



**NATIONAL CENTER FOR DISEASE CONTROL AND
PUBLIC HEALTH**



**MINISTRY OF LABOUR, HEALTH AND
SOCIAL AFFAIRS OF GEORGIA**



HEALTH CARE

SHORT REVIEW



GEORGIA

2014

Prepared by the National Centre for Disease Control and Public Health of the Ministry of Labour, Health and Social Affairs of Georgia.

The methodology of the calculation, recommended by the WHO and the UNO is applied to the calculation of the indicators given in the publication.

The publication provides Millennium Development indicators for Georgia, describes population health status, maternal and child health, and main indicators of the health care resources.

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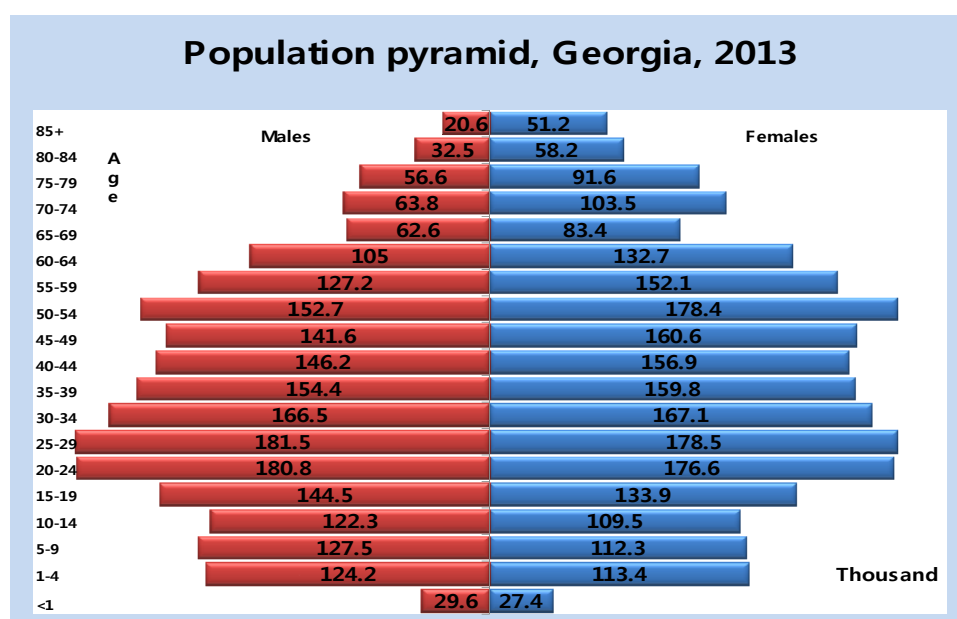
Georgia, 2013

Area, km ²	69 700
Population	4 483 800 (by January 1, 2013)
Administrative units	11 regions, 64 districts
Capital	Tbilisi
Ethnical Composition (2002)	Georgian - 84%, Azerie - 6.5%, Armenian - 5.7%, Russian - 1.5%, Other - 2.3%
Main religions (2002)	Orthodox Christian - 84%, Muslim - 9.9%, Armenian Apostolic - 3.9%, Catholic - 1%.
State system	Presidential Republic
Independence	Since 1991
GDP per capita	3,519.60\$
Increase of GDP	12.3% - 2007, 2.3% - 2008, -3.8% - 2009, 6.3% - 2010, 7.2% - 2011; 6,1% - 2012
Human Development Index	0.745*
National currency	Lari
Membership in international organizations	International Monetary Fund, United Nations, World Health Organization, World Bank, International Trade Organization, etc.

Demographic Indicators**

Population

Annual Mid-year Population	4487200	Age structure	
Males	2140.1 (47.7%) / 2347.1 (52.3%)	Under 1	57000 (1.3%)
Females	1.08	Under 15	766200 (17.1%)
Urban population	2408800 (53.7%)	65+	624000 (13.9%)

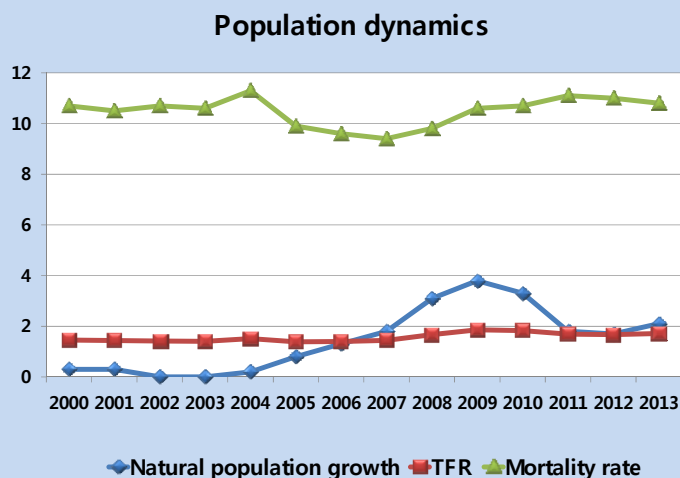


* Human Development Report 2013; The Rise of the South: Human Progress in a Diverse World

** National statistics office of Georgia

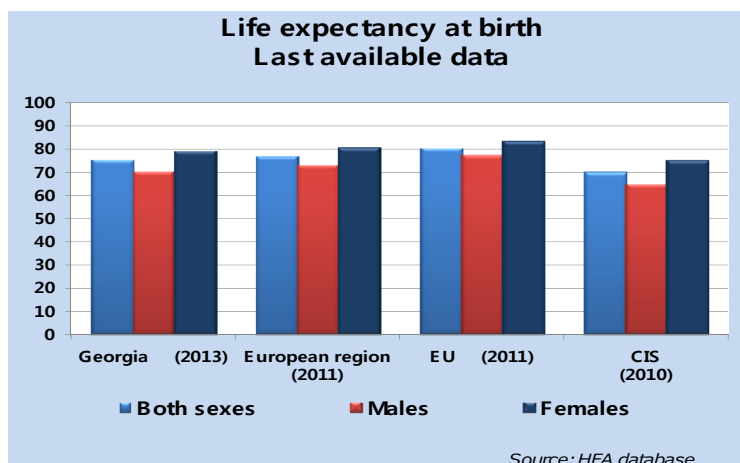
Population dynamics

Number of life-births and birth rate per 1,000 population	57878 (12.9)
Natural population growth and natural population growth rate per 1,000 population	9325 (2.1)
Number of deaths and mortality rate per 100,000 population	48553 (10.8)
Number of still-births and still-birth rate per 1000 births	567 (9.7)
Number of marriages and marriage rate per 1,000 population	34693 (7.7)
Number of divorces and divorce rate per 1,000 population	8089 (1.8)
Number of migrants and migration rate per 1,000 population	-2606 (-0.58)



Source: National Statistics Office of Georgia

Life expectancy



Georgia, 2013

Both sexes	75.2 years (2001 – 71.6)
Males	70.8 years (2001 – 68.1)
Females	79.4 years (2001 – 74.9)

The life expectancy in Georgia is almost the highest among the post-Soviet countries.

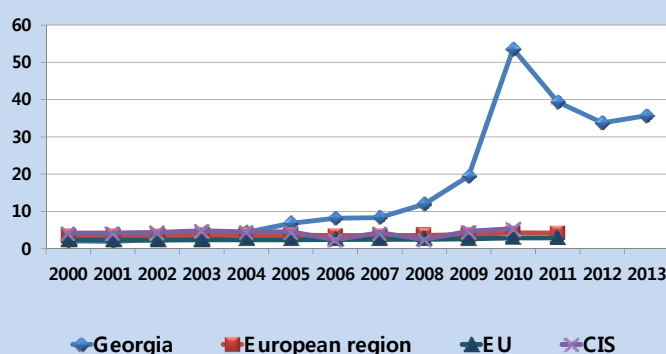
Mortality

In 2013 in Georgia, 48,553 persons died (mortality rate per 1,000 population – 10.8), including 880 children (mortality rate per 1,000 children – 1.15); 51.2% of deaths happened in males.

In Georgia, since 2009, the share of ill-defined cases of deaths has sharply increased (34% – 50%); this deteriorated the real mortality structure*

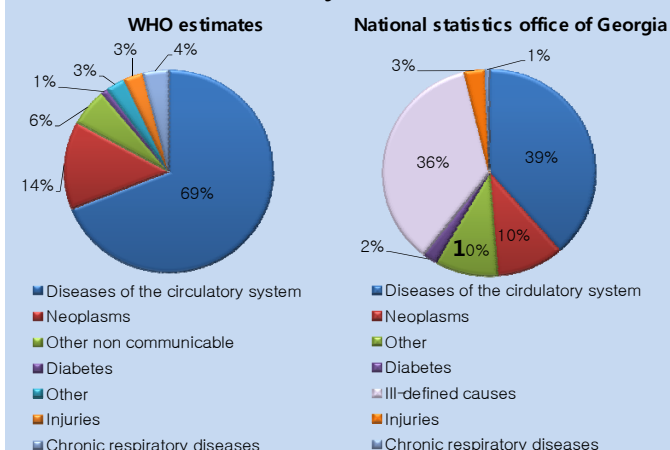
* The Ministry of Labour, Health and Social Affairs, the Ministry of Justice and the National Centre for Disease Control jointly conduct activities in order to reduce the ill-defined causes of death

Share of the ill-defined causes of death in the mortality structure



Source: WHO HFADB, Geostat

Mortality structure



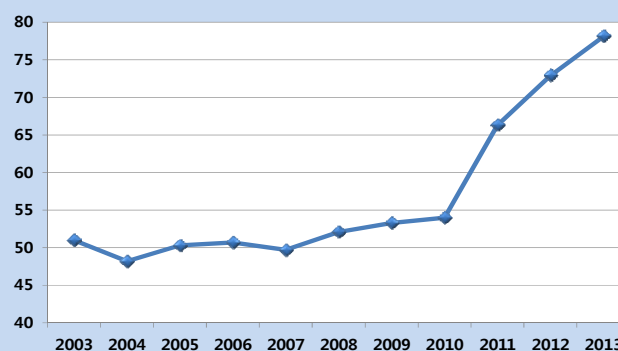
Maternal health and maternal mortality

Pregnancy and delivery

Last years, there was a growth of timely initiation of antenatal care, this could be based on the improved financial accessibility of antenatal services (MOHLSA is implementing a state maternal and child program, which is funding 4 antenatal care visits); share of pregnancies registered within the first 12 weeks of pregnancy increased, compared to the previous year, from by 72.9% to 78.1%.

	2012	2013
Number of pregnancies	79381	88190
Pregnancy brought to term	89.6%	89.1%
Timely initiation of antenatal care	72.9%	78.1%
Coverage with at least 4 antenatal care visits (MDG 5)*	84.1%	84.6%
Adolescent pregnancy rate (MDG 5)	39.9	40.8
Abortions	39225	37018
including induced abortions	33688	30726
Share of drug induced abortions	10.1%	21.2%

Share of pregnant women initiated antenatal care within the first trimester (%), Georgia

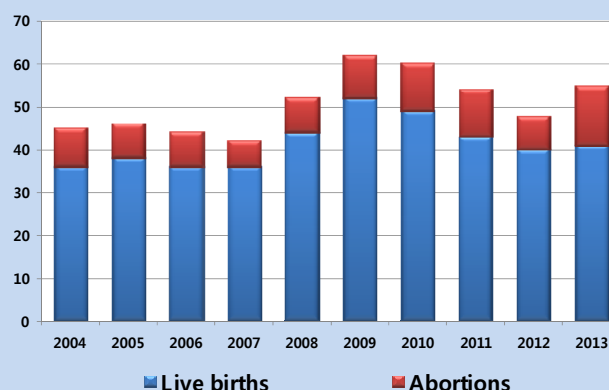


In 2009 – 2012, in Georgia, adolescent (15–19 years) pregnancy rate decreased; although, in 2013, this indicator again increased and totaled to 64.7. In the Western European countries this indicator varies from 15 to 25. In some countries of the Eastern and Central Europe this indicator is 2-4 folds higher, than in Georgia.

* The Millennium Development Goals (MDGs) are eight *international development goals* that were officially established following the *Millennium Summit of the United Nations* in 2000, following the adoption of the *United Nations Millennium Declaration*. All 193 United Nations *member states* and at least 23 *international organizations* have agreed to achieve these goals by the year 2015. *Each country, which signed the Declaration, assumed the responsibilities to develop national strategies* whose aim is to accelerate progress on the Millennium Development Goals (MDGs), and to publish periodic reports on their efforts to tackle poverty and inequality.

	2012	2013
Number of deliveries	56746	57505
Term deliveries	95.5%	96.7%
Normal deliveries	58.6%	58.3%
Pathological deliveries	41.4%	41.7%
Proportion of births attended by skilled health personnel (MDG 5)	99.8%	99.9%

Adolescent pregnancy rate per 1,000 women aged 15-19, Georgia, 2004 – 2013

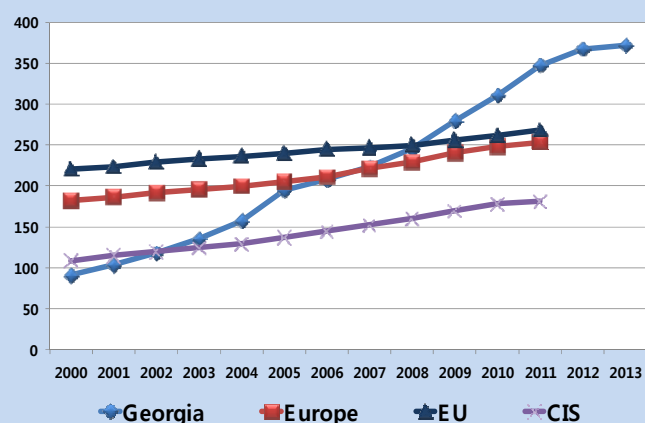


Caesarean sections and abortions

According to the WHO recommendations the “normal share” of caesarean sections is from 10% to 15% both for the whole country and for individual facilities. If the frequency of caesarean sections is less than 10% from the total deliveries, it is considered as under-use; in the case of more than 15% – as over-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.

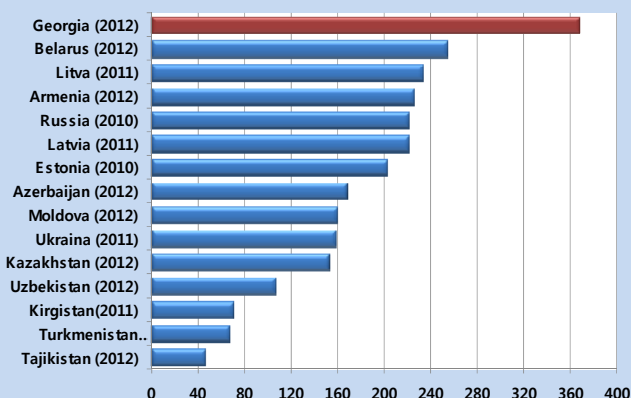
According to the above mentioned study, Georgia is among countries where the share of caesarean sections is excessive. Since 2000, the number of caesarean sections has been increased 3.8 times and, in 2013, the number of caesarean sections performed in Georgia had reached 37.3% of the total number of deliveries.

Cesarean sections rate per 1,000 live births



Source: HFADB & NCDC

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



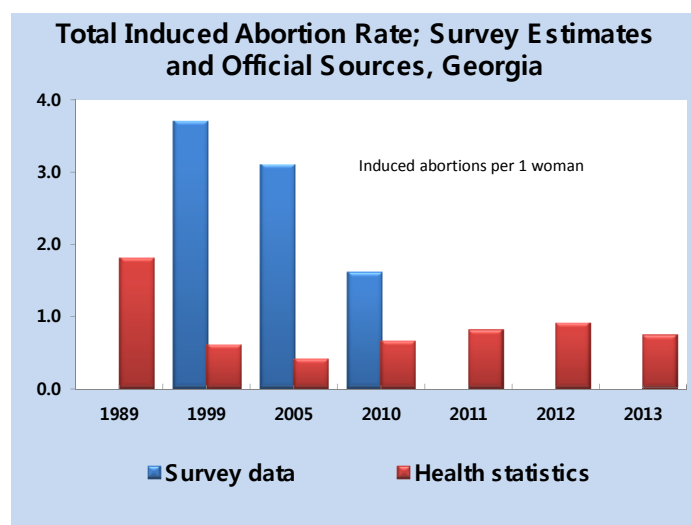
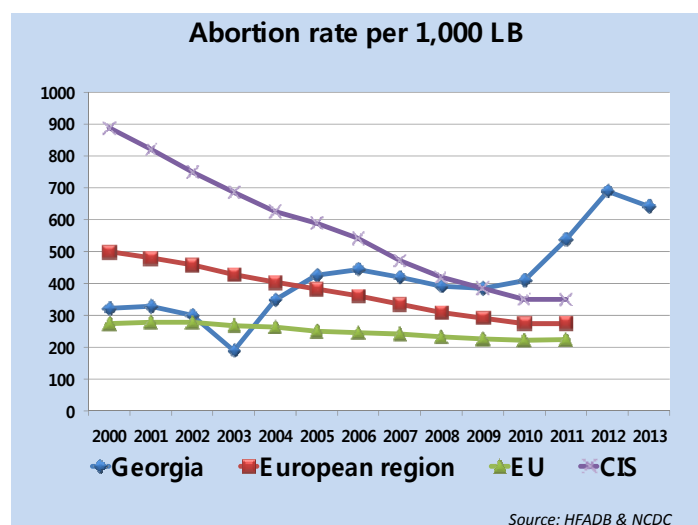
Source: HFADB

The increase of the frequency of use of caesarean sections has been documented also by Reproductive Health Surveys (GERHS): during the period, covered by surveys, the indicator has increased 4 folds.

In 2013, the State has made significant steps to reduce the number of caesarean sections: a caesarean section management protocol was developed and approved. The protocol defined Indications and contraindications for a caesarean section. Assessment of the quality of perinatal care was conducted in order to promote effective perinatal care practices. From 2015, a regionalization of perinatal services is scheduled

(introduction of levels of care). A piloting, supported by the USAID/Sustain will begin in Imereti and Racha-Lechkhumi.

The Reproductive Health Surveys observed drawbacks in the induced abortion registration, although, the last round recorded the decrease of the difference between survey and official data by 44%.



Last years, the share of abortions in under-20 women constituted 5% of the total number of induced abortions. The induced abortion rate was high in women aged 20-29 and age 30-34. The share of induced abortion performed by medication increased two folds.

Maternal mortality (MDG 5)

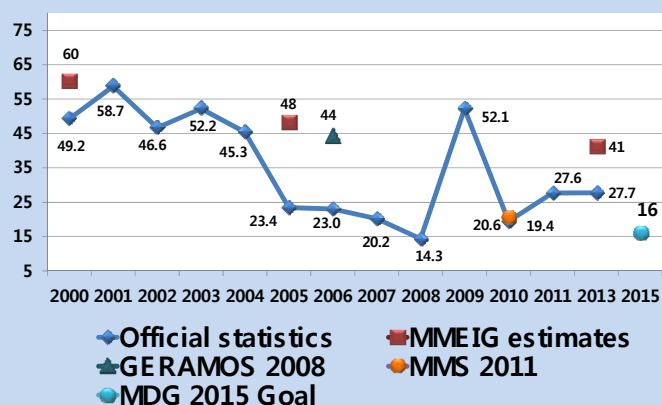
The Millennium development goals (MDGs) set out the goal of reducing the maternal mortality ratio by $\frac{3}{4}$ by 2015.

Data on maternal mortality for Georgia could be found from several sources: National Statistics Office of Georgia (NSO), Health statistics department of the National centre for disease control and public health, Health department of the Ministry of Labour, health and social affairs, the UN Maternal Mortality Estimation Interagency Group (MMEIG) and surveys, like Reproductive Age Mortality Study (RAMOS2008) and Maternal Mortality Study (MMS2011).

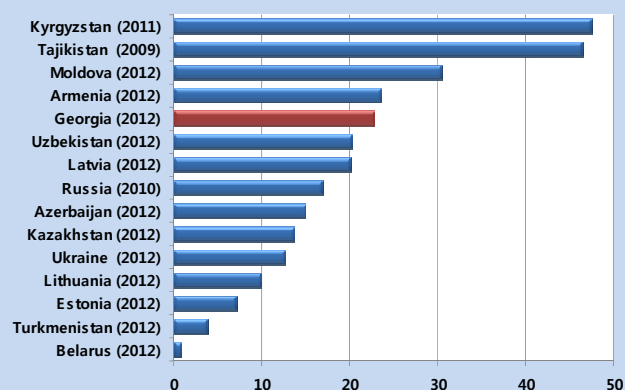
In 2003 – 2008, according to the official data the downward trend of maternal mortality ratio was noted in Georgia. To improve the quality of the maternal mortality data, since 2009, the NCDC and the NSO have been reconciling their data. Since 2013, based on the Health minister's Order #01-30/N "On the mandatory notification 'of the cases of maternal and child death or stillbirth' formats and rules" the data collected through this way also have been participating in the reconciling process.

Every year the UN Maternal Mortality Estimation Interagency Group (MMEIG) publishes the maternal mortality estimates. Generally, these differ from the official statistics. Over the years, the estimates for Georgia are higher than official data and survey results. In 2012, the MMEIG estimated maternal mortality ratio for Georgia in 1990, as 92; and in 2000 - as 113. For 2012 the preliminary estimate was 77. In this regard, the NCDC held series of activities, aimed on the old data revision and quality checking. In 2013, as a result of the collaboration with the MMEIG, the estimate was reduced to 41, and, correspondingly, the estimates for the previous years were corrected.

Maternal mortality ratio per 100000 live births, Georgia



Maternal mortality ratio per 100,000 live births, former Soviet Union, last available year



Source: WHO HFADB

Under-five children morbidity and mortality rate

Under-five children morbidity

Top causes of under-5 children morbidity (2013)

Diseases of the respiratory system
Infectious and parasitic diseases
Diseases of the ear and mustoid process
Diseases of the skin and subcutaneous tissue
Diseases of the blood and blood forming organs
Diseases of the eye and adnexa
Diseases of the digestive system

Incidence per 1000 children aged under-5

453.3
83
28.6
22.1
16.6
16.4
14.1

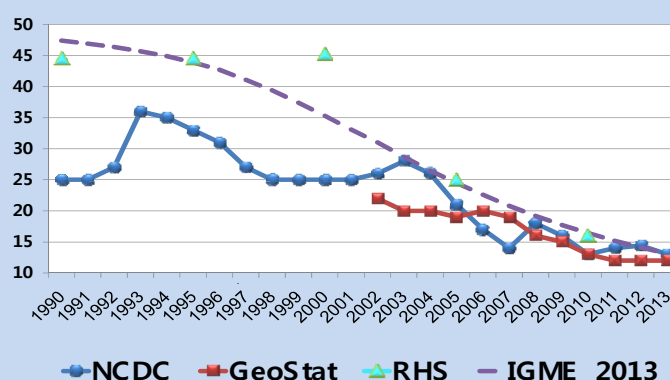
Under-five mortality

The Millennium Development Goals (MDGs) set the goal of a reduction of the under-5 mortality rate worldwide by two-thirds between 1990 and 2015.

Alternative sources of mortality data are: The UN Inter-agency Group for Child Mortality Estimation (IGME), health statistics produced by the National centre for disease control and public health (NCDC) and surveys.

In 2013, the under-5 mortality, calculated using health statistics, is lower than the corresponding indicator, provided by the demography statistics. According to the latest estimates of the UN Inter-agency Group, the under-5 mortality is stably declining and, in 2013, these estimates are very close to the official statistics. Under the initiative of the National Center for Disease Control and Public Health, a mission of the UN Inter-agency Group came to Georgia. The mission familiarized with the existing information systems and corrected the indicators for Georgia. Estimates for 2013 approached the official statistics.

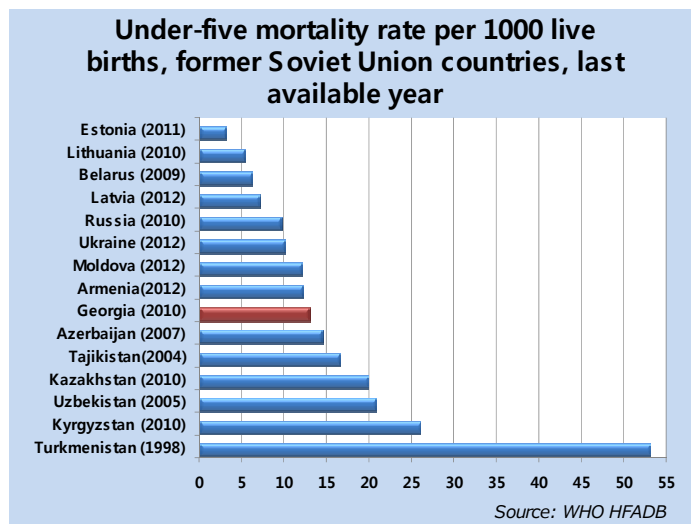
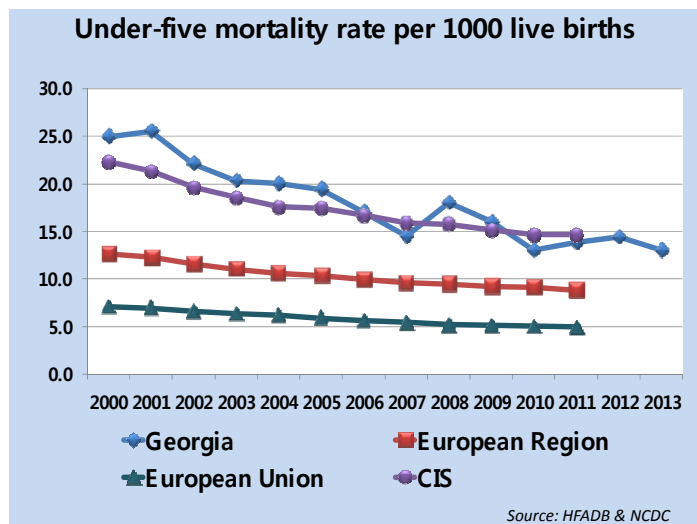
Under-five mortality rate per 1,000 live births, Georgia



Under-five mortality rates per 1000 live births, Georgia

	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
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
Vital statistics	24.9	27.6	26.4	21.1	16.9	14.4	18.0	16.0	13.0	13.8	14.4	13.0
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
GERHS	45.8	-	-	25.1	-	-	-	-	16.4	-	-	-

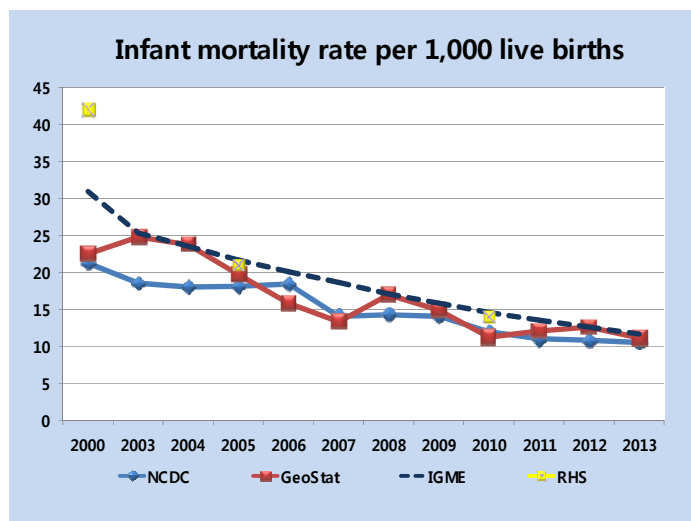
In Georgia, according to the latest available data, the under-5 mortality rate, despite the downward trend, still maintains the higher value compared to the average indicator for the European countries, and stays at the mid position between the former Soviet Union countries.



From January 2015, each case of under- 5 death will be entered in the operational mode into the electronic disease surveillance integrated system (EIDSS).

According to the WHO global data, almost 40% of under-5 deaths occurred in infants. In 2013, in Georgia, this share amounted to 87.9%.

According to all sources, the infant mortality is declining.



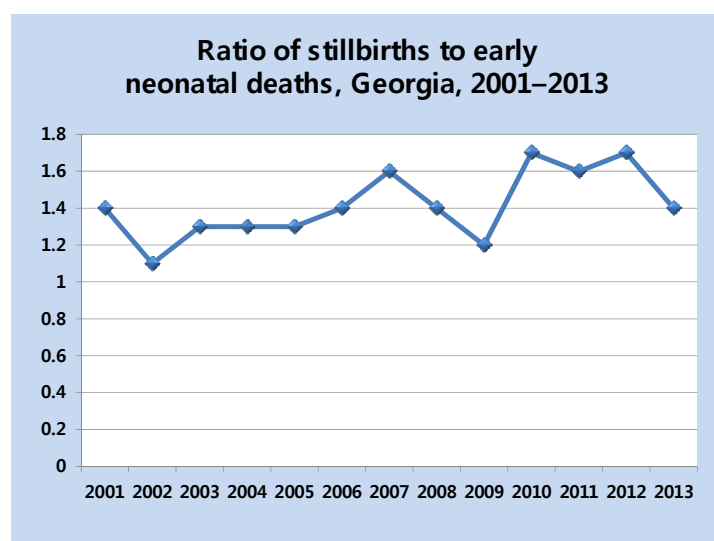
Infant mortality rates by 1000 live births, Georgia

	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NCDC	21.2	18.5	18.0	18.1	18.4	14.1	14.3	14.1	12.0	11.0	10.8	10.5
Vital statistics	22.5	24.8	23.8	19.7	15.8	13.3	17.0	14.9	11.2	12.1	12.6	11.1
IGME	30.9	25.3	23.5	21.7	20.1	18.6	17.1	15.8	14.6	13.5	12.6	11.7

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

In the infant mortality structure, 67.7% of cases were caused by conditions originating in the perinatal period. More than a half (55%) of the perinatal deaths by comes from stillbirths; an adequate ratio of the number of stillbirths to the number of early neonatal deaths is very important.



According to the WHO estimates, the ratio of the stillbirths to early neonatal deaths for Georgia should not exceed 1.2.

In 2013, in Georgia the stillbirth rate was 9.7 per 1,000 births (in 2012 - the latest available data: *in the CIS* - 9.3, *in the EU* - 5.3).

In order to improve maternal and child health and reduce mortality, the Ministry of Labour, Health and Social Affairs conducts several State programs, namely: prevention of development of light and medium mental disorders in children, screening of delay of development in children under-6, early diagnostics and prevention of epilepsy, oncohaematology for children, in-patient and out-patient treatment for under-18 population with rare diseases and being on permanent substitution treatment, in-patient and out-patient treatment for children with haemophilia, provision of pregnant women with folic acid and iron supplements.

Also the Ministry of Labour, Health and Social Affairs initiated organization of a "Maternal and Child Health Coordinating Council", whose main objectives are: improving the quality of the maternal and child morbidity and mortality data, and ante-, peri- and post-natal service capacity assessment; development of the national policy and identification of priorities, based on analysis; legislative and administrative activities aimed on provision of continuity, consistency and quality improvement of services for reproductive health, safe motherhood, health of infants and young children.

Population health status

Communicable diseases

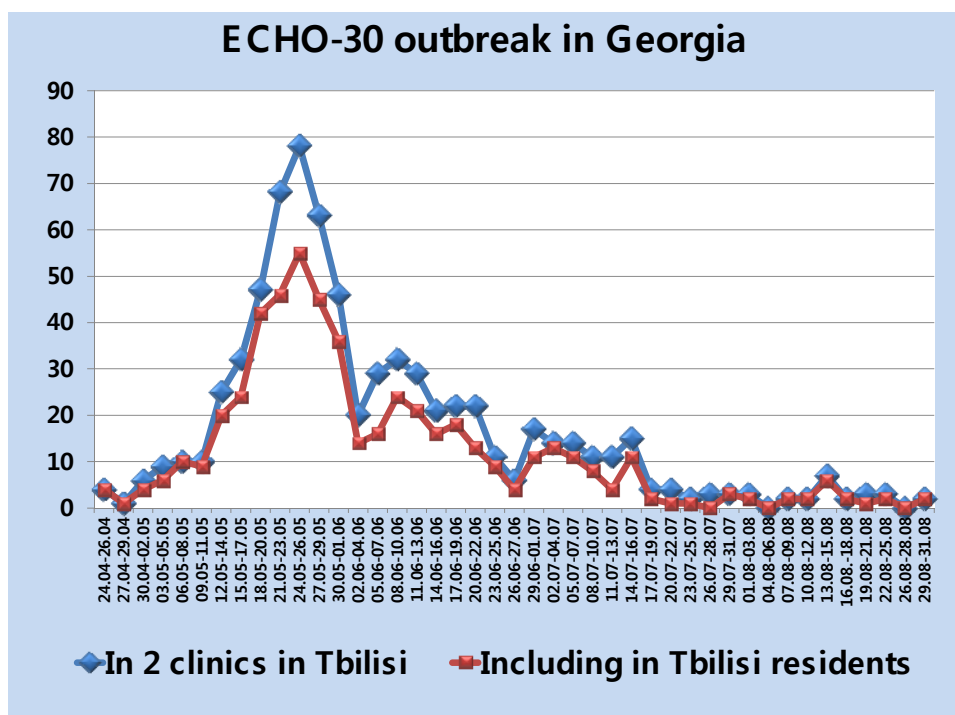
Through Electronic Integrated Disease Surveillance System more than 100,000 cases of notifiable diseases were recorded. National Center for Disease Control and Public Health analyzes data and appropriately responds. Studies on unusual, unexpected and significant for epidemiological security events are conducted (anthrax, botulism, diarrheal diseases, Crimean-Congo fever, rabies, etc.). Influenza sentinel epidemiological surveillance is established. For the monitoring of the influenza season in 2014-2015, an integrated notification system was established.

A new, prior unknown type of orthopoxvirus was discovered as a result of development of zoonotic infections surveillance and laboratory diagnostic capacities, held under the frame of One Health concept. For the first time parapoxvirus infection was diagnosed in humans. Polymerase chain reaction was introduced for diagnostics of the significant zoonosis - rabies, this methodology makes possible to diagnose the disease at the moment of appearance of signs of the disease. The Government decree #690 from April, 2014 "Rabies prevention measures in 2014-2018" was issued in order to reduce the incidence of rabies. In 2014, only for preventive vaccination of post-exposition contacts and for immunoglobulin procurement the country spent 2,407,000 lari.

Cessation Crimean-Congo fever outbreak in Shida Kartli region became possible as a result of the Government decree # 1817, from October 2, 2014 "On management of Crimean-Congo hemorrhagic fever outbreak and prevention measures" and activities conducted together with the Ministry of Agriculture.

Sentinel surveillance the flu-like diseases is established; information was sent to the European surveillance system (the TESS). Since 2013, a united notification system has been established to monitor influenza season. In 2013-2014, the State purchased 4,000 doses of vaccine and, in 2014-2015, 8,000 doses for seasonal vaccination of the population with especially high risk of influenza complications.

In the country a sentinel epidemiological surveillance on diarrheal diseases, nosocomial infections, rotavirus infection and invasive meningitis was established with the support of the State programs and donors. A viral meningitis outbreak has been timely detected using sentinel epidemiological surveillance means, and the Lugar Center identified the agent – ECHO-30.



On October 1, 2014 the government of Georgia issued Order #1807 "Adoption of the plan for operative response on Ebola viral disease cases"; the NCDC approved " National Action Plan on preparedness and

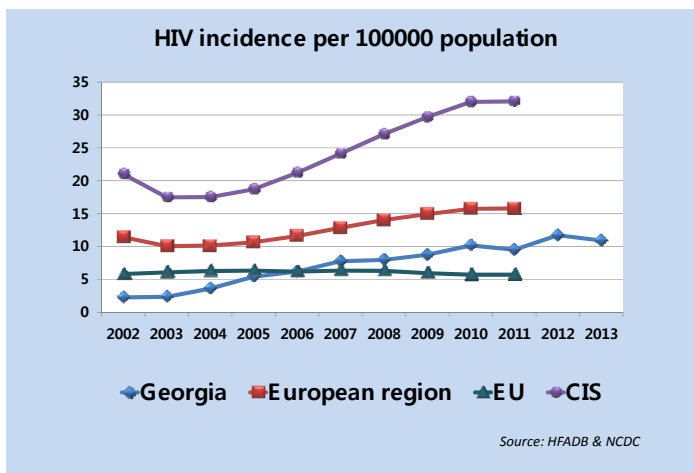
response to the Ebola viral disease"; a special Ebola surveillance headquarter and response teams were set up.

HIV / AIDS

Georgia is considered as a country with low prevalence of HIV/AIDS. However, in recent years Georgia has witnessed an increase of the HIV/AIDS incidence. In 2013, there were registered 490 new cases of HIV (incidence per 100,000 population – 10.9), and 96 deaths attributed to AIDS. By December 1, 2014, in Georgia, the total number of 4,646 cases of HIV/AIDS was registered.

HIV modes of transmission (2013):

	2013	01.12.2014
Injecting drug use	35.3%	49.5%
Heterosexual contacts	49.2%	41.5%
Homosexual contacts	13.5%	5.9%
Vertical transmission	0.8%	1.8%
Blood or blood products transfusion	0.4%	0.5%
Unidentified	0.8%	0.8%



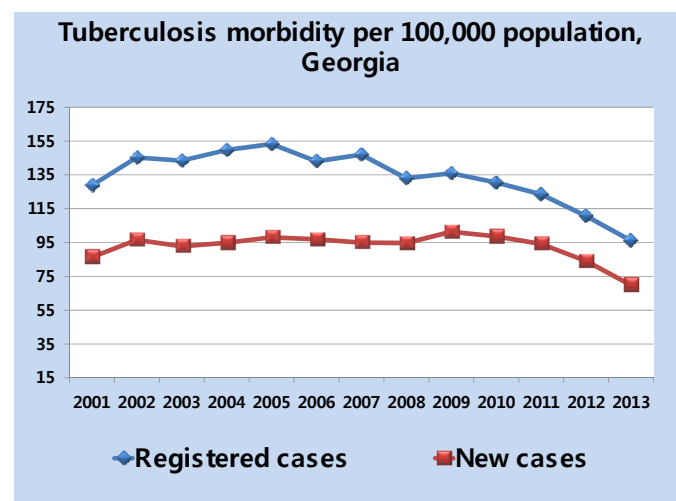
There is a rather high level of HIV / AIDS late detection, and this represents a serious problem. Over the past years, under the framework of the state program, testing for HIV / AIDS of pregnant women, blood donors, high-risk population and other groups, including voluntary testing of accused / prisoners in the penal system, was implemented. There is a universal access to retroviral treatment in Georgia.

Tuberculosis

UN MDGs targeted on the sharply decrease of the global burden of tuberculosis by 2015.

In Georgia, since 2009 a reduction of tuberculosis morbidity has been registered. In 2013, 69.8 new cases of tuberculosis per 100,000 population have been registered. This is high, compared to the European region, EU and CIS countries. About 4% of the new cases and relapses were registered in prisons.

The share of new cases of pulmonary tuberculosis constitutes 78.5% of new cases of all forms of tuberculosis



In 2013, according to the National Statistical Office of Georgia data, mortality caused by tuberculosis was 3.1 per 100,000 population.

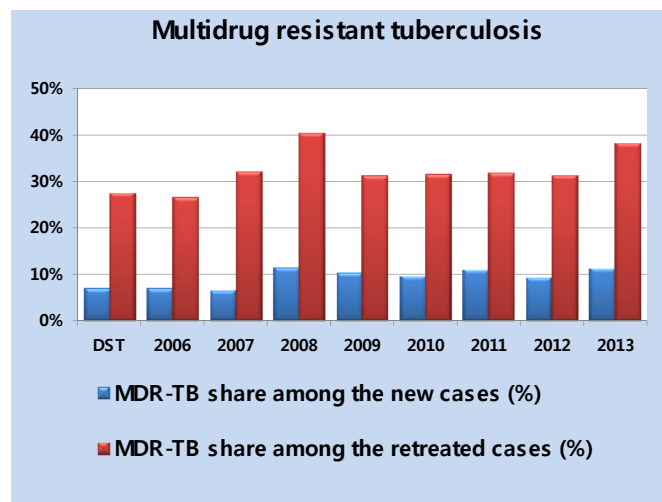
The “successful treatment” of the new cases of pulmonary BK+ tuberculosis is a good assessment characteristic of the general tuberculosis control and management. “Successful treatment” is calculated based

on the sum of recovered cases and completed treatment cases. The World Health Organization, in 2005, set 85% of treatments being performed successfully as an indicator of the National tuberculosis control program's good functioning. However, in 2005 "successful treatment" of new cases of pulmonary BK+ tuberculosis reached only 64.1%. In 2013, this indicator increased up to 74.4%.

Worldwide, according to the latest the World Health Organization data, multi-resistant forms constitute 3.7% of the new cases and 20% of the retreated cases. According to the World Health Organization estimates, Georgia belongs to the group of countries "with a high burden" of MDR-TB.

In Georgia, in 2004-2006, under the auspices of the World Health Organization, a multidrug resistance survey has been conducted in Georgia (in compliance with MDR Survey/DST). The survey revealed that multidrug resistant cases constitute 6.8% of the new cases and 27.4% of the retreated cases.

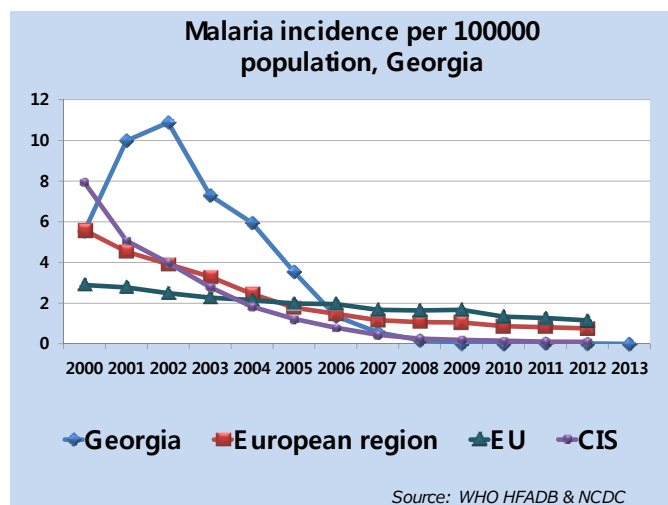
In 2013, 11.2% of the new cases and 38.1% of the retreated cases have been multi-resistant.



The frequency of interrupted treatment is high among the multidrug resistant cases. Hence, an upward trend of the multidrug resistance has been registered among new cases. This indicates the high risk of spreading of multidrug resistant tuberculosis in the society.

In 2013, in the country, the surveillance of tuberculosis improved, new definitions were developed, and a standard format for the electronic surveillance integrated system was set up.

Malaria



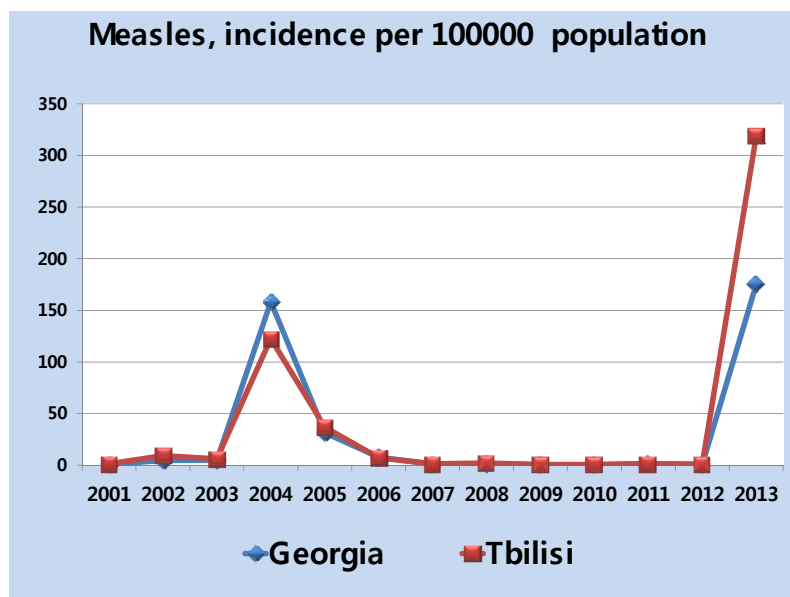
Georgia, after signing the Tashkent declaration "The move from malaria control to elimination" in 2005, has been committed to action against malaria. It is very likely that Georgia will obtain the WHO certification of malaria elimination in the near future.

Since 2002 malaria incidence has been sharply reduced and, in 2013, it was 0.

During last year, there were no deaths due to malaria registered in Georgia.

Measles

In Georgia, like in all other countries, 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 aided the conditions for a measles epidemic. The heaviest burden of morbidity mainly came on the under-1 and 15-30 years-old populations.

The recommendations of the World Health Organization, to reduce measles morbidity and its elimination are as follows: achievement / maintenance 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.

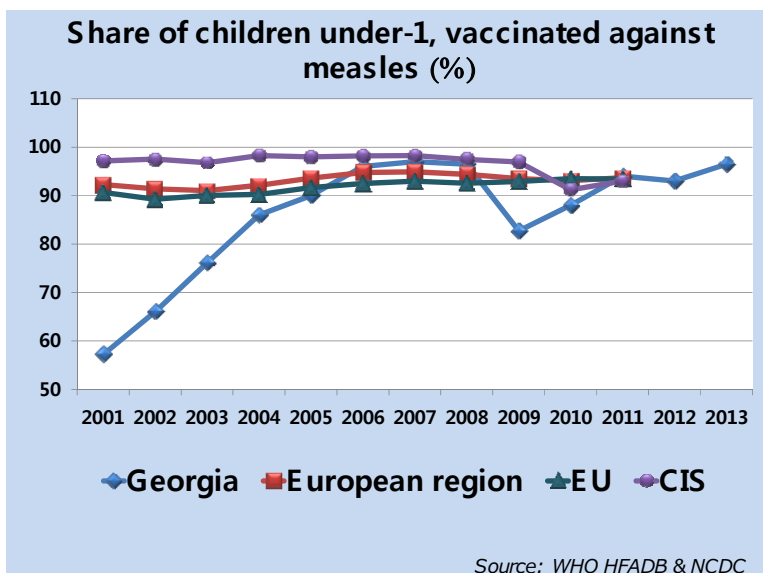
Since March 2013, vaccinations are being administered to under-14 incompletely vaccinated children, population aged 15-30, health professionals and some other groups of the population, to prevent a speeding of measles epidemic. In 2013-2014, more than 140,000 people were vaccinated. Preventive measures resulted in a marked decrease of the incidence of measles (in 2013 – 7,872 cases, in 2014 – slightly more than 3,000 cases).

Children aged 12-23 months immunized against measles

For 2010, the recommended by the European Center for Disease Control and the World Health Organization level of coverage with the first dose of vaccine against measles was \square 95%.

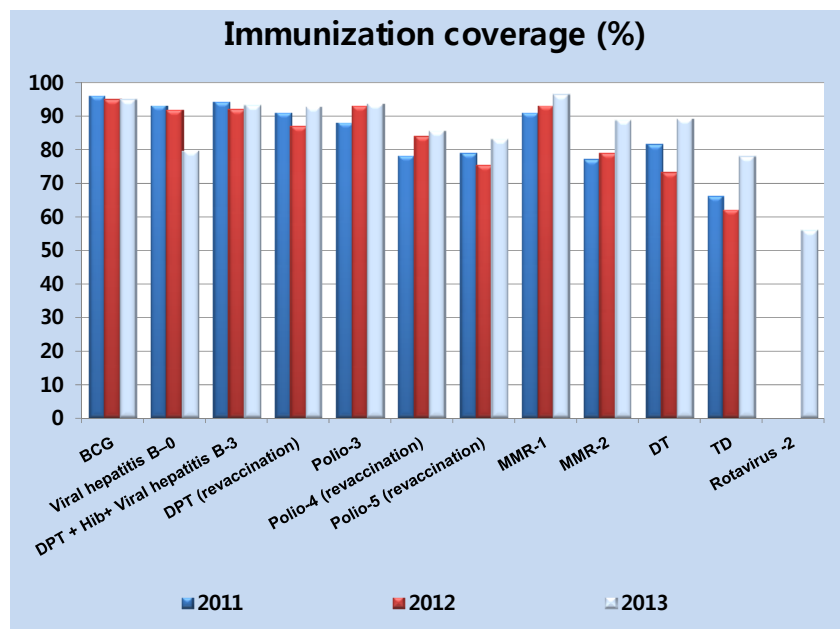
In Georgia, an increase of the coverage with immunization against measles has been registered over the last years, except for the year 2009. The decrease in 2009 can be explained by the longtime shortage of the vaccine in the country.

In 2012, the coverage was 93%. In 2013, the coverage rate exceeded the recommended by the WHO level and made up 96.5%.



Immunization

All vaccinations and immunizations included into the National vaccination calendar are free of charge to the population. For immunization of the population State purchases of vaccines, which are prequalified by the World Health Organization, this is a guarantee of a high quality and safe immunization. In 2014, the government paid 800,000 lari for updating the "cold chain" inventory, in order to increase the safety of immunization.



In 2013 compared to 2012, in the frame of the State immunization program, the vaccination coverage rates increased on average by 6% (except hepatitis B-0, which could explain by a shortage in the vaccine supply). Since 2013, vaccinations against rotavirus gastroenteritis, and since October 30, 2014, against pneumococcal infection have been introduced. Electronic information system Geovacc was updated due to inclusion of new vaccines in the national immunization calendar.

Noncommunicable diseases

In 2012, 68% of the 56 million global deaths were due to noncommunicable diseases. The 4 main NCDs are cardiovascular diseases, cancers, diabetes and chronic lung diseases. In terms of number of deaths, about three quarters of the global NCD deaths in 2012 occurred in low- and middle-income countries.

In Georgia, 94% of deaths are caused by noncommunicable diseases and injuries, which led to development, in 2013, strategies and action plans for control of hypertension, cancer, diabetes, chronic lung disease, obesity, healthy food, violence and injuries, alcohol, tobacco.

Diseases of the circulatory system

Diseases of the circulatory system constitute 17% of all registered cases of diseases in the country, and 11% of all new cases. High morbidity and mortality rates are specific for such diseases as hypertension, ischaemic heart diseases and cerebrovascular diseases.

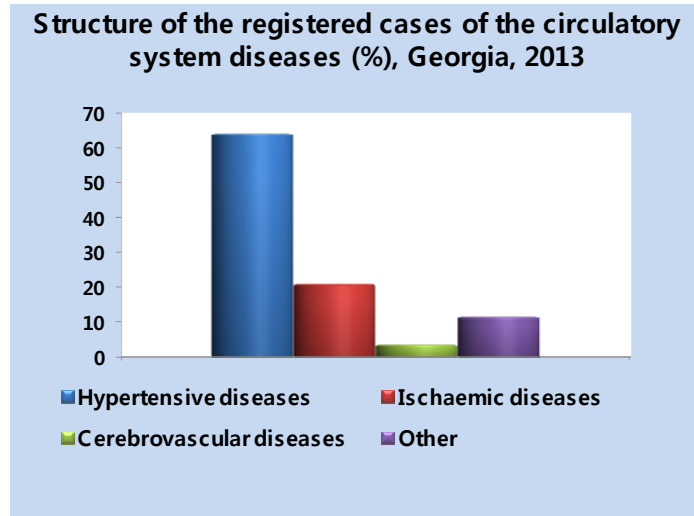
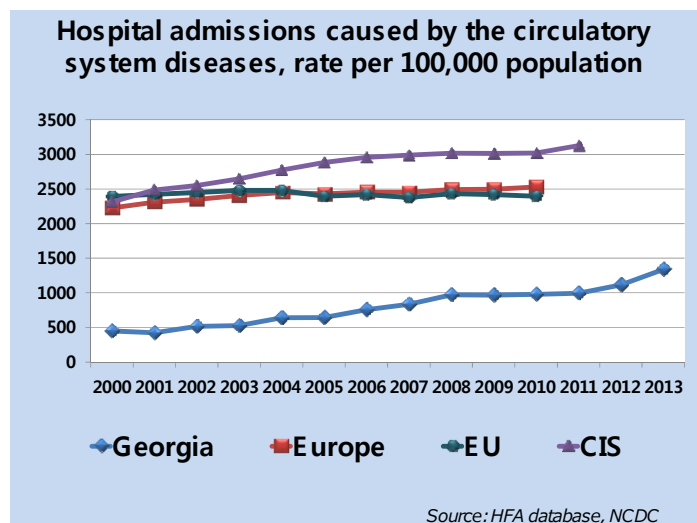
From 2000 to 2013, prevalence of diseases of the circulatory system in Georgia has followed an upward trend.

Hypertension

The share of hypertension in Georgia constitutes more than 64% of the cardiovascular diseases structure (2013).

In 2010, the NCDC with support of the WHO and EU conducted the first large-scale survey on the noncommunicable diseases risk-factors (STEPS-2010).

According to surveys data, about 34% of the population suffers from either developed, or potential hypertension; 7.5% of the population use self-treatment to control hypertension; 49.3%, including 37.4% of males, never had blood pressure measured by a health worker (STEPS-2010).



Ischaemic heart diseases

Ischaemic heart diseases constitute about one fourth of all diseases of the circulatory system: angina pectoris – about 8.0%; acute myocardial infarction and other acute ischaemic diseases - about 2.3%.

In 2013, 47.0% of hospital admissions caused by acute myocardial infarction were done in a timely fashion (within the first 24 hours from the onset of symptoms).

Cerebrovascular diseases

Cerebrovascular diseases stand in third place among diseases of the circulatory system. Over the past years the cerebrovascular diseases prevalence rate has followed an upward trend.

According to the survey results, about 75% of the first manifestations of hemorrhagic stroke developed on the background of unidentified hypertension (STEPS-2010).

Malignant neoplasms

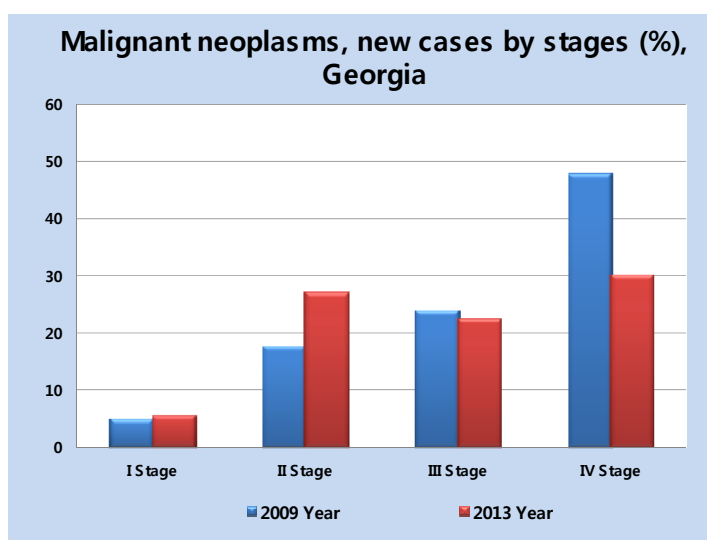
In 2013, 110 new cases of cancer per 100,000 population were registered in Georgia, including 55.6% of cases in women.

The most frequent localizations of the malignant neoplasms (2013)

Females		Males	
Breast	34.9%	Trachea, bronchus and lung	18.5%
Melanoma and other cancers of skin	6.6%	Prostate	9.5%
Cervix	6.3%	Larynx	6.9%
Ovarian	6.3%	Stomach	6.4%
Thyroid gland	5.9%	Colorectal	6.1%

Last period among the new cases a share of the cases, diagnosed at early stages (I and II), increased, consequently the share of the late cases (III and IV) decreased.

In 2013, the share of cancers diagnosed at the third and fourth stages accounted for 52.6%. The cancer screening program contributed a lot to the achievement.



In 2006, the Ministry of Labour, Health and Social Affairs of Georgia the first time introduced breast and cervical cancer screening programs (using mammography and PAP- test) in Tbilisi were.

Since 2010, an immunization program with the human papillomavirus (HPV) vaccine of the 13-year-old girls was introduced.

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 screening for 50-70-year-old men;
- Colorectal cancer screening for 50-70-year-old population.

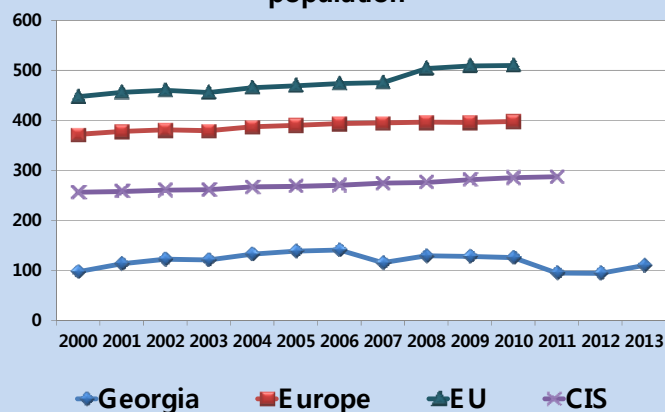
The following types of screening: breast cancer screening, cervical cancer screening (Pap-test), uterus colposcopy (cervical cancer), prostate cancer screening, colorectal cancer screening (FOBT test) were introduced within the breast, cervical, colorectal and prostate cancer screening component, for early detection of cancer. The screenings covered the whole country population (except Tbilisi, where screenings were funded by the local municipality).

Number of tests performed in the frame of cancer screening program

Localization	2012	2013
Breast	17576	20121
Cervix	27374	26111
Prostate	3424	5900
Colon	4691	6025

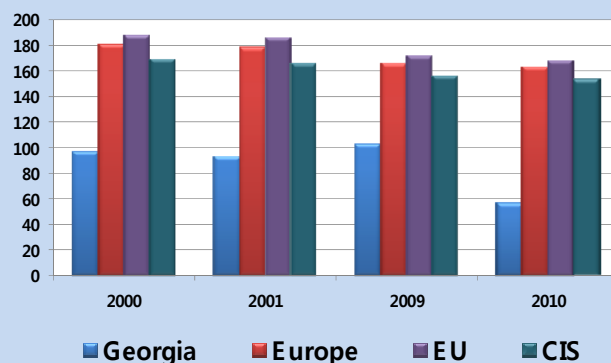
The collapse of the dispensary registration system caused a lack of statistical data on malignant neoplasms, and deterioration of the cancer morbidity. Due to the above, the incidence and mortality rates of malignant neoplasms in Georgia was significantly lower than in the CIS and European countries.

Malignant neoplasms, new cases per 100,000 population



Source: HFA database, NCDC

Malignant neoplasms, standardized death rate



Source: HFA database

Population Cancer Registry has been developed in order to improve the surveillance of cancer (continuous, timely and systematic collecting of new cancer cases and deaths caused by cancer; morbidity, mortality and survival indicators evaluation; proper implementation and demonstration of the effectiveness of cancer screening and other preventive measures). In the framework of this activity trainings were provided to oncologists, surgeons working with patients with neoplasms, chemotherapists, radiologists, data entry clerks and data entry coordinators. Cancer register works in a pilot regime and since January 1, 2015, will be operational nationwide.

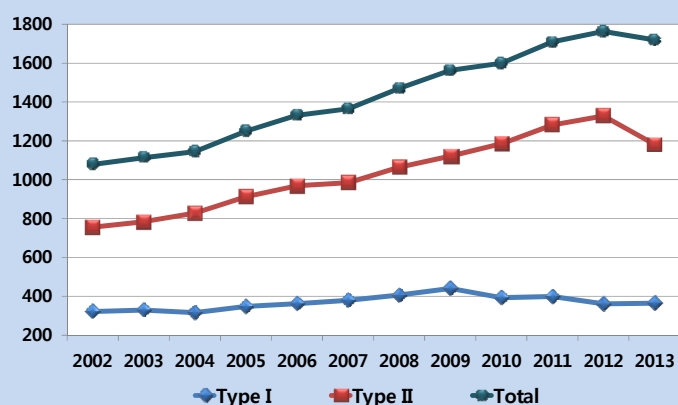
Diabetes melitus

In recent years an upward trend of diabetes mellitus has been registered. In 2013, 2.0% of cases of insulin-dependent diabetes (type I) were registered in children.

Risk-factors, which are considered to be influencing the rise of the diabetes morbidity indicators:

- malnutrition
- obesity
- tobacco consumption
- over use of alcohol
- hypertension
- intolerance toward glucose
- stress
- immunity imparment

Diabetes Mellitus, prevalence rate per 100000 population, Georgia



Diabetes increases the risk of developing heart diseases and stroke at least two-fold.

People who developed diabetes need 2-3 times more health resources compared to people without diabetes.

Diabetes during pregnancy is associated with life-threatening complications and poor pregnancy outcomes.

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 2013, chronic obstructive pulmonary diseases (COPD) contributed 80.9% of all registered cases of lower respiratory diseases, while asthma made up 19.1%.

Chronic and unspecified bronchitis represented the largest share of the group of chronic pulmonary diseases (70.7%); in children this share was 86.9%. The mentioned indicators have significantly increased compared to the previous year.

Over the past years, asthma and status asthmaticus morbidity rates are almost unchanged.

Tobacco smoke (including passive smoking) is the main cause of chronic pulmonary diseases. Air contamination in buildings, atmosphere air pollution, occupational dust and chemicals also constitute risk factors.

Risk-factors

Georgia, according to the World Health Organization, is one of the countries with the highest level of tobacco consumption in the European region and the world. In Georgia, 55% of males and 5% of females are smokers. Meanwhile, the level of alcohol consumption in Georgia is not considered problematic.

On 15 March 2013 the Government passed a resolution and set up a governmental commission under the leadership of the Prime Minister, to strengthen tobacco control measures, and bring them in compliance with international and national legislations, and to initiate a large-scale tobacco control movement (campaign). Functions of the Secretariat of the Commission have been awarded to the National Center for Disease Control and Public Health. A Tobacco Control Strategy, an action plan and program for 2013-2018 were developed, and legislative changes were prepared. An international team of experts (representatives of the Convention Secretariat, UNDP and the World Bank) performed needs assessment for the enforcement of the World Health Organization Framework Convention on Tobacco Control. National Health Promotion Strategy for 2014-2019 and health promotion program for 2014 have been developed (including the 2014 state tobacco control program).

In Georgia, in 2012, according to the conducted study "Assessment of the prevalence of drug use", there were 45,000 problematic (injection) drug users, among which 1.65% of the population aged over-18 (Sirbiladze et al, 2012).

There are no regularly conducted population surveys to assess the spread of health risk factors such as tobacco, alcohol and illicit drug consumption, obesity, low physical activity and malnutrition. Developing a good level of understanding of these risk factors and identifying measures to reduce their influence is an essential strategy to act against the leading causes of mortality and morbidity.

The World Health Organization annually defines a particularly significant topic for the health of the population. In 2013, arterial hypertension has been selected as a priority topic. In Georgia, high blood pressure is a leading cause of the medical aid administration. A national arterial hypertension screening and control strategy, an action plan and a state program for 2013 – 2018 have been developed.

In 2013, a secondary analysis of the data collected during STEPS2010, was done. The purpose of the analysis was to identify among the adults the hypertension associated main behavioral risk factors and target population for the development of the effective change-oriented interventions.

The analysis revealed that the age was a significant effect modifier, providing, that with the changes of the age significantly were changed as the socio-economic determinants, also behavioral and biological risk factors roles in the development of hypertension. The risk of development of hypertension increased in both sexes with the age, considering other socio-demographic and bio-behavioral risk factors. The age of 45 was a delimiter, in terms of hypertension associated biological and behavioral risks. Hypertension prevalence in males, compared to females, began to rise at lower age groups. The gender difference in the risk of developing hypertension, with consideration of other risk factors, was revealed only in under-45 age group.

According to the survey, among behavioral risk factors only tobacco and alcohol use appeared to be associated with hypertension.

Universal healthcare

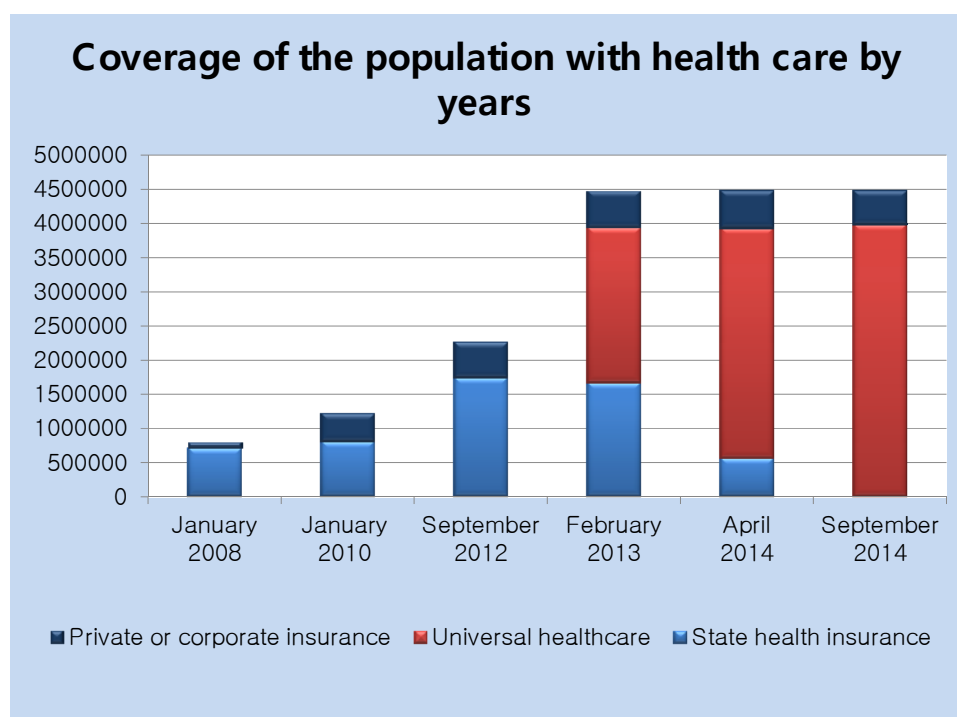
Since September 2012, some vertical state health programs were transformed into state insurance programs and insurance programs for children under-6, pensioners, students, children with disabilities and disable population were launched. By the end of 2012, about 1.6 million people enjoyed these health insurance schemes.

Since February 28, 2013 the first stage of the state universal healthcare program was launched, and from July 1, 2013 – the second stage.

Since April 2014, the insurance program for the population living below the poverty line and teachers was connected to the universal healthcare program, while in September the insurance program for children under-5, pensioners and students were transformed into a universal healthcare program. According to data for September 2014, all population of Georgia is secured with provision of the basic health services, including 496 thousand people, which have got to have a private or corporate insurance, while the rest of the population is covered by the state universal healthcare program.

After the launch of the program the numbers of encounters with both out-patient and in-patient services have increased. The number of contacts with the primary health care almost approached the recommended by the World Bank value for developing countries.

By November 1, 2014, 2,882,238 persons were registered by primary healthcare centers. In 2014, from January 1 to November 21, the total number of registered cases reached 578,049.



Health care resources

Georgia, 2013

Physicians

20474

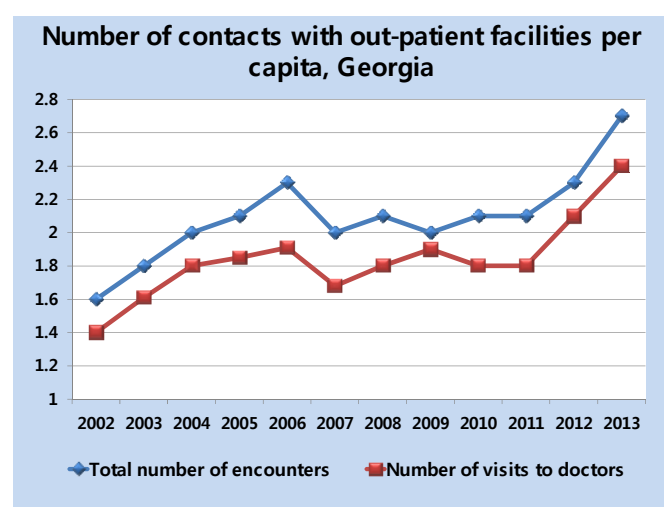
In-patient facilities

253

Number per 100000 population	456.3	Polyclinics	238
Nurses	14935	Women consultancy centers (independent)	26
Number per 100000 population	328.2	Ambulance stations	75
Number of hospital beds	11600	Blood transfusion facilities	20
Number per 100000 population	258.5	Nurseries for infants	1
Encounters with physicians	10974514	Scientific research institutes	14
Home visits of physicians	250036	Rural physician-entrepreneurs	1235

In Georgia, there is an unbalanced ratio of physicians to nurses. While the number of physicians per 100,000 population is rather high, compared to the European region, the number of nurses per 100,000 population is one of the lowest. Since 2004, health-staffing indicators have been declining. In addition, there is an uneven geographic distribution of medical staff: in 2013, the staffing indicators in Tbilisi were 3-4 times higher than in all other regions.

In 2013, the numbers of encounters of the population with out-patient and in-patient health facilities have increased. This could be explained by the increased accessibility of health services after the universal coverage program implementation. In 2013, the out-patient service utilization growth was registered; the number of contacts with out-patient facilities per capita (2.7) nearly approached the World Bank recommended number for developing countries - 3.0.



In 2013, compared to last year, a 14% increase of the number of surgical operations in hospitals and outpatient clinics was recorded. In 2013, the number of heart surgeries increased by 29.2% and the number of eye surgeries - by 76%. The number of hip and knee joints prosthetics, which is one indicator of the well-being of the population, increased by 46.4%. In-patient case-based electronic reporting system has been developed within the administrative information system of the Ministry of Labour, Health and Social Affairs.

In the background of a continuous decline of the number of hospital beds during the last decade, hospital beds utilization indicators stay quite low compared to the indicators of the European region.

According to the World Health Organization, the acute bed occupancy rate (excluding beds for a longtime treatment – for tuberculosis and mental disorders) in Georgia is lower than the average in countries in the European region and CIS. According to the average length of stay, Georgia is one of the leaders in Europe.

The ambulance system is providing free emergency medical care for the population. In December 2013, a Legal entity of public law "Emergency service center" was established, which provided the integrated control center for the country and improved the quality of emergency medical services. 97-98% of the total number of emergency services was provided within the State program.

Within the Safe Blood Program up to 45 thousand donations were collected, of which about 13 thousand free donations.

Use of medications

In 2010, the share of expenditures on medications constituted 57% of private health expenditures. This indicator is the highest among the countries of the European Region, where this indicator fluctuated within the

range of 16%-17%. Thirteen percent of the population of Georgia cannot afford buying the prescribed drugs due to their high price. This share increased by 2%, compared to 2007.

Expenditures on medical supplies, prices of which had been increasing during the past 10 years, settled as a heavy burden on the population. Their share made up almost half of total health expenditures.

In Georgia, due to the absence of the drugs prescription conception, population, along with buying non prescription drugs, purchase also prescription drugs for self-treatment and get adverse reactions. Last period in Georgia, significant steps have been made to implement drug prescription conception. Since September 1, 2014 amendment to the law of Georgia on "Drugs and Pharmaceutical Activity" came into force. According to which, medications of the group II will not be sold without prescription. This will increase doctors' and the pharmacists' responsibility for drug prescribing and will decrease self-treatment cases.

International cooperation

In 2013-2014, Georgia participated in many international joint projects and initiatives, including:

- Georgia is actively engaged in the new global initiative - Global Health Security Agenda. Its action package incorporates three main directions of protection from infectious agents: disease prevention / elimination (Prevent), detection-finding (Detect) and responses (Respond). Georgia is the leader in real-time bio-surveillance, supporting laboratory surveillance and zoonotic infections packages and actively working on the development of the integrated surveillance electronic system, which is based on the principle "one health". This system will unite the electronic integrated disease surveillance system (EIDSS), laboratory information management system and the electronic healthcare system (E-health), which has been already implemented in the country. The system will include both human health and veterinary parts.
- Agreement between the governments of the US and Georgia on the transfer of provision of related costs and responsibilities for the integrated laboratory system and the Lugar center. This agreement is aimed on detection, surveillance and response systems for particularly dangerous infections, and maintenance of stability during the transition period for Richard G. Lugar Center for Public Health. Since 2018, Georgia will provide the integrated laboratory system with all relevant measures and financial support needed for the operation.
- Since 2013, the National center for disease control and public health became a major recipient of grants from the Global Fund to fight HIV / AIDS, Tuberculosis and Malaria. Since April 2014, the center performs two very important programs aimed on tuberculosis and HIV / AIDS. Global Fund TB program is aimed on a provision of a universal access to a high-quality diagnostics and treatment of the disease; strengthening of the program management, monitoring and evaluation mechanisms in the country; and on the financial incentives to patients in order to improve compliance to the treatment. In the frame of the HIV / AIDS grant preventive measures for the high-risk groups, qualitative diagnostics and universal access to ARV treatment are provided.
- Partnership with International Science and Technology Center (ISTC) and the US National Institute of Allergy and Infectious Diseases (NIAID / NIH) on financing of HIV / AIDS, tuberculosis and hepatitis research projects.
- Partnership with the US CDC on responds to the ongoing world epidemic outbreaks and other urgent, and establishing of the operation center to monitor emergency events.
- Signing of agreement / memorandum of partnership for development and experience sharing. with Lithuanian and Poland, Maryland (USA) and Oslo (Norway) universities, the Bundeswehr Microbiology Institute (Germany), Health Measurement and Evaluation Institute (IHME) of the university of Washington in the fields of healthcare, public health, biosafety, medical education and pharmaceuticals.
- Partnership with the World Health Organization on global analysis and evaluation of drinking water and sanitation (GLAAS 2013/2014) and the elimination of lead.