hospital beds

Total - 128, density per 100000 population – 113.5

Imereti

Administrative units:

Kutaisi
Bagdati
Vani
Zestaponi
Terjola
Samtredia
Sachkhere
Tkibuli
Tskhaltubo
Chiatura
Kharagauli
Khoni



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Imereti	**531300**	**7784**	**14.7**
Kutaisi	147500	2469	16.7
Tkibuli	20500	260	12.7
Tskhaltubo	56400	695	12.3
Chiatura	39700	569	14.3
Bagdati	21300	284	13.3
Vani	24300	356	14.7
Zestaponi	57400	833	14.5
Terjola	35300	474	13.4
Samtredia	48400	674	13.9
Sachkhere	37800	584	15.4
Kharagauli	19300	277	14.4
Khoni	23400	309	13.2

Source: NSO Georgia

Stillbirths

Total - 81, ratio per 1000 births – 10.3

Under-5 mortality rate

Total - 63, 0-5 mortality rate – 8.1

Under-1 mortality rate

Total - 54, 0-1 mortality rate – 6.9

Obstetric care

Number of deliveries - 7378
Number of cesarean sections - 3652, ratio per 1000 LB – 494.9

Abortions

Total - 2999
Ratio per 100 LB – 40.6

Healthcare network

In-patient facilities - 32
Out-patient facilities - 140
Rural doctors - 214
Ambulance stations - 13
Blood transfusion stations - 2

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Imereti	**2709**	**509.9**	**2531**	**476.4**
Kutaisi	1561	1058.3	1517	1028.5
Tkibuli	60	281.7	46	216.0
Tskhaltubo	62	255.1	39	160.5
Chiatura	229	399.0	183	318.8
Bagdati	65	184.1	56	158.6
Vani	199	411.2	138	285.1
Zestaponi	149	394.2	195	515.9
Terjola	50	243.9	32	156.1
Samtredia	99	175.5	56	99.3
Sachkhere	90	226.7	92	231.7
Kharagauli	32	165.8	31	160.6
Khoni	113	482.9	146	623.9

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 1637440
Number of enrollements per capita per year - 3.1

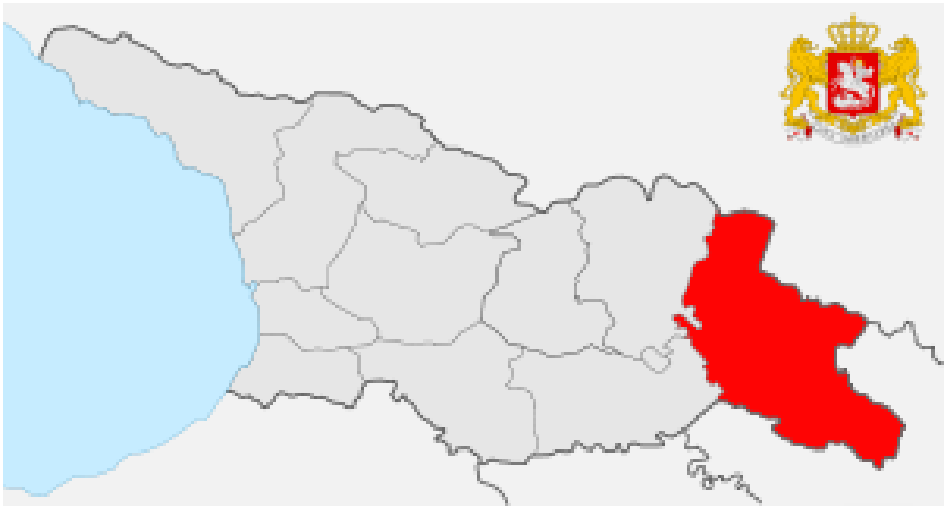
Hospital beds

Total - 2043, density per 100000 population – 384.5

Kakheti

Administrative units:

Telavi
Akhmeta
Gurjaani
Kvareli
Dedoplistskaro
Lagodekhi
Sagarejo
Sighnaghi



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Kakheti	**317 900**	**4870**	**15.3**
Akhmeta	31 600	509	16.1
Gurjaani	53 700	696	13.0
Dedoplistskaro	21 100	333	15.8
Telavi	58 300	596	10.2
Lagodekhi	41 700	697	16.7
Sagarejo	52 300	936	17.9
Sighnaghi	29 500	413	14.0
Kvareli	29 700	472	15.9

Source: NSO Georgia

Stillbirths

Total - 20, ratio per 1000 births – 4.1

Under-5 mortality rate

Total - 20, 0-5 mortality rate – 4.1

Under-1 mortality rate

Total - 16, 0-1 mortality rate – 3.3

Obstetric care

Number of deliveries - 3337
Number of cesarean sections - 1380, ratio per 1000 LB – 411.8

Abortions

Total - 1503
Ratio per 100 LB – 44.9

Healthcare network

In-patient facilities - 16
Out-patient facilities - 65
Rural doctors - 209
Ambulance stations - 9
Blood transfusion stations - 1

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Kakheti	**1222**	**384.4**	**798**	**251.0**
Akhmeta	66	208.9	76	240.5
Gurjaani	249	463.7	108	201.1
Dedoplistskaro	58	274.9	43	203.8
Telavi	410	703.3	259	444.3
Lagodekhi	151	362.1	102	244.6
Sagarejo	126	240.9	87	166.3
Sighnaghi	98	332.2	74	250.8
Kvareli	64	215.5	49	165.0

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 671766

Number of enrollements per capita per year - 2.1

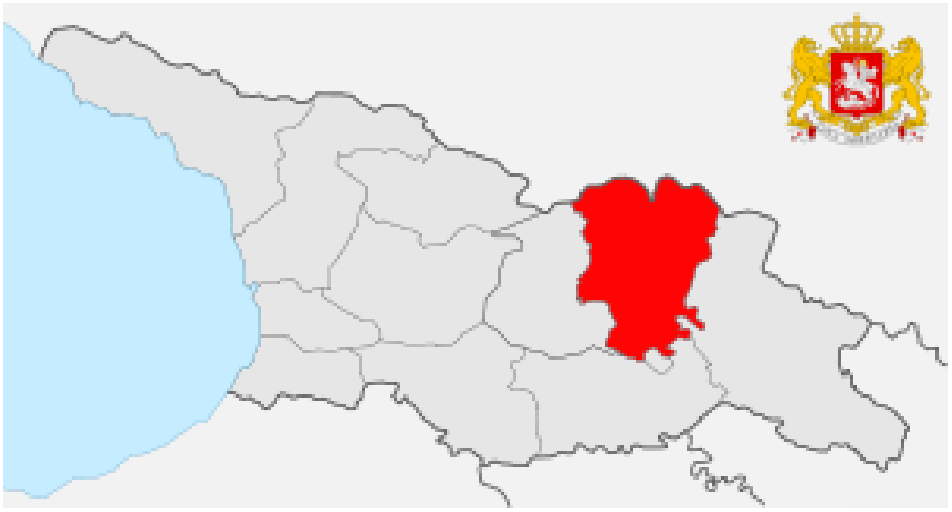
Hospital beds

Total - 531, density per 100000 population – 167.0

Mtskheta-Mtianeti

Administrative units:

Akhalgori
Dusheti
Mtskheta
Stepantsminda
Tianeti



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Mtskheta-Mtianeti	**94000**	**1180**	**12.6**
Akhalgori	-	-	-
Dusheti	25300	327	12.9
Tianeti	9300	118	12.7
Mtskheta	55600	563	10.1
Stepantsminda	3800	52	13.7

Source: NSO Georgia

Stillbirths

Total - 0, ratio per 1000 births - 0

Under-5 mortality rate

Total - 3, 0-5 mortality rate – 2.5

Under-1 mortality rate

Total - 2, 0-1 mortality rate – 1.7

Obstetric care

Number of deliveries - 68
Number of cesarean sections - 14, ratio per 1000 LB – 205.9

Abortions

Total - 20
Ratio per 100 LB – 1.7

Healthcare network

In-patient facilities - 4
Out-patient facilities - 16
Rural doctors - 55
Ambulance stations - 5
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Mtskheta-Mtianeti	**272**	**289.4**	**258**	**274.5**
Akhalgori	19	--	14	--
Dusheti	58	229.2	53	209.5
Tianeti	28	301.1	32	344.1
Mtskheta	153	275.2	145	260.8
Stepantsminda	14	368.4	14	368.4

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 557160

Number of enrollements per capita per year - 5.9

Hospital beds

Total - 119, density per 100000 population – 126.6

Racha-Lechkhumi and Kvemo Svaneti

Administrative units:

Ambrolauri
Lentekhi
Oni
Tsageri

Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Racha-Lechkhumi and Kvemo Svaneti	**31300**	**327**	**10.4**
Ambrolauri	10800	73	6.8
Lentekhi	4400	65	14.8
Oni	6000	55	9.2
Tsageri	10100	109	10.8

Source: NSO Georgia

Stillbirths

Total - 0, ratio per 1000 births - 0

Under-5 mortality rate

Total - 1, 0-5 mortality rate – 3.1

Under-1 mortality rate

Total - 0, 0-1 mortality rate - 0

Obstetric care

Number of deliveries - 34
Number of cesarean sections - 4, ratio per 1000 LB – 117.6

Abortions

Total - 6
Ratio per 100 LB – 1.8

Healthcare network

In-patient facilities - 4
Out-patient facilities - 0
Rural doctors - 62
Ambulance stations - 4
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Racha-Lechkhumi and Kvemo Svaneti	**147**	**469.6**	**217**	**693.3**
Ambrolauri	44	407.4	69	638.9
Lentekhi	29	659.1	42	954.5
Oni	32	533.3	46	766.7
Tsageri	42	415.8	60	594.1

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 51636

Number of enrollements per capita per year - 1.6

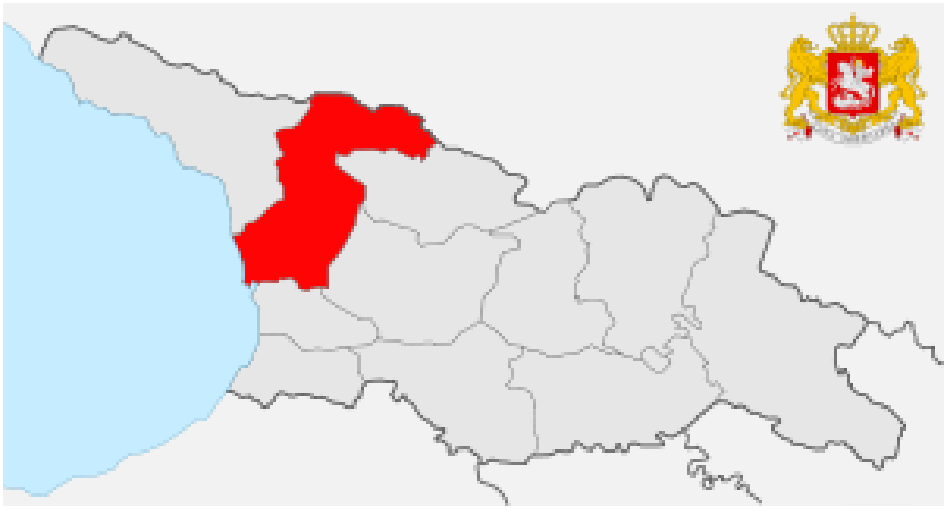
Hospital beds

Total - 83, density per 100000 population – 265.2

Samegrelo and Zemo Svaneti

Administrative units:

Abasha
Zugdidi
Martvili
Mestia
Senaki
Chkhorotsku
Tsalenjikha
Khobi
Poti



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Samegrelo and Zemo Svaneti	**329000**	**4797**	**14.6**
Zugdidi	105000	994	9.5
Abasha	22000	245	11.1
Martvili	33200	470	14.2
Senaki	39400	563	14.3
Chkhorotsku	22200	324	14.6
Tsalenjikha	26000	354	13.6
Khobi	30400	386	12.7
Poti	41400	545	13.2
Mestia	9400	196	20.9

Source: NSO Georgia

Stillbirths

Total - 13, ratio per 1000 births – 2.7

Under-5 mortality rate

Total - 20, 0-5 mortality rate – 4.3

Under-1 mortality rate

Total - 14, 0-1 mortality rate – 1.7

Obstetric care

Number of deliveries - 3144
Number of cesarean sections - 1870, ratio per 1000 LB – 593.8

Abortions

Total - 972
Ratio per 100 LB – 41.4

Healthcare network

In-patient facilities - 21
Out-patient facilities - 88
Rural doctors - 161
Ambulance stations - 11
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Samegrelo and Zemo Svaneti	**1333**	**405.2**	**978**	**297.3**
Zugdidi	514	489.5	407	387.6
Abasha	81	368.2	51	231.8
Martvili	78	234.9	50	150.6
Senaki	194	492.4	160	406.1
Chkhorotsku	33	148.6	39	175.7
Tsalenjikha	94	361.5	60	230.8
Khobi	78	256.6	52	171.1
Poti	224	541.1	105	253.6
Mestia	37	393.6	54	574.5

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 624502
Number of enrollements per capita per year - 1.9

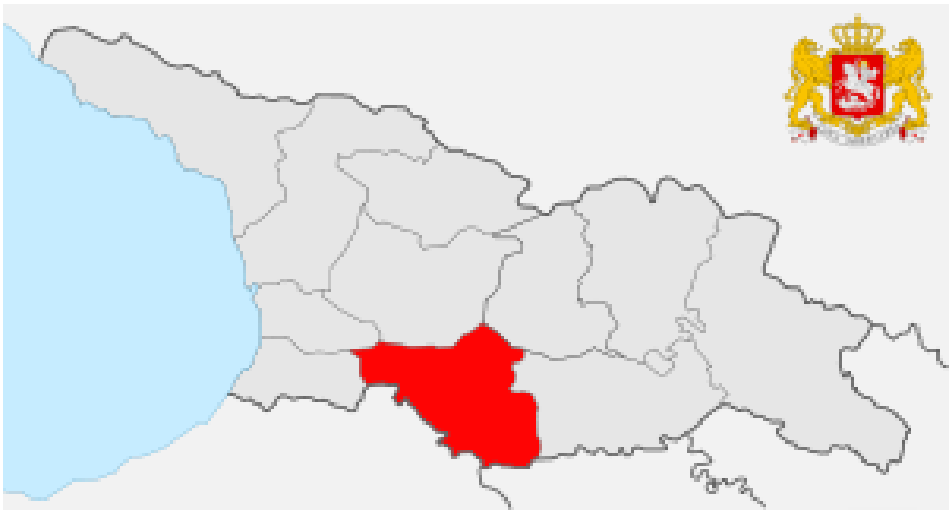
Hospital beds

Total - 600, density per 100000 population – 182.4

Samtskhe-Javakheti

Administrative units:

Akhaltsikhe
Adigeni
Akhalkalaki
Aspindza
Borjomi
Ninotsminda



Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Samtskhe-Javakheti	**160 500**	**2349**	**14.6**
Adigeni	16 500	251	15.2
Aspindza	10 400	179	17.2
Akhalkalaki	45 200	638	14.1
Akhaltsikhe	38 700	262	6.8
Borjomi	25 100	380	15.1
Ninotsminda	24 600	349	14.2

Source: NSO Georgia

Stillbirths

Total - 9, ratio per 1000 births – 3.8

Under-5 mortality rate

Total - 10, 0-5 mortality rate – 4.3

Under-1 mortality rate

Total - 4, 0-1 mortality rate – 1.7

Obstetric care

Number of deliveries - 1639
Number of cesarean sections - 229, ratio per 1000 LB – 139.1

Abortions

Total - 850
Ratio per 100 LB - 30,9

Healthcare network

In-patient facilities - 9
Out-patient facilities - 18
Rural doctors - 84
Ambulance stations - 6
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Samtskhe-Javakheti	**451**	**281.0**	**486**	**302.8**
Adigeni	49	297.0	56	339.4
Aspindza	31	298.1	29	278.8
Akhalkalaki	63	139.4	93	205.8
Akhaltsikhe	177	457.4	179	462.5
Borjomi	92	366.5	85	338.6
Ninotsminda	39	158.5	44	178.9

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 243014
Number of enrollements per capita per year - 1.5

Hospital beds

Total - 377, density per 100000 population – 234.9

Kvemo Kartli

Administrative units:

Rustavi
Bolnisi
Gardabani
Dmanisi
Marneuli
Tetritskaro
Tsalka

Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Kvemo Kartli	**426 900**	**6892**	**16.1**
Rustavi	126 200	1940	15.4
Bolnisi	53 800	828	15.4
Gardabani	82 400	1313	15.9
Dmanisi	19 100	304	15.9
Marneuli	105 600	1926	92.2
Tetritskaro	20 900	284	2.7
Tsalka	18 900	297	15.7

Source: NSO Georgia

Stillbirths

Total - 52, ratio per 1000 births – 7.5

Under-5 mortality rate

Total - 36, 0-5 mortality rate – 5.2

Under-1 mortality rate

Total - 28, 0-1 mortality rate – 4.1

Obstetric care

Number of deliveries - 4929
Number of cesarean sections - 1710, ratio per 1000 LB – 346.9

Abortions

Total - 4281
Ratio per 100 LB - 86.9

Healthcare network

In-patient facilities - 19
Out-patient facilities - 49
Rural doctors - 160
Ambulance stations - 8
Blood transfusion stations - 1

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Kvemo Kartli	**1382**	**323.7**	**994**	**232.8**
Rustavi	676	535.7	450	356.6
Bolnisi	136	252.8	121	224.9
Gardabani	133	161.4	107	129.9
Dmanisi	30	157.1	31	162.3
Marneuli	305	288.8	213	201.7
Tetritskaro	44	210.5	36	172.2
Tsalka	58	306.9	36	190.5

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 734629
Number of enrollements per capita per year - 1.7

Hospital beds

Total - 812, density per 100000 population – 190.2

Shida Kartli

Administrative units:

Gori
Java
Kareli
Kaspi
Khashuri

Demographic indicators

	Number of population	Live births	
		Total number	Rate per 1000 population
Shida Kartli	**263800**	**4074**	**15.4**
Gori	126200	684	5.4
Kaspi	43600	587	13.5
Kareli	41300	700	16.9
Khashuri	52700	784	14.9

Source: NSO Georgia

Stillbirths

Total - 18, ratio per 1000 births – 4.4

Under-5 mortality rate

Total - 36, 0-5 mortality rate – 3.4

Under-1 mortality rate

Total - 28, 0-1 mortality rate – 2.7

Obstetric care

Number of deliveries - 2927
Number of cesarean sections - 1138, ratio per 1000 LB – 387.9

Abortions

Total - 2775
Ratio per 100 LB - 94,6

Healthcare network

In-patient facilities - 10
Out-patient facilities - 21
Rural doctors - 131
Ambulance stations - 5
Blood transfusion stations - 2

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Shida Kartli	**682**	**258.5**	**558**	**211.5**
Gori	302	239.3	236	187.0
Kaspi	130	298.2	106	243.1
Kareli	95	230.0	76	184.0
Khashuri	155	294.1	140	265.7

Source: NCDC

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 638980

Number of enrollements per capita per year - 2.4

Hospital beds

Total - 443, density per 100000 population – 167.9

In any question applications, should be made to the National Centre for Disease Control and Public Health named after L.Sakvarelidze at 9, Asatiani Street, Tbilisi, Georgia

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