



# Health Care HIGHLIGHTS



**GEORGIA, 2015**

# Georgia, 2014\*



## Area, km2

69700

## Population

3729500 (by January 1, 2015); 3727000 (2014, average mid-year)

## Administrative units

11 regions, 64 raions

## Capital

Tbilisi

## Ethnic Composition (2002)

Georgian - 84%, Azeri - 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

Parliamentary republic

## Independence

Since 1991

## GDP per capita

3681\$ (2013 - 3599.6\$)

## Increase of GDP

6.2% (2010), 7.2% (2011); 6.4% (2012); 3.3% (2013), 4.8% (2014)

## Human Development Index

0.744 (Human Development Report, 2014)

## National currency

Lari

## Membership in international organizations

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

\* According to the Census, 2014. The difference with the previous year population size is about 76,000, this difference causes changes of the main indicators. In 2016, the National statistics office of Georgia will recalculate indicators backward.



# Demographic Indicators\*

## Population

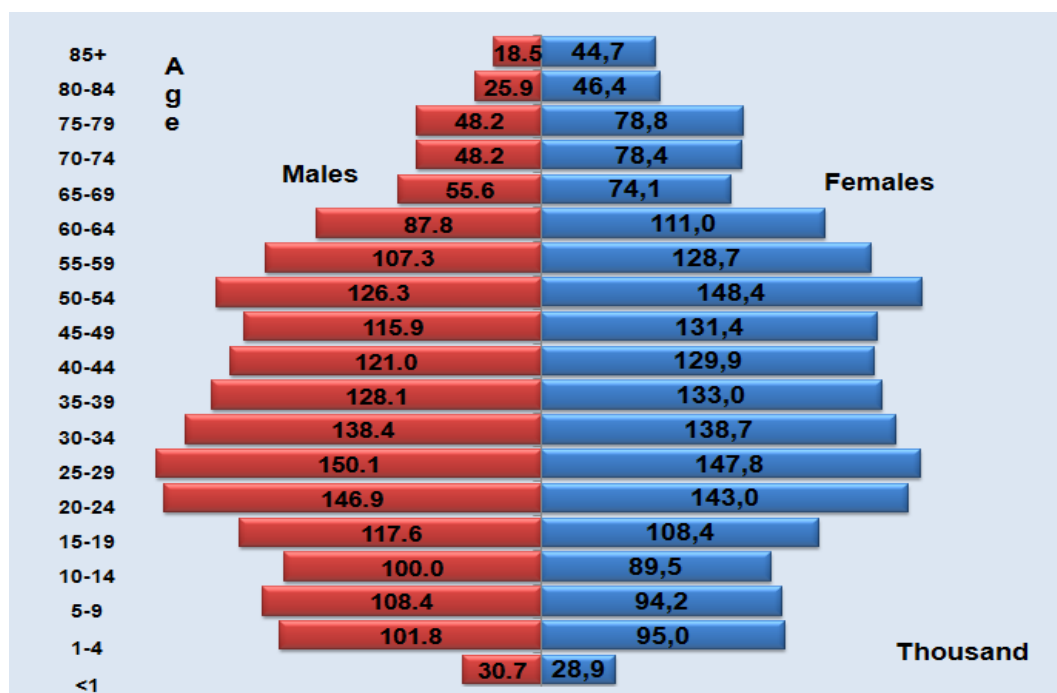
### Population structure, Georgia, 2014

Mid-year population	3727000
Male / Female	1776.7(47.7%) / 1950.3 (52.3%)
Secondary sex ration	1.1
Urban population	2137800 (57.4%)

Age structure:	
Under-1	59600 (1.6%)
Under-15	648500 (17.4%)
65+	518800 (13.9%)

Source: National statistics office of Georgia (NSO)

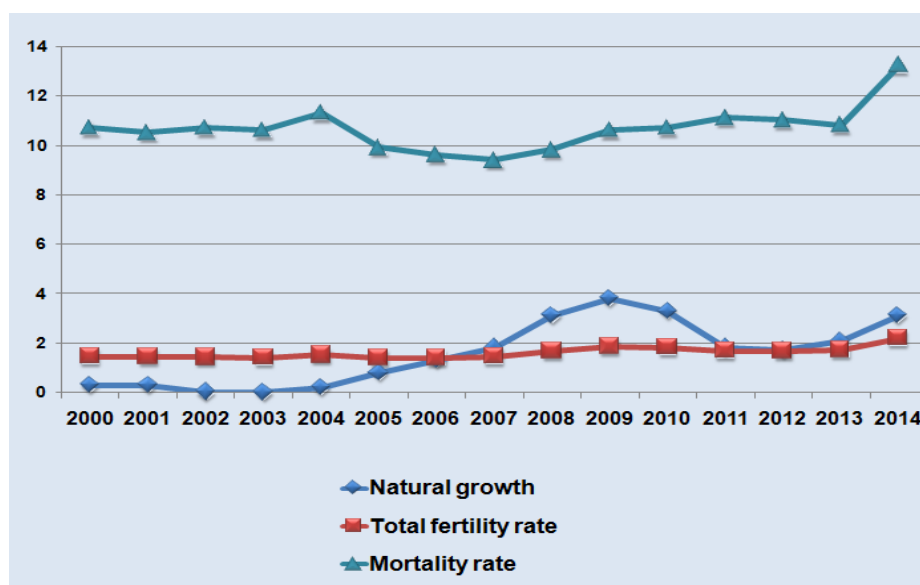
### Population pyramid, Georgia, 2014



Source: NSO Georgia

## Population dynamics

### Population dynamics, Georgia



Source: NSO Georgia

## Main demographic indicators, Georgia 2014

Number of live births (birth rate per 1,000 population)	60635 (16.3)
Natural population growth (natural population growth rate per 1,000 population)	11548 (3.1)
Number of deaths (mortality rate per 100,000 population)	49087 (13.2)
Number of still-births (still-birth rate per 1000 births)	640 (10.4)
Number of marriages (marriage rate per 1,000 population)	31526 (8.5)
Number of divorces (divorce rate per 1,000 population)	9119 (2.4)
Number of migrants (migration rate per 1,000 population)	-6500 (-6.5)

Source: NSO Georgia

## Life expectancy

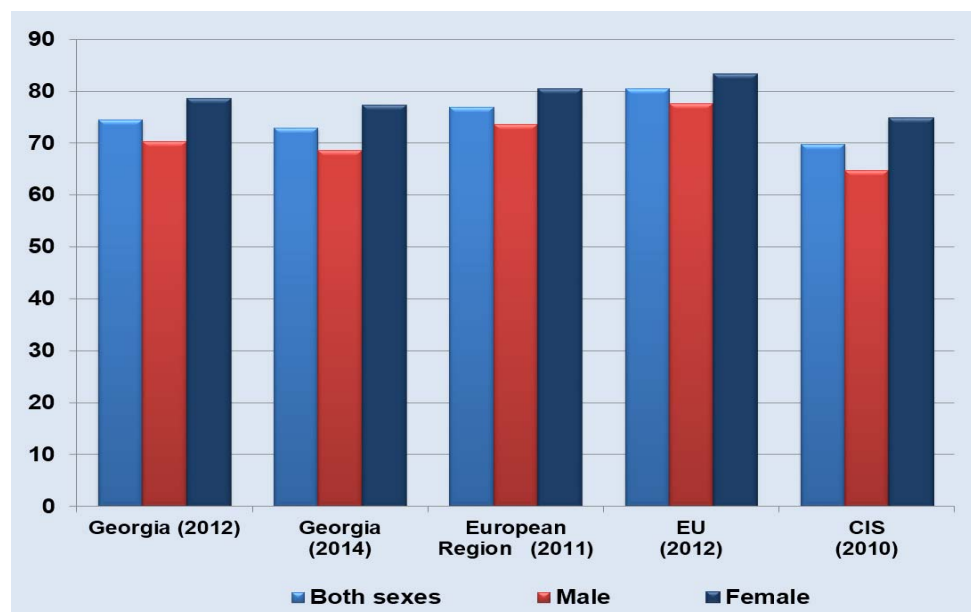
During recent years, the life expectancy at birth in Georgia keeps the highest values among the post-Soviet countries.

### Life expectancy at birth, Georgia, 2014

Both sexes	72.9 years (2001–71.6; 2013–75.2)
Male	68.6 years(2001–68.1; 2013–70.8)
Female	77.2 years(2001–74.9; 2013–79.4)

Source: NSO Georgia

### Life expectancy at birth



Source: WHO, Health for All Database; last available data

### Life expectancy at birth, 1990, 2013

	World		Georgia	
	1990	2013	1990	2013
Male	63.0	68.8	65.8	67.7
Female	67.7	74.3	74.2	78.1

Source: The Institute for Health Metrics and Evaluation (IHME) at the University of Washington, 2015

# Mortality

According to the National Statistics Office of Georgia (NSO), the general mortality rate during the last years is stable.

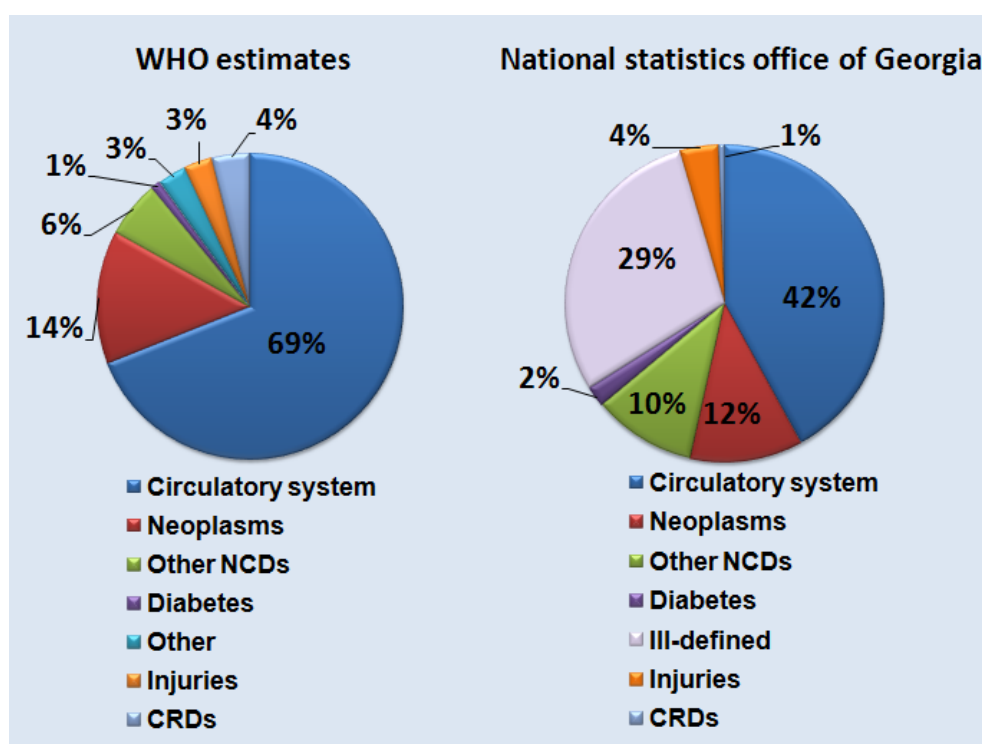
## Mortality rates, Georgia, 2014

	Number of deaths	Mortality rate per 1000 population	Under-15 deaths	Mortality rate per 1000 children
Both sexes	49087	13.2	778	1.2
Male	24851	14.0	433	1.3
Female	24236	12.4	345	1.1

Source: NSO Georgia

Non-communicable diseases caused mortality has the largest share in the mortality structure, although, due to problems with underlying cause of death identification, existing in the country, there are discrepancies between the official statistics and estimates.

## Mortality structure, Georgia, 2014

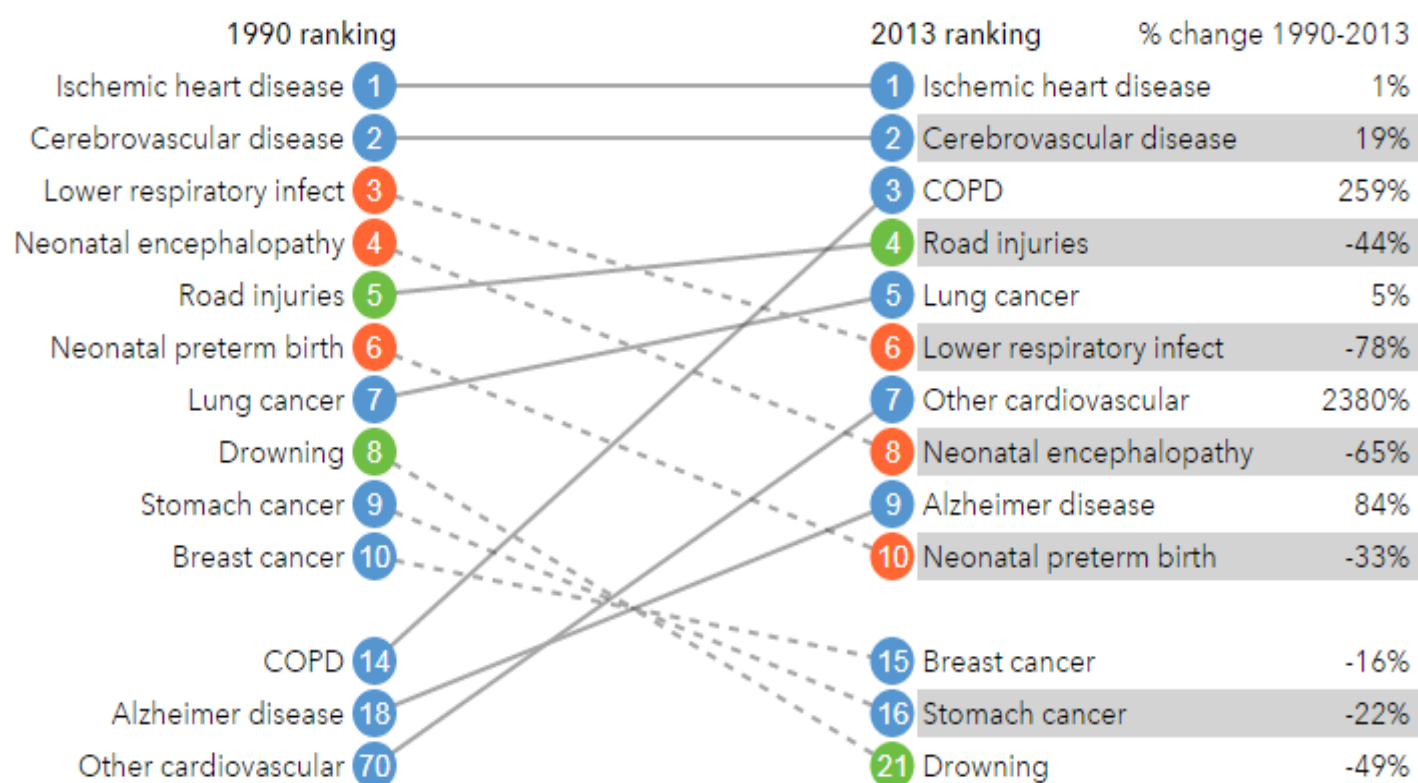


Source: WHO, NSO Georgia

Since 2014, in Georgia the Global Burden of Disease Study (GBD) has started with participation of the Institute for Health Metrics and Evaluation (IHME) at the University of Washington and the National Center for Disease Control and Public Health. GBD is a scientific method of systematized measurements, which represent health losses caused by death and diseases, injuries, and risk factors in a form of comparable values.

In 1990 and 2013, years lost due to premature mortality (YLLs) were estimated on the basis of the GBD study. The YLLs due to circulatory diseases showed the largest difference between 1990 and 2013.

## Leading causes of years of life lost to premature death and percent change, top 10 diseases, Georgia, 1990 and 2013



**Years of life lost (YLLs)** are years of life lost due to premature mortality.

Rankings are based on YLL rates per 100,000, all ages.

- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases
- Injuries

Source: IHME, 2015

The Institute for Health Metrics and Evaluation (IHME) at the University of Washington also compared the top 10 causes of premature mortality in Georgia and other countries, participating in the GBD survey. The countries for comparison were chosen based on the GBD regional classifications, known trade partnerships, and income classifications.

The results are presented in years of life lost per 100,000 and are age-standardized, shown in the following strata:

- Significantly lower than mean
- Indistinguishable from mean
- Significantly higher than mean

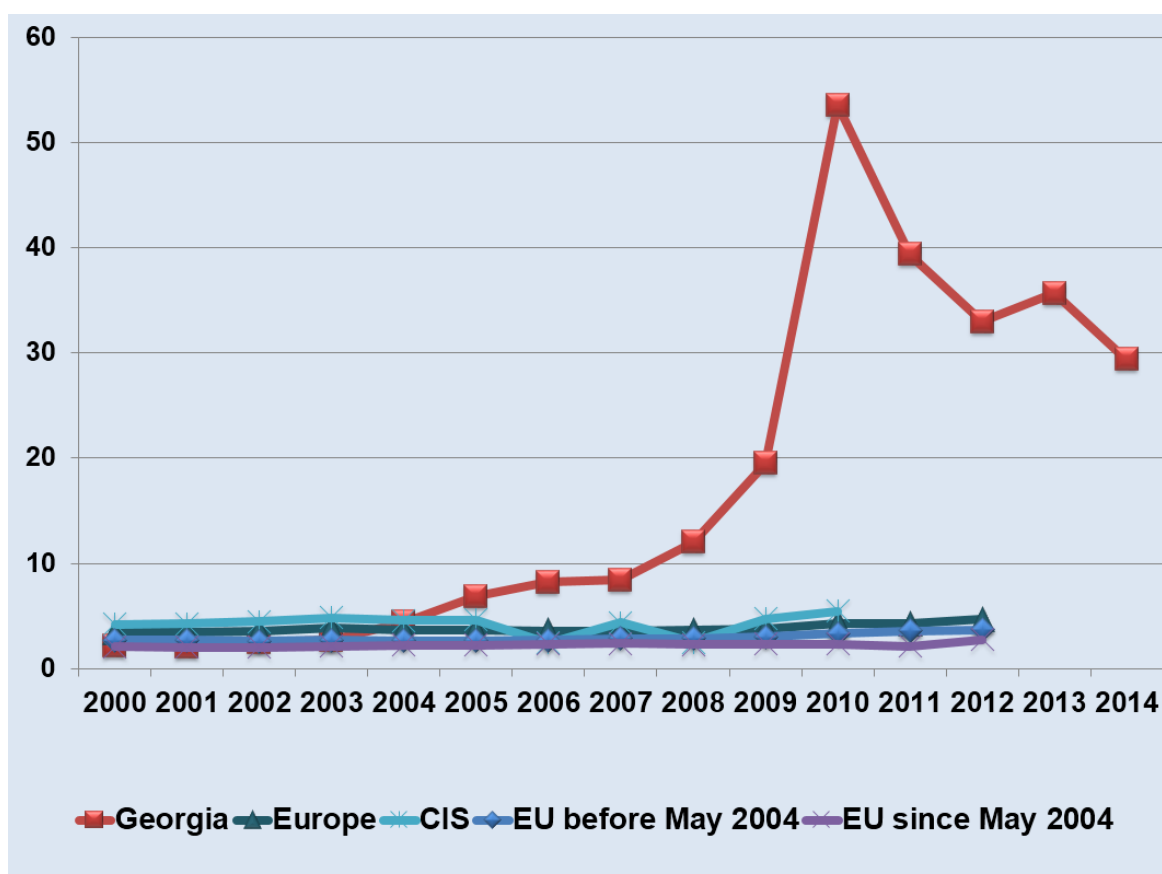
	Ischemic heart disease	Cerebrovascular disease	COPD	Neonatal encephalopathy due to birth asphyxia and	Lower respiratory infections	Road injuries	Preterm birth complications	Other neonatal disorders	Tracheal, bronchus, and lung cancer	Other cardiovascular and circulatory diseases
Georgia	4,643.7	3,119.6	818.7	764.2	663.1	629.9	571.5	484.0	478.2	439.7
Comparison group average	3,182.4	1,785.7	344.5	153.8	534.8	494.3	225.0	131.1	736.1	165.3
Armenia	4,280.6	1,633.2	454.5	160.6	757.8	698.5	479.5	226.3	882.7	58.4
Azerbaijan	5,487.2	2,206.2	399.6	949.7	2,342.7	553.3	514.0	436.6	370.5	122.0
Albania	2,764.5	2,600.9	399.3	42.5	1,057.7	424.9	148.4	285.4	662.0	412.8
Bosnia and Herzegovina	2,012.9	1,632.2	434.2	118.9	149.5	160.2	239.1	69.9	886.8	169.6
Croatia	2,027.9	1,351.7	338.7	76.6	151.3	528.3	127.5	91.4	851.8	138.1
Czech Republic	2,171.7	1,147.7	293.0	49.9	285.0	359.1	81.0	59.3	719.6	260.5
Montenegro	3,224.3	3,228.7	67.5	209.1	213.0	513.7	241.4	114.3	1,067.9	193.4
Poland	1,970.6	1,489.1	469.9	48.8	324.1	524.5	217.5	36.2	931.8	188.6
Romania	2,641.5	2,242.4	322.0	62.1	802.8	420.6	177.7	176.6	696.3	123.6
Serbia	1,662.2	1,586.7	356.4	94.0	152.4	377.8	256.5	52.6	832.2	164.9
Slovakia	3,276.9	1,333.8	231.1	56.7	497.7	405.7	291.1	43.5	685.3	263.6
Slovenia	1,037.6	760.6	251.2	32.2	221.3	397.5	162.4	35.7	695.8	155.1
Estonia	2,572.0	1,184.3	155.3	79.9	252.1	318.2	77.6	45.9	678.9	141.0
Latvia	3,367.9	1,764.1	163.1	166.8	318.7	424.9	56.1	76.6	611.2	111.2
Lithuania	3,634.9	1,295.4	271.9	61.8	313.9	611.0	79.0	35.3	630.5	162.0
Moldova	5,389.3	2,442.8	464.2	197.8	836.7	613.9	126.8	61.9	563.5	72.0
Russia	4,679.7	2,652.8	265.7	94.8	673.2	812.2	175.4	222.1	641.5	124.0
Ukraine	5,982.4	2,232.4	344.5	248.5	422.0	677.4	210.9	142.3	584.3	36.3
Turkey	2,280.8	1,143.2	863.7	172.0	388.8	569.1	612.3	279.2	992.9	243.6

Source: IHME, 2015

Secondary investigation of ill-defined causes of death was conducted under the initiative of the National Center for Disease Control (NCDC), with the participation of the district public health centers. International

standard questionnaire for verbal autopsy was used to investigate each case. In 2014, as a result of these activities, the share of ill-defined causes of death was reduced to 29%.

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



Source: WHO, Health for All Database; NSO Georgia

## Maternal health and mortality

### Pregnancy and delivery

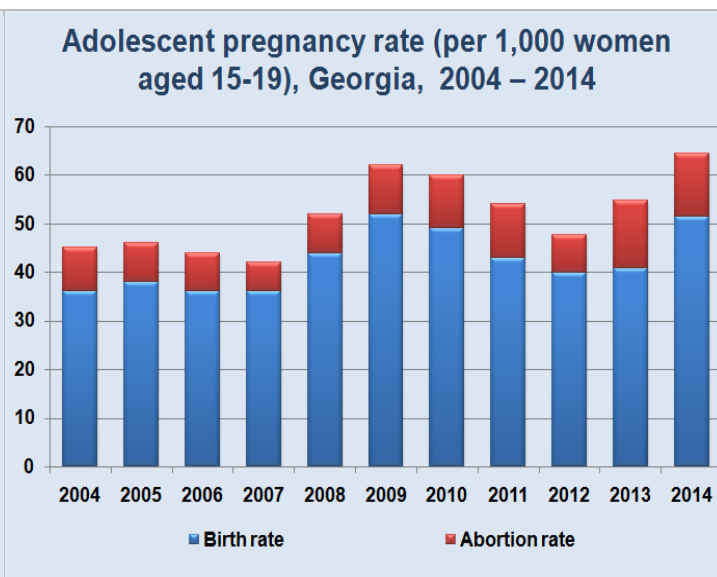
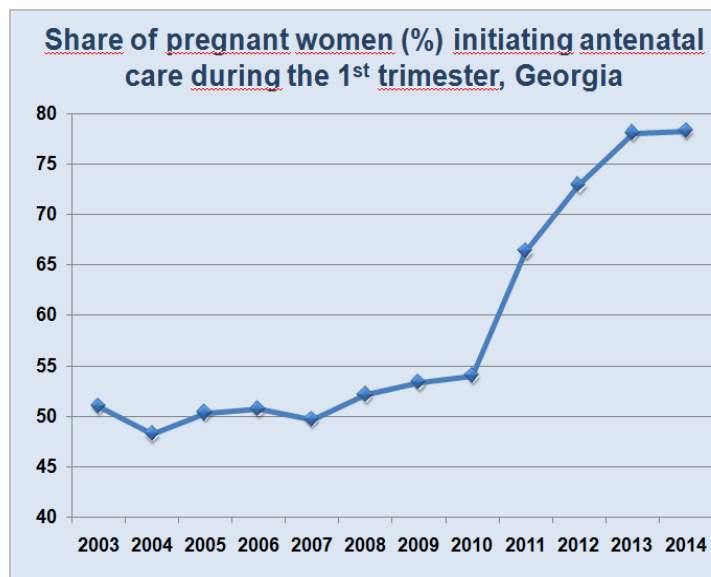
Last years, there was a growth of timely initiation of antenatal care, this could be based on the improved financial accessibility of antenatal services (MOHLSA is implementing a state maternal and child health program, which is funding 4 antenatal care visits).

#### Pregnancy and delivery, Georgia, 2014

	2013	2014
Number of pregnancies	88190	89725
Pregnancy brought to term	89.1%	90.3%
Timely initiation of antenatal care	78.1%	78.3%
Coverage with at least 4 antenatal care visits (MDG 5)	84.6%	86.9%
Number of deliveries	57505	60126
Term deliveries	96.7%	96.2%
Normal deliveries	58.3%	57.0%
Pathological deliveries	41.7%	43.0%
Adolescent pregnancy rate (MDG 5)	40.8	51.5
Proportion of births attended by skilled health personnel (MDG 5)	99.9%	99.9%

Source: NCDC





Source: NCDC, NSO

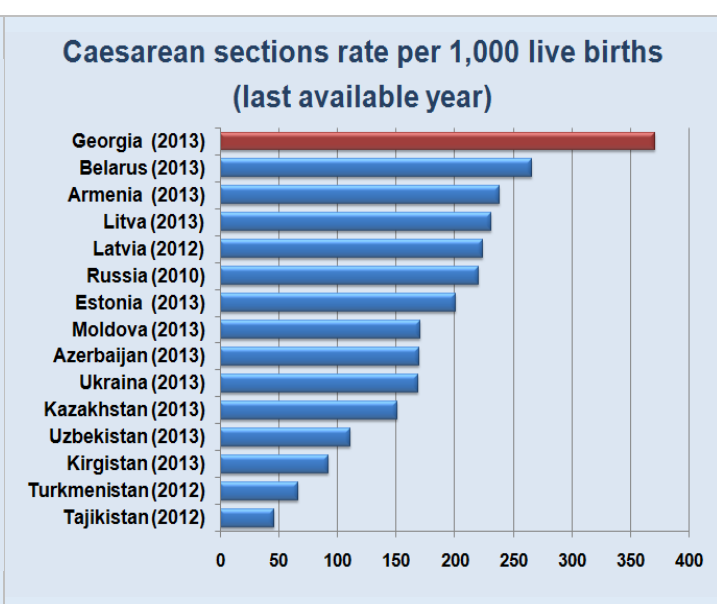
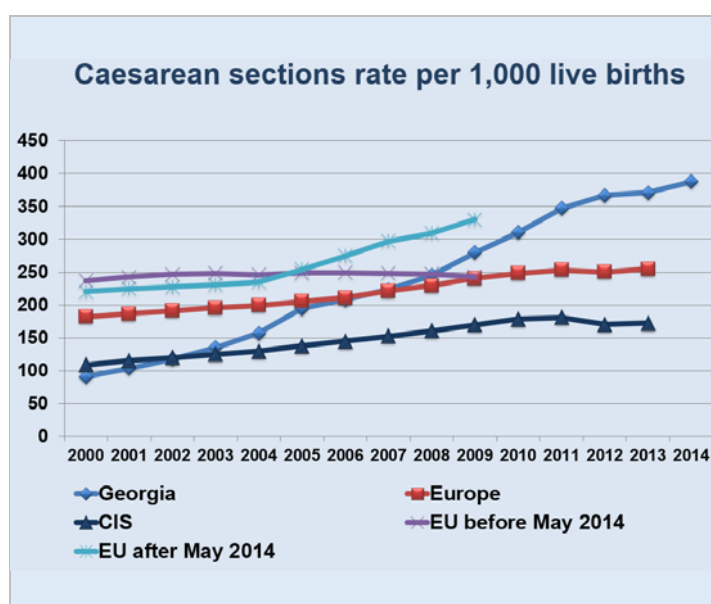
## Caesarean sections and abortions

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.

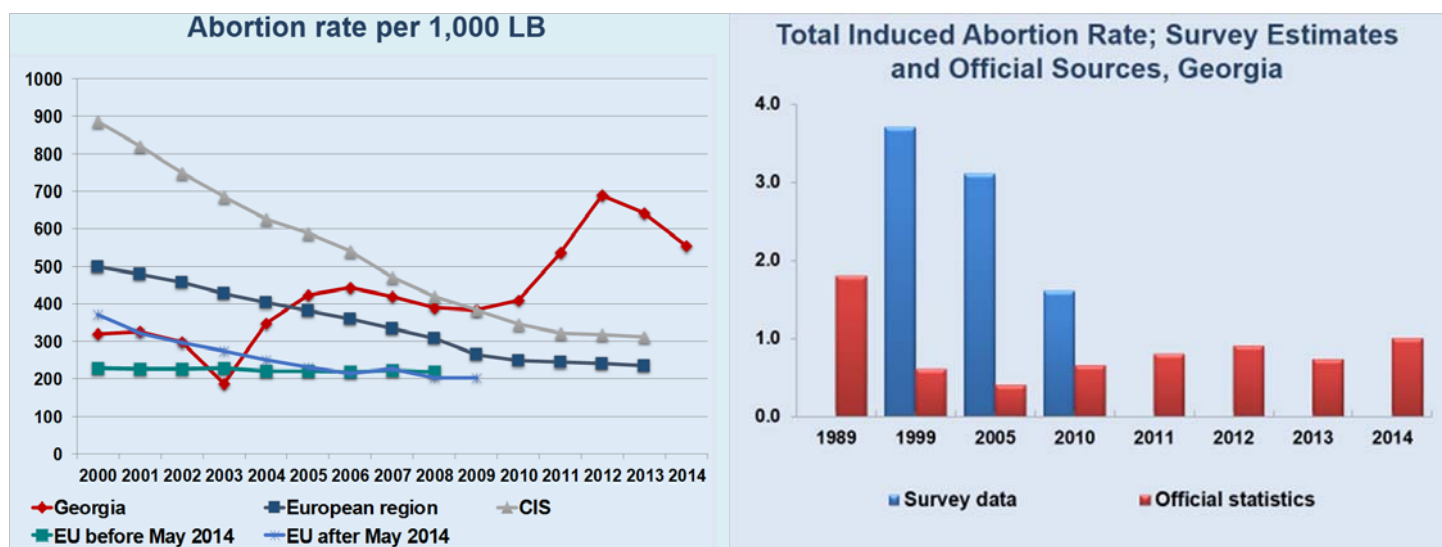
According to the above mentioned study, Georgia is among countries where the share of caesarean sections is excessive.

Since 2000, the number of caesarean sections has been increased 4.3 times and, in 2014, the number of caesarean sections performed in Georgia had reached 39% of the total number of deliveries. Although, the share in the individual facilities is significantly higher than country average.



Source: NCDC; WHO Health for All Database

In 2013, the country 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 (introduction of levels of care), supported by the USAID/Sustain, began in Imereti and Racha-Lechkhumi.



Source: NCDC; WHO Health for All Database

In 2014, a decrease of the total number of abortions has been continued. Last year, the share of abortions in women aged under-20 constituted 3.8% of the total number of induced abortions. The induced abortion rate was high in women aged 25-29 and 30-34. The share of medication induced abortions sufficiently increased.

### Abortions, Georgia

	2013	2014
Total number of abortions	37018	33469
Including induced abortions	30726	27637
Share of abortions induced by medication from the total number of abortions	21.2%	28.1%

Source: NCDC

## 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.

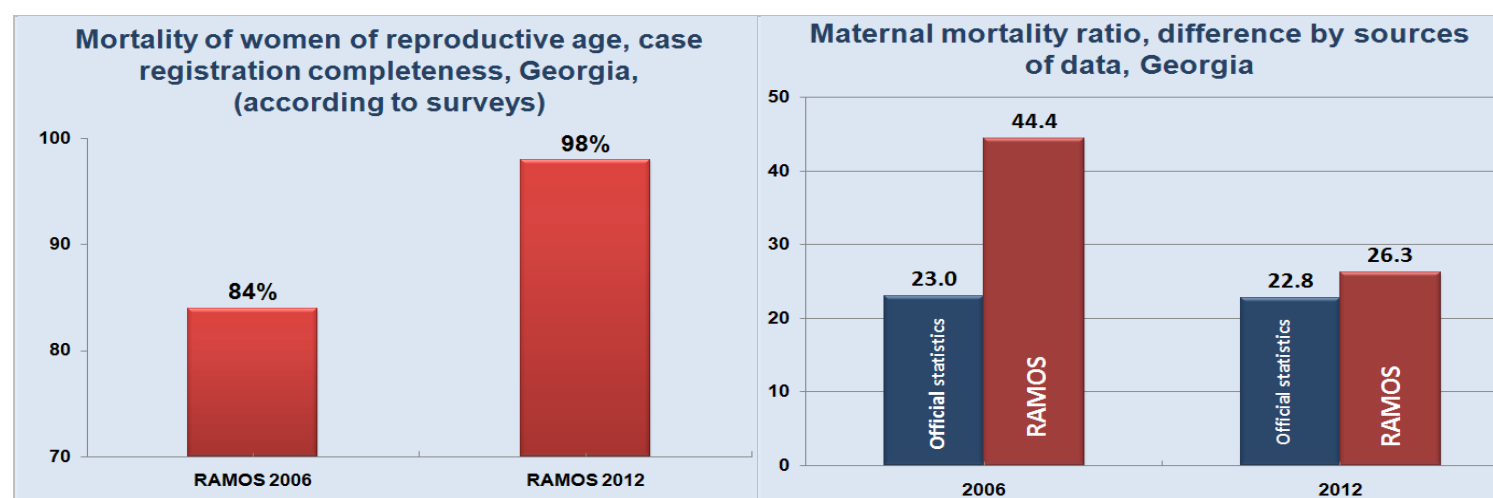
Data on maternal mortality for Georgia could be found from several sources:

- National Statistics Office of Georgia;
- Department of Medical Statistics of the National Center for Disease Control and Public Health;
- Electronic Integrated Disease Surveillance System (EIDSS);
- Epidemiological case investigation;
- Health department of the Ministry of Labour, Health and Social Affairs;
- The UN Maternal Mortality Estimation Interagency Group (MMEIG);
- Surveys, as Reproductive Age Mortality Study (RAMOS) and Maternal Mortality Study (MMS-2011).

In 2003 – 2008, according to the official data, the downward trend of maternal mortality ratio was noted in Georgia, this, hypothetically, could be explained by poor registration.

Since 2009, the NCDC and the NSO have been reconciling their information to improve the quality of the maternal mortality 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.

Reproductive age mortality studies (RAMOS) confirm an improvement of the quality of registration of deaths of women of reproductive age. In 2012, according to these surveys data, the registration of deaths of women of reproductive age reached 98%.

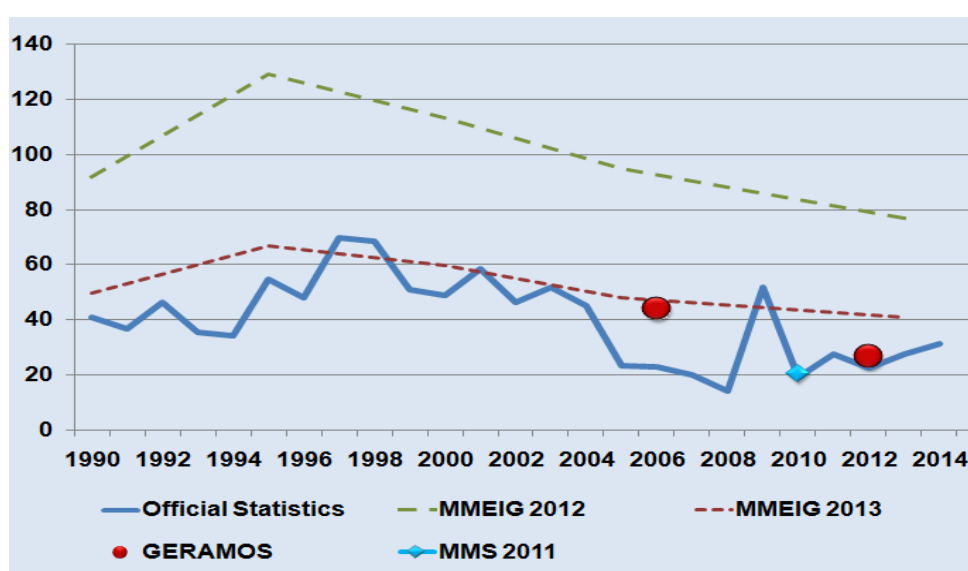


Source: RAMOS; NCDC

The UN Maternal Mortality Estimation Interagency Group (MMEIG), using the above mentioned sources, every year publishes the maternal mortality estimates. Generally, these estimates are based on surveys data and differ from the official statistics.

Over the years, the estimates for Georgia are higher than official data and survey results. For 2013 the preliminary estimate, published in 2012, 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 LB, Georgia



### Maternal mortality ratio per 100000 LB, Georgia

Source	1990	1995	2000	2005	2006	2010	2011	2012	2013	2014
Official statistics	40.9	55.1	49.2	23.4	23.0	19.4	27.6	22.8	27.7	31.5
MMEIG_2012	92	129	113	95	-	-	-	-	77	-
MMEIG_2013	50	67	60	48	-	-	-	-	41	-
RAMOS	-	-	-	-	44	-	-	26	-	-
MMS_2011	-	-	-	-	-	-	20.6	-	-	-

# Morbidity and mortality in children under-5 (MDG 4)

## Under-5 morbidity

Top causes of under-5 children morbidity, Georgia, 2014

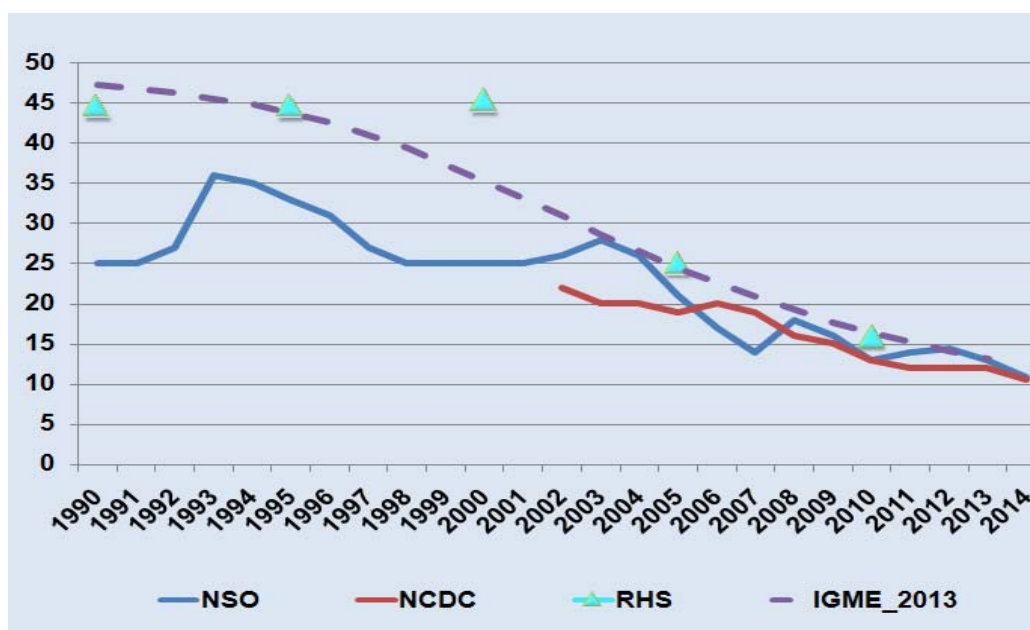
	Incidence per 1000 children aged under-5
Diseases of the respiratory system	518.7
Infectious and parasitic diseases	74.7
Diseases of the ear and mustoid process	37.1
Diseases of the skin and subcutaneous tissue	23.5
Diseases of the blood and blood forming organs	23.5
Diseases of the eye and adnexa	20.7
Diseases of the digestive system	17.2

Source: NCDC

## Under-5 mortality

Under-five mortality rate is one of the important indicators of 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. 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) and surveys (GERHS) prevails the MDG goal.

Under-5 mortality rate per 1000 LB, Georgia

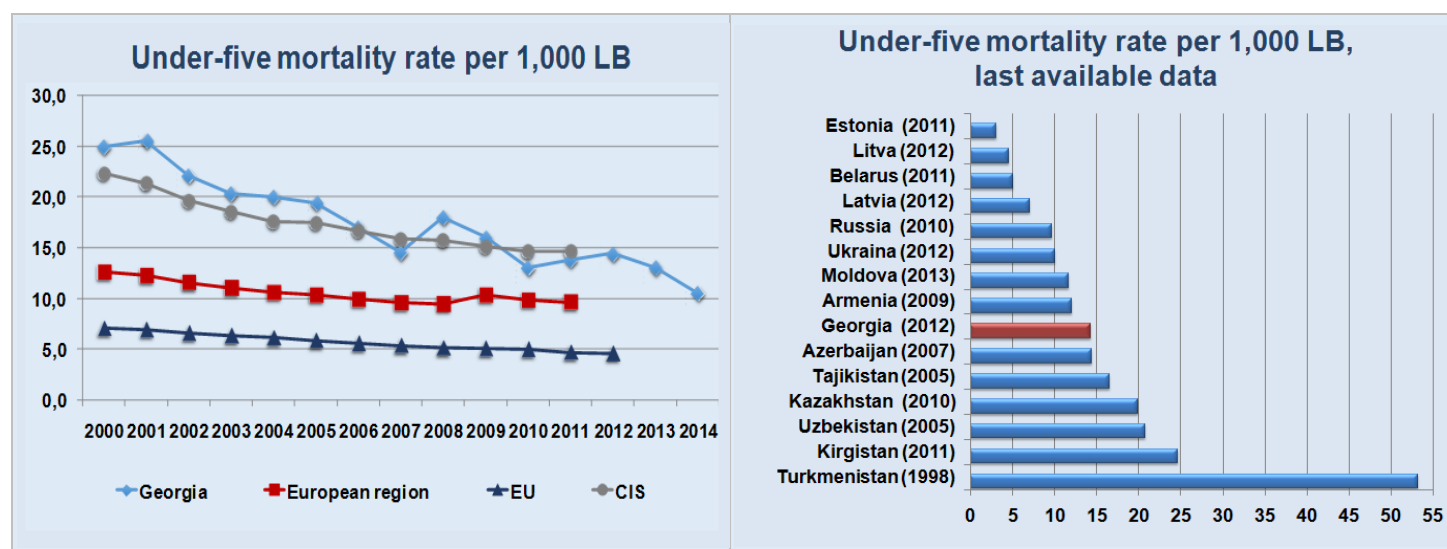


Under-5 mortality rate per 1000 LB, Georgia

	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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
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
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	-
RHS	45.8	-	-	25.1	-	-	-	-	16.4	-	-	-	-

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 between the former Soviet Union countries.





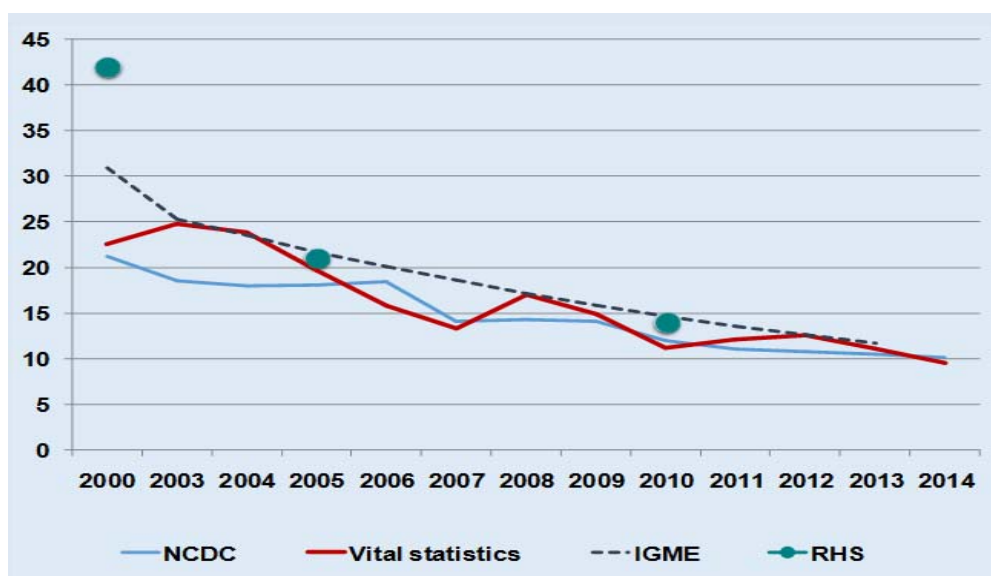
Source: NCDC; WHO Health for All Database

Data, collected from different sources are undergoing a process of collation to improve the data quality. From January 2015, each case of under-5 death is 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 2014, in Georgia, this share, according to the National Center of Disease Control, amounted to 96.4%; although, according to the National statistics office, it was 87.7%.

According to all sources, the infant mortality is declining.

### Infant mortality rate per 1000 LB, Georgia



### Infant mortality rate per 1000 LB, Georgia

	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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	8.5
NSO	22.5	24.8	23.8	19.7	15.8	13.3	17.0	14.9	11.2	12.1	12.6	11.1	9.5
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	-
RHS	41.6	-	-	21.1	-	-	-	-	14.1	-	-	-	-

## Neonatal and perinatal mortality, Georgia

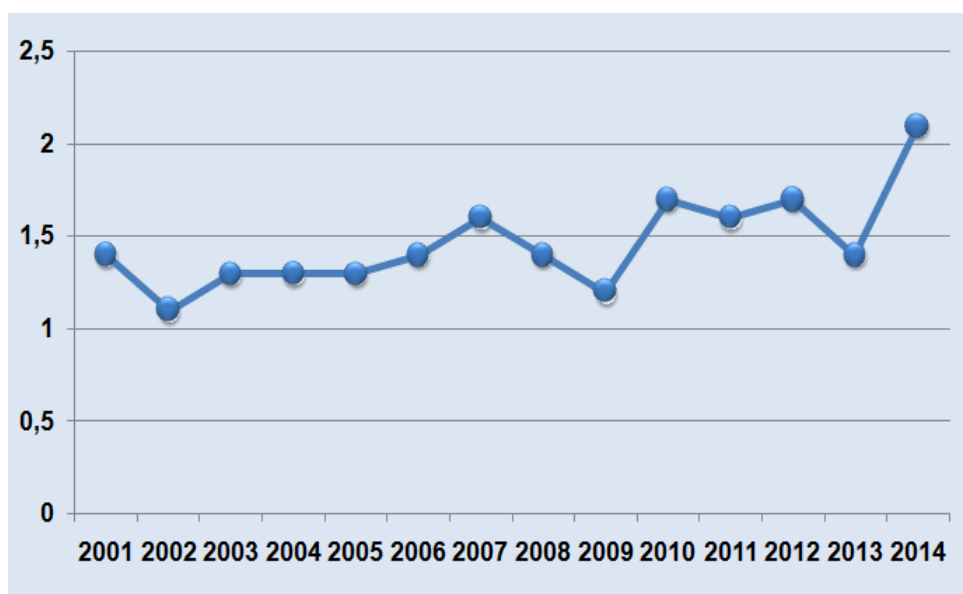
	Neonatal mortality rate per 1000 live births	Early neonatal mortality rate per 1000 live births	Late neonatal mortality rate per 1000 live births	Perinatal mortality per 1000 births
<b>2010</b>	9.6	6.6	3.0	17.4
<b>2011</b>	8.5	6.1	2.4	15.6
<b>2012</b>	9.2	6.6	2.7	17.7
<b>2013</b>	8.4	6.7	1.7	16.1
<b>2014</b>	7.2	5.1	2.1	15.5

Source: NSO Georgia

66% of mortal cases in infants were caused by conditions originating in the perinatal period. The largest share (67.6%) of the perinatal deaths comes from stillbirths; an adequate ratio of the number of stillbirths to the number of early neonatal deaths is very important. In Georgia, according to the WHO data, stillbirths to early neonatal deaths ratio should not exceed 1.2. In 2014, this ratio equaled to 2.1.

In 2014, in Georgia, the stillbirth rate was 10.5 per 1,000 births (according to the latest available data: in the CIS - 9.3, in the EU - 5.3).

### Stillbirths to early neonatal deaths ratio, Georgia, 2001–2014



Source: NCDC

# Communicable diseases

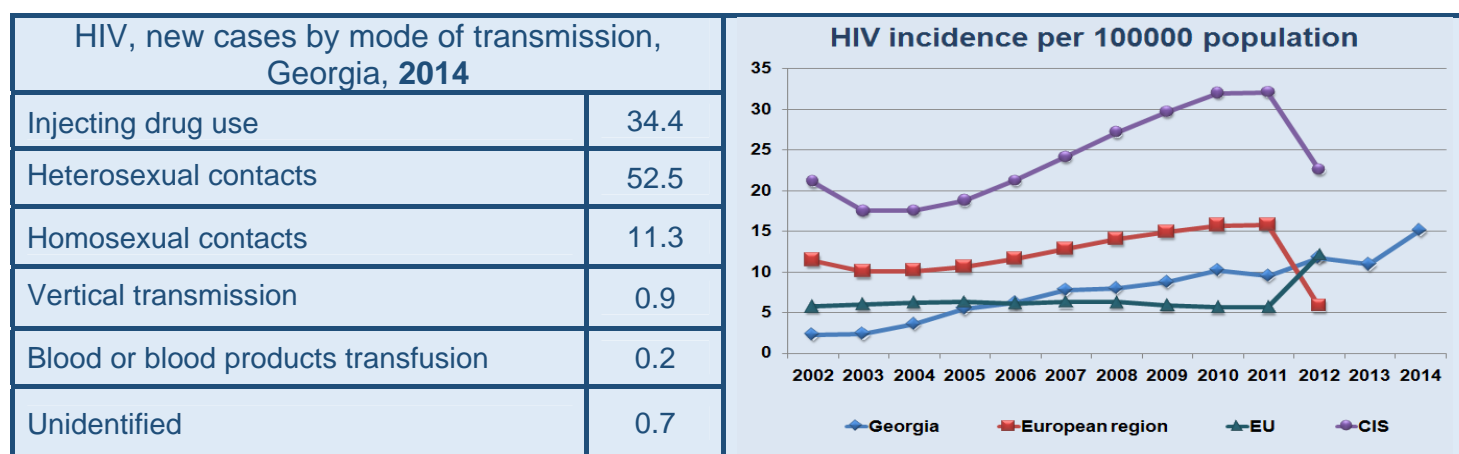
## Hepatitis C

According to international estimates, Georgia is among countries with a high hepatitis C (HCV) prevalence. Since 2015, under the initiative of the Georgian Government, a national Hepatitis C elimination program has become operational.

In 2015, a population-based HCV and HBV seroprevalence survey has been conducted with support of the CDC/USA. In the frame of the survey 6,331 interviews (response rate – 90.8%) were conducted; 6,015 blood samples were collected (response rate – 86.3%). According to the preliminary data, 7.1% of the studied population are anti-HCV positive.

## 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 2014, there were registered 564 new cases of HIV (incidence per 100,000 population – 15.1), and 84 deaths attributed to AIDS. By December 31, 2014, in Georgia, the total number of 4,695 cases of HIV/AIDS was registered.



Source: Center for infectious pathology, AIDS and clinical immunology; WHO Health for All Database

There is a rather high level of HIV / AIDS late detection (35.6% of new cases are revealed at the AIDS stage), 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

In 2014, 103 new cases of tuberculosis per 100,000 population have been registered. This is high, compared to the European region, EU countries; 1.4% of all new cases and relapses were registered in prisoners.

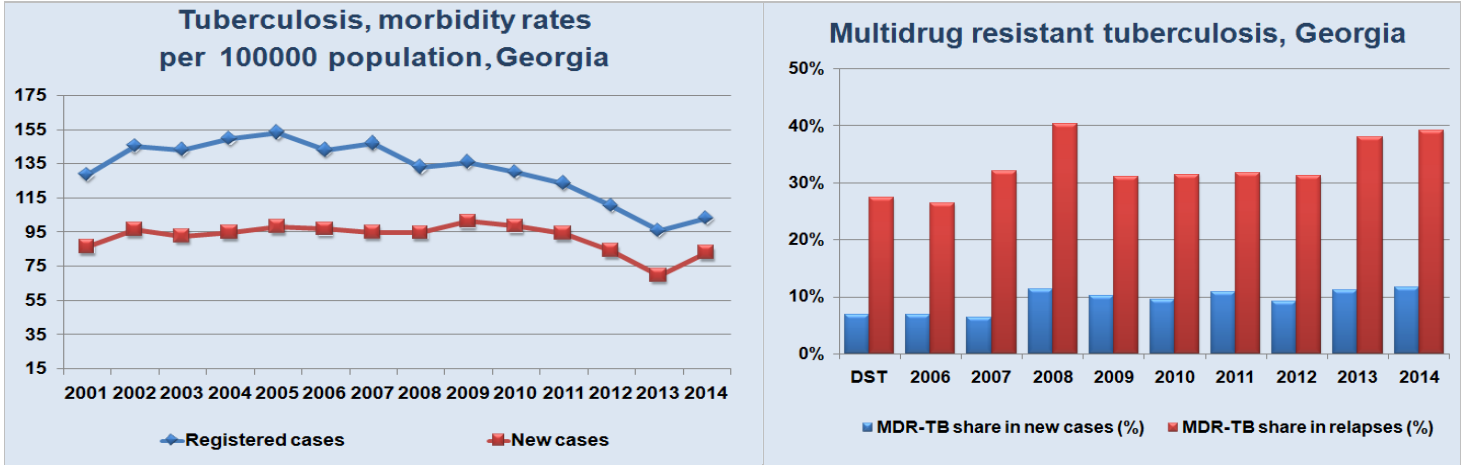
In Georgia, in 2014 the share of new cases of pulmonary tuberculosis constitutes 76.4% of new cases of all forms of tuberculosis.

In 2014, according to the National Statistical Office of Georgia data, mortality caused by tuberculosis was 3.0 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. In 2005, “successful treatment” of new cases of pulmonary BK+ tuberculosis reached only 64.1%. In 2014, this indicator increased up to 81% (2013 cohort).

According to the World Health Organization estimates, Georgia belongs to the group of countries "with a high burden" of MDR-TB.

In 2014, 11.6% of the new pulmonary tuberculosis cases and 39.2% of the retreated pulmonary tuberculosis cases have been multidrug resistant.

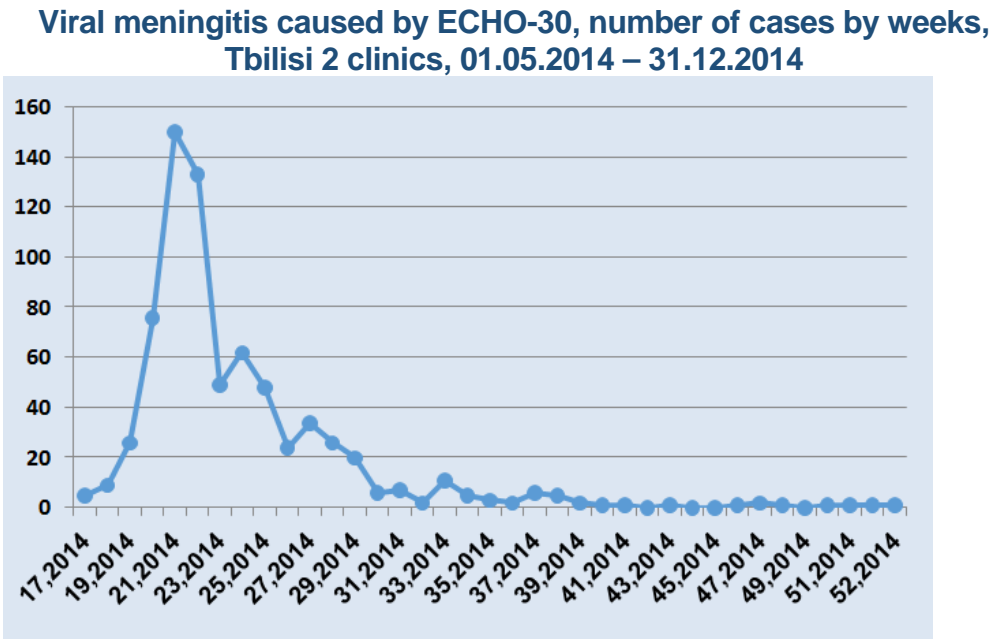


Source: NCDC; National center for tuberculosis and lung diseases

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.

ECHO-30 viral meningitis

In 2014, an outbreak of viral meningitis was detected based on the sentinel surveillance (data from two clinics in Tbilisi). The Richard Lugar Center for Public Health Research detected the agent – ECHO-30; 1,200 cases of viral meningitis were identified in May – December, 2014. Clinical course of all cases was either medium or light. There were no fatal cases.



Source: NCDC

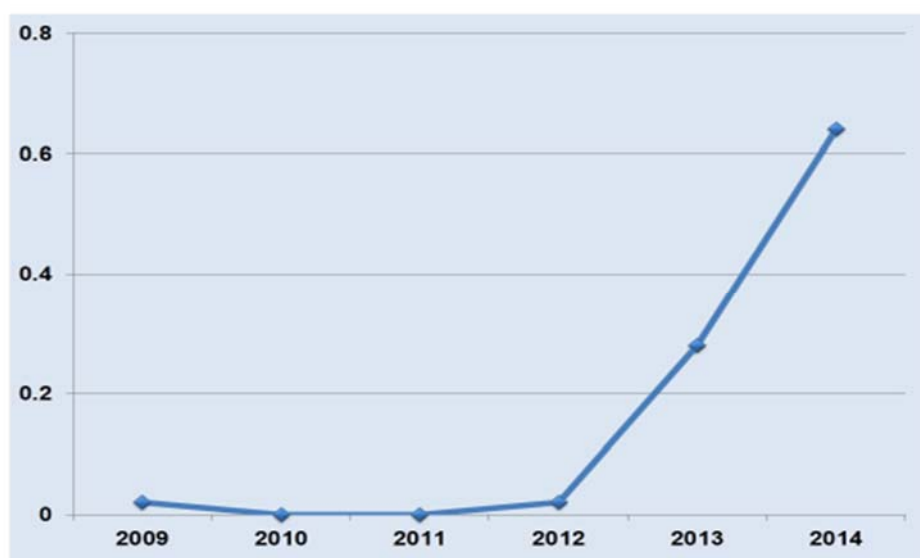
Crimean-Congo fever

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). The cases spread out into 6 regions. The largest incidence was in Shida Kartli (6.8).



*In January – July 2015, two cases of Crimean-Congo fever were registered.*

### Crimean-Congo fever, incidence per 100000 population, Georgia



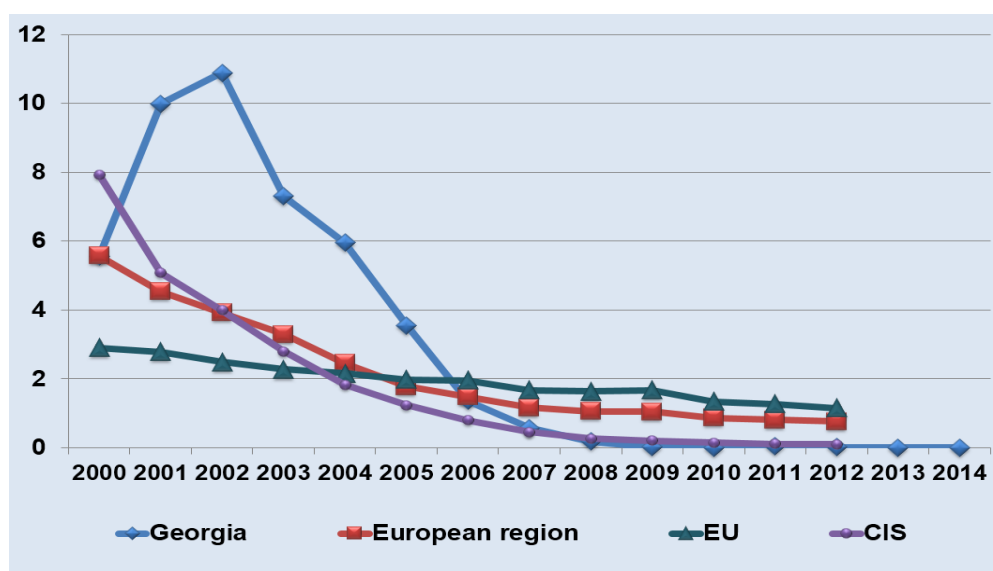
Source: NCDC

## 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 - 2014, it was 0. In January – June, 2015, only one case of malaria was registered. During last years, there were no deaths due to malaria registered in Georgia.*

### Malaria incidence per 100000 population

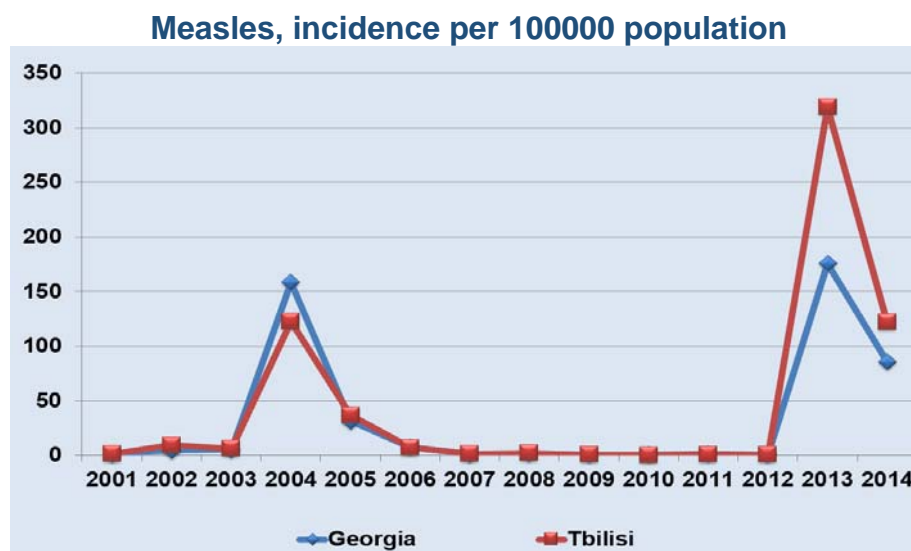


Source: NCDC; WHO Health for All Database

## 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. In 2014, the incidence rate reduced by 51.3%, compared to 2013. In 2014, 3188 cases of measles were registered (incidence per 100000 population – 85.5).*

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 registered in under-1 and 15-30 years-old age groups.



Source: NCDC

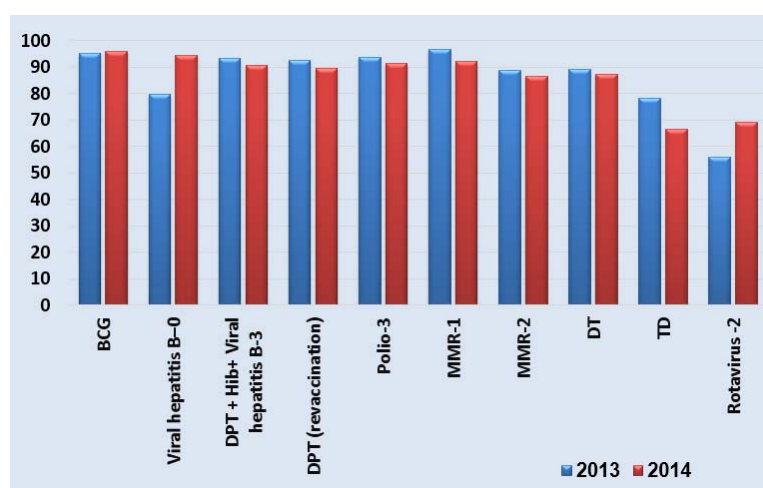
Since 2013, additional campaigns have been implemented to seize the epidemic: the completion of the anti-measles vaccination course for children aged 14; provision of additional vaccinations to population aged 15-30, health professionals and some other specific groups. In 2013-2014, more than 140,000 people were vaccinated. Preventive measures resulted in a marked decrease of the incidence of measles; thus, in January – July, 2015, only 414 cases of measles were registered.

## Immunization

All vaccinations and immunizations included into the National vaccination calendar are free of charge for 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 2014, compared to 2013, in the frame of the State immunization program, the vaccination coverage rates with BCG, HepB0, OPV4, OPV5 and Rotavirus increased on average by 6%, although, coverage with DPT+Hib+Heb3, DPT4, OPV3, MMR1, MMR2, DT and DT stays about at the same level.

**Immunization coverage (%), Georgia**



Source: NCDC

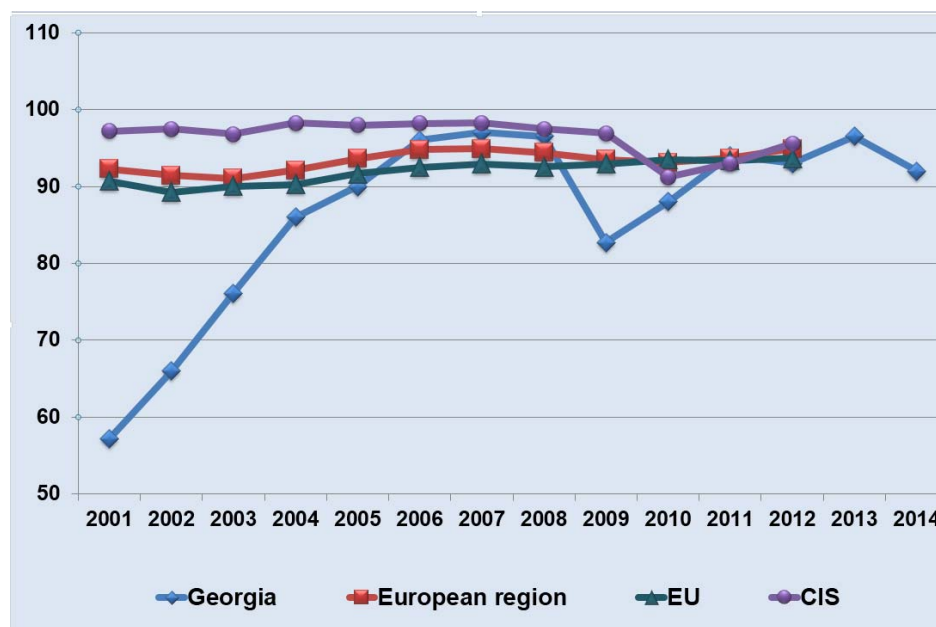
The recommendations of the World Health Organization and the European Centre for Disease Control to reduce measles morbidity and its elimination are as follows: achievement / maintenance of 95% coverage

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.

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

In 2013, the coverage rate exceeded the recommended by the WHO level and made up 96.5%. In 2014, the coverage rate decreased and measured up 89.7%.

### Share of children (%) aged under-1, vaccinated against measles



Source: NCDC; WHO Health for All Database

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

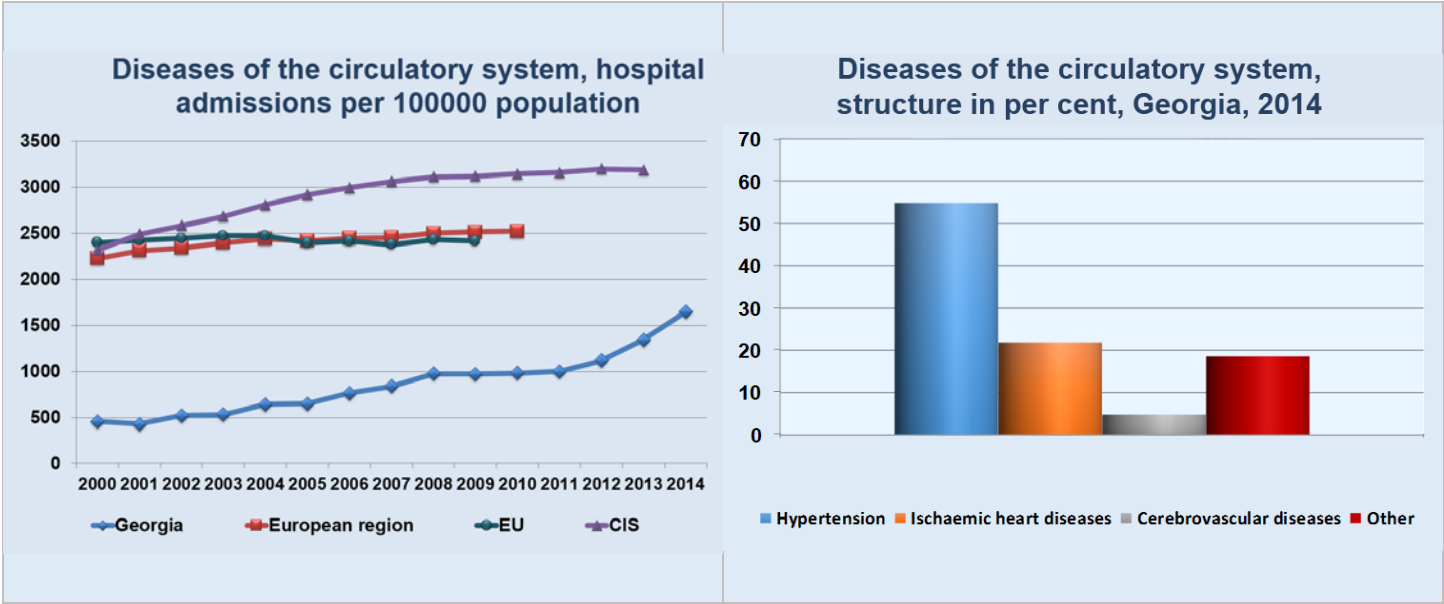
Diseases of the circulatory system constitute 15.5% of all registered cases of diseases in the country, and 8.6% of all new cases. High morbidity and mortality rates are specific for such diseases as hypertension, ischaemic heart diseases and cerebrovascular diseases.

In 2000 - 2014, prevalence of diseases of the circulatory system in Georgia has followed an upward trend.

### Hypertension

The share of hypertension in Georgia constitutes about 60% of the cardiovascular diseases structure (2014). 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.



Source: NCDC; WHO Health for All Database

Ischaemic heart diseases

Ischaemic heart diseases constitute about one fourth of all diseases of the circulatory system: angina pectoris –7.8%; acute myocardial infarction – 1.2% and other acute ischaemic diseases - 2.7%.

In 2014, 55.8% of patients with acute myocardial infarction were admitted to hospital timely (within the first 24 hours from the onset of symptoms).

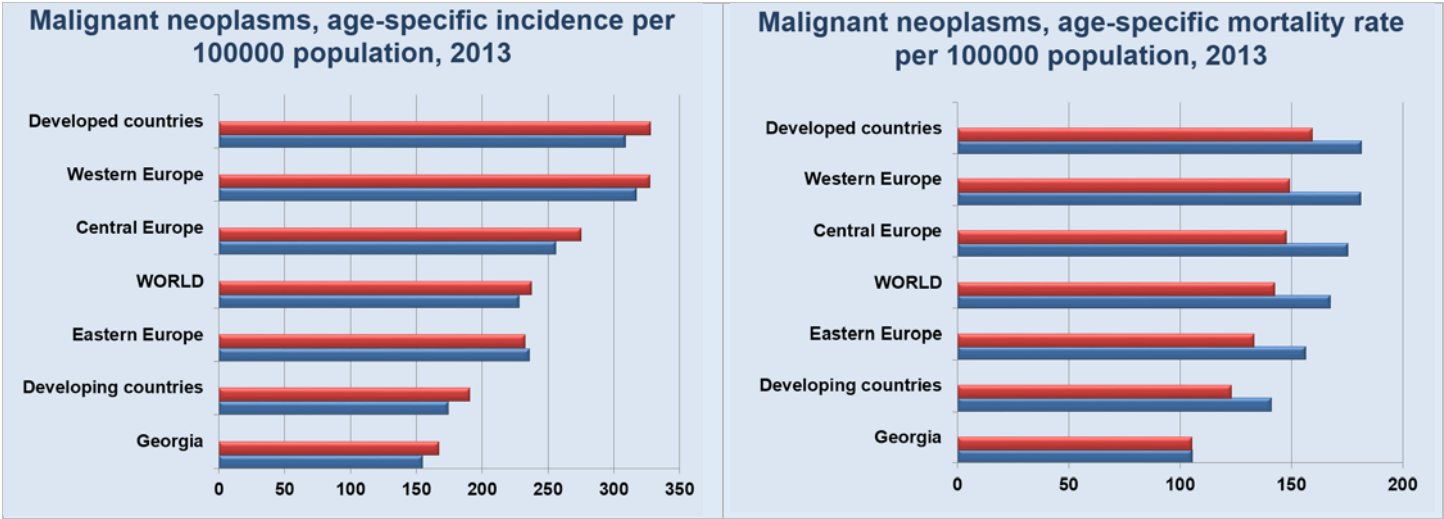
Cerebrovascular diseases

Cerebrovascular diseases 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

The Institute for Health Metrics and Evaluation at the University of Washington pays special attention to the estimates of the morbidity and mortality caused by malignant neoplasms.

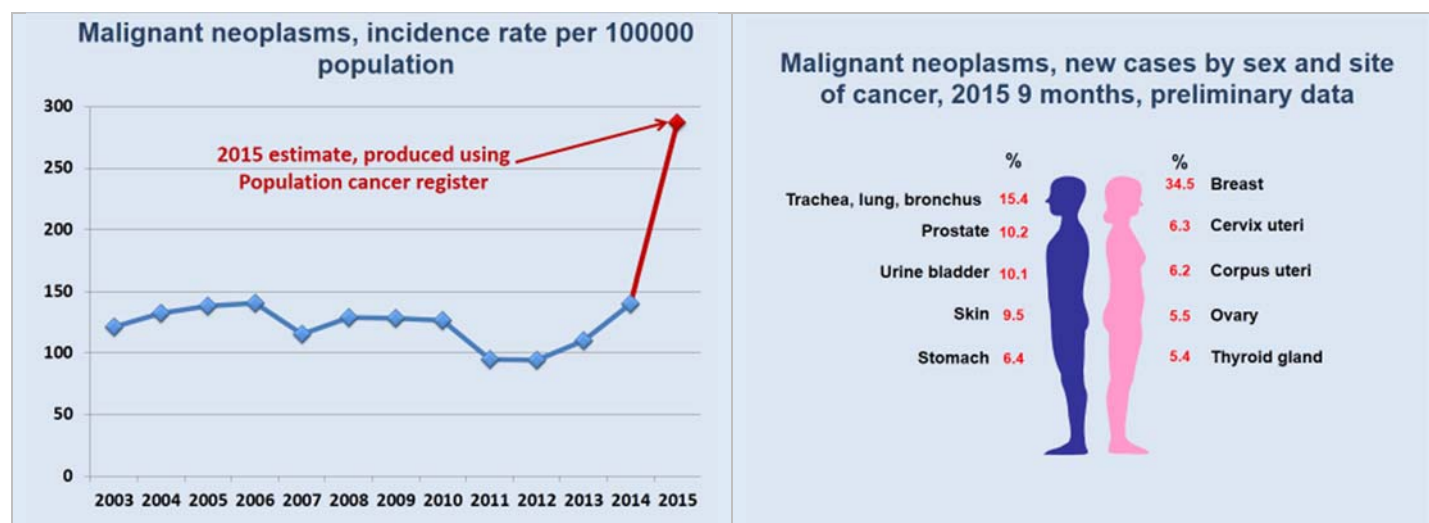


Source: IHME, 2015



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.

Since January 1, 2015, Georgia started implementation of the Population Cancer Registry, in order to improve the epidemiological surveillance of cancer. Comparison of the register data, collected within the first 9 months of 2015, with the aggregative statistical reports from 2014, revealed a sharp difference in statistics: according to the aggregative statistics, in 2014, the incidence was 140 new cases of malignant neoplasms per 100,000 population, although, an estimated value for 2015, using registry data, is likely to increase up to 287.



Source: NCDC

Cancer of all localizations are more frequent in older ages independently of the sex.

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.

Since 2010, an immunization program with the human papillomavirus (HPV) vaccine for 13-year-old girls has been implemented in Tbilisi.

#### Number and coverage (% on corresponding age and gender) of tests performed in the frame of cancer screening program, Georgia, 2014

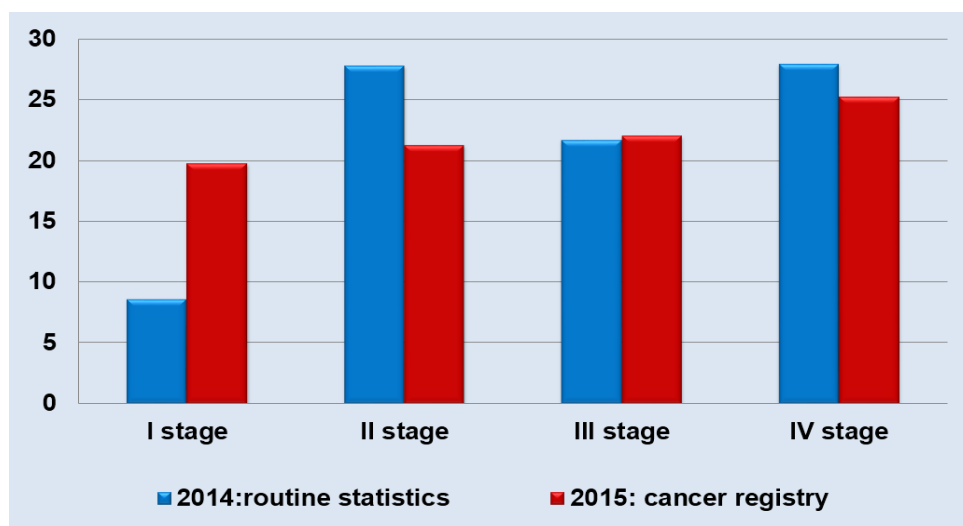
Site	2012		2013		2014	
	Number	%	Number	%	Number	%
Breast	17576	2.1	20121	2.3	21865	3.0
Cervix	27374	2.4	26111	2.3	23532	2.5
Prostate	3424	0.8	5900	1.3	6178	1.6
Colon	4691	0.5	6025	1.8	6417	0.8

Source: NCDC

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 2015, according to the estimates, the share of cancers diagnosed at the first stage to be increased two-fold, compared to the previous year.

## Malignant neoplasms, new cases by stage (%), Georgia

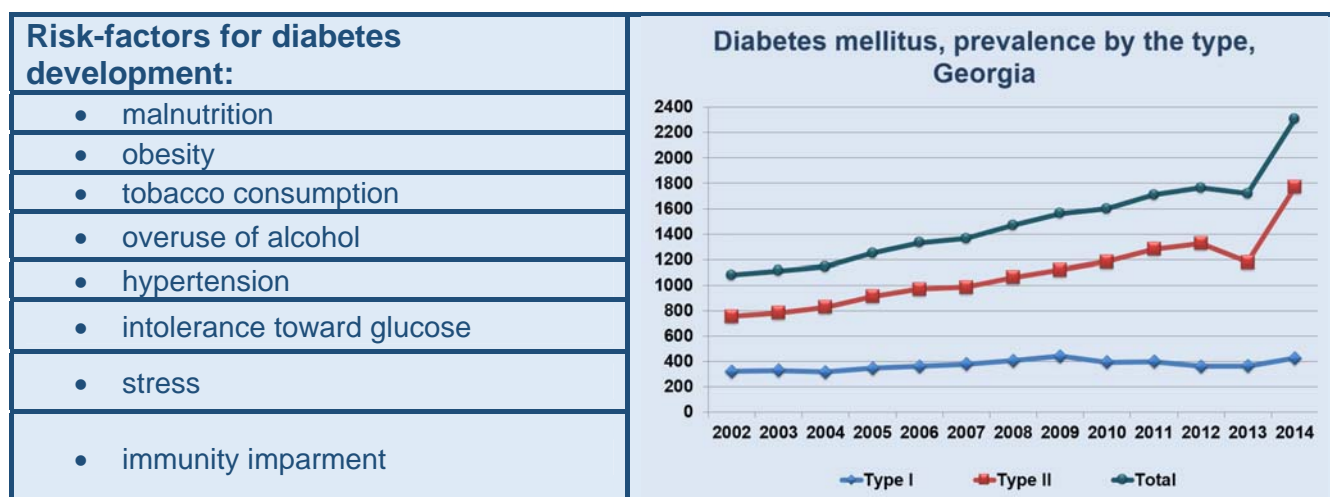


Source: NCDC

## Diabetes melitus

- Diabetes increases at least two-fold a risk of heart disease and stroke.
- People with diabetes need 2-3 times more health care resources, compared to people without diabetes.
- Diabetes in pregnancy linked to life-threatening complications, and adverse pregnancy outcomes.

In recent years an upward trend of diabetes mellitus has been registered. In 2014, 2.6% of cases of insulin-dependent diabetes (type I) were registered in children.



Source: NCDC; WHO Health for All Database

## Chronic obstructive pulmonary diseases (COPD)

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.

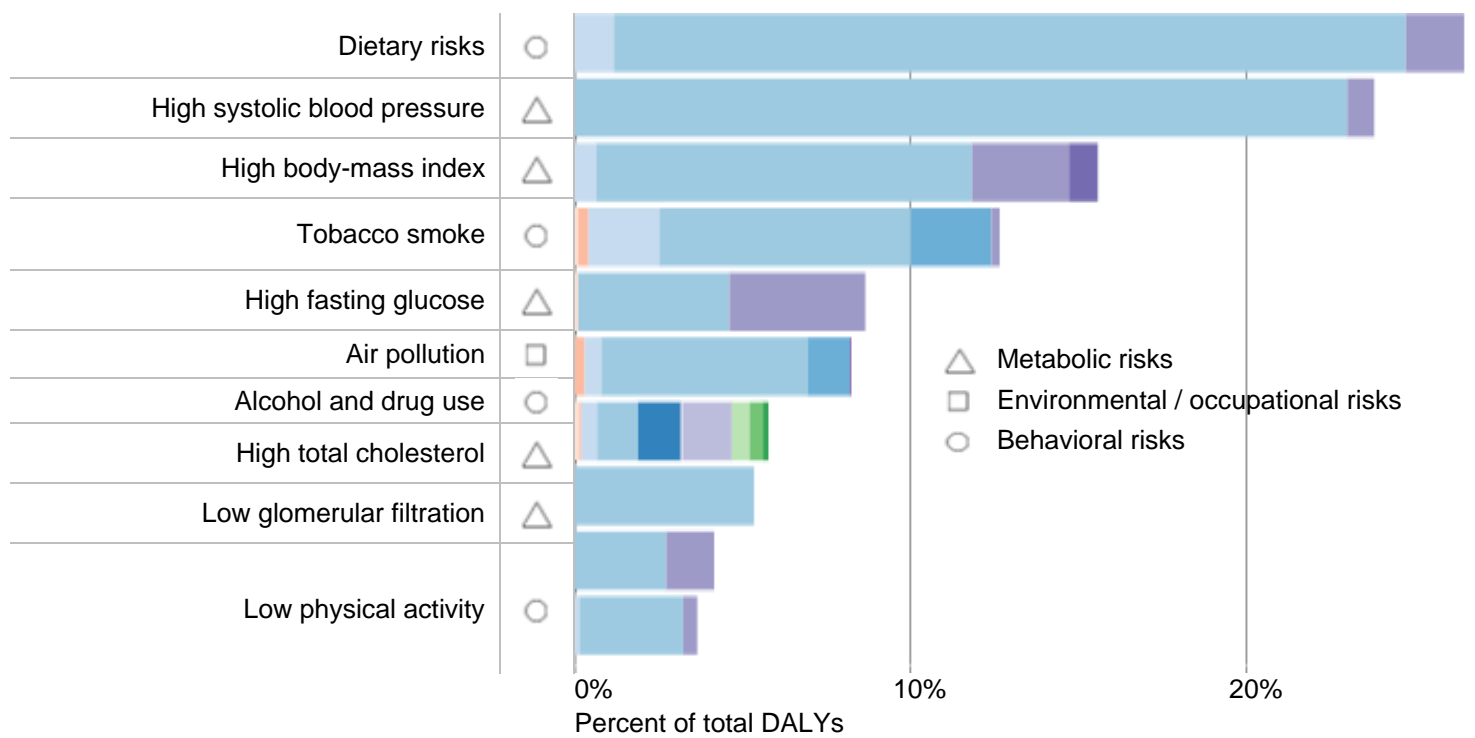
In 2014, chronic obstructive pulmonary diseases (COPD) contributed 79.2% of all registered cases of lower respiratory diseases.

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

In Georgia, according to the latest estimates made by IHME, unhealthy nutrition, high blood pressure and tobacco smoke are leading among 15 main risk factors of GBDs.

Burden of disease attributable to leading risk factors, 2013



Hiv / AIDS and tuberculosis	Neoplasms	Musculoskeletal diseases
Diarrhea, lower respiratory and other common infectious diseases	Cardiovascular diseases	Other non-communicable diseases
Neglected tropical diseases and malaria	Chronic respiratory diseases	Transport injuries
Maternal disorders	Cirrhosis	Unintentional injuries
Neonatal disorders	Digestive diseases	Self-harm and interpersonal violence
Nutritional deficiencies	Neurological disorders	Forces of nature, war, and legal intervention
Other communicable, maternal, neonatal, and nutritional diseases	Mental and substance use disorders	
	Diabetes, urogenital, blood, and endocrine diseases	

Source: IHME, 2015

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.

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.

A tobacco control strategy, an action plan for the 2013-2018, the state program, and draft of legislative changes have been developed to bring tobacco control measures to international and national legislation, and to start a large-scale anti-tobacco movement (campaign). A national health promotion strategy for 2014-2019 and health promotion program for 2014 (with tobacco control component) have been developed.

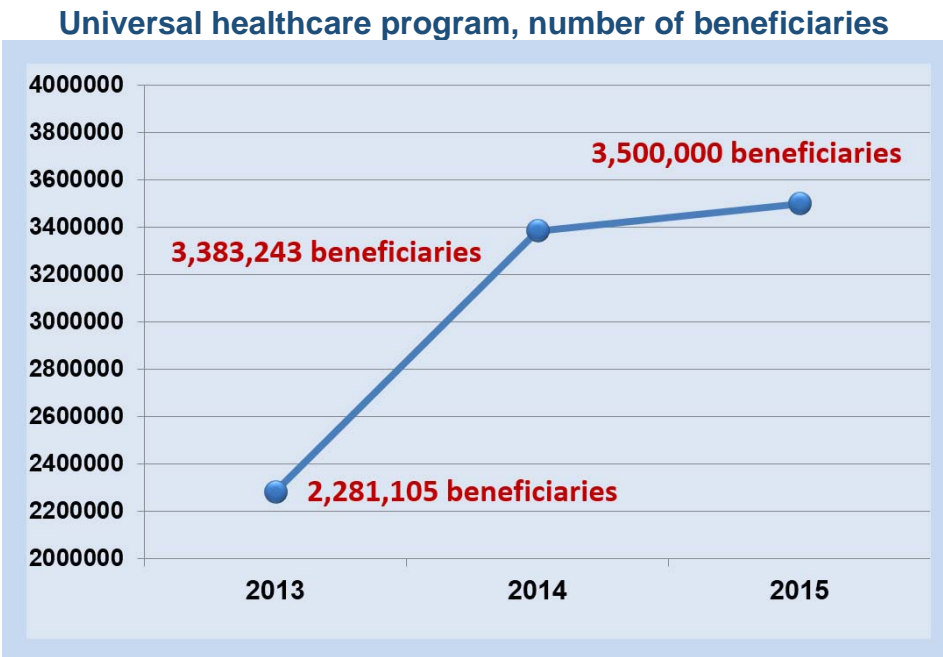
In 2013, a secondary analysis of the data collected during STEPS2010, was done. According to the survey, among behavioral risk factors only tobacco and alcohol use appeared to be associated with hypertension.

# Universal healthcare

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

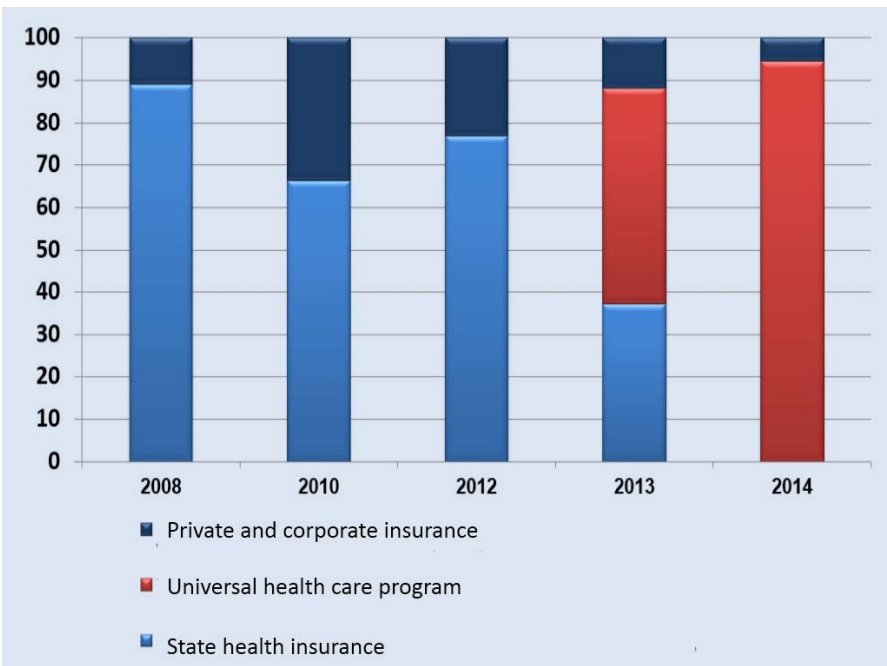
Since February 28, 2013, the state universal healthcare program had been launched, which, since April 2014, covered the population living under the poverty line and teachers. Since September programs for under-5 children, pensioners, and students had been transformed into the universal healthcare programs.

In 2013, the state universal healthcare program covered 2.281.105 beneficiaries. By the end of 2014, the whole population of Georgia was secured with the basic health services. By 2015, the State universal healthcare program covers 3.5 million population.



Source: Ministry of labour, health and social affairs of Georgia

## Coverage of the population with health security by types (%)

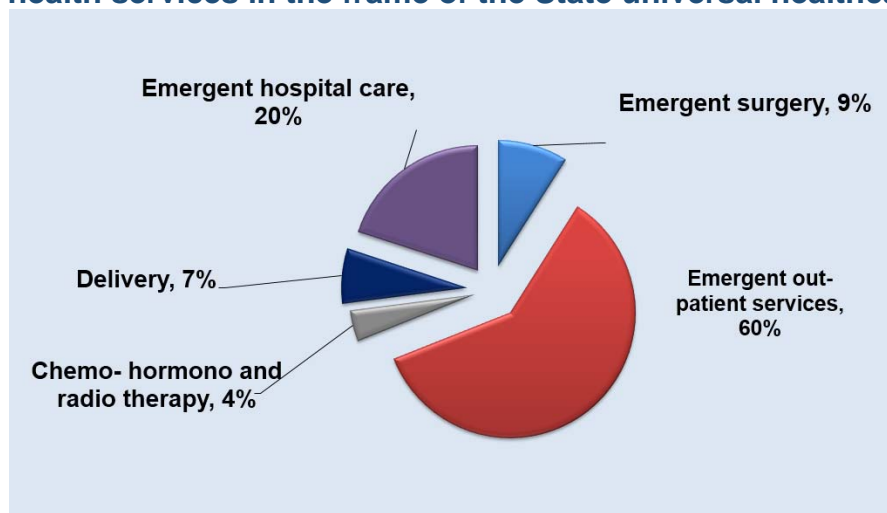


Source: Ministry of labour, health and social affairs of Georgia

After the launch of the program the numbers of encounters with both outpatient and in-patient services have

increased. Emergency outpatient contacts constituted the main share of the healthcare services provided to the population.

### Coverage with health services in the frame of the State universal healthcare program (%)

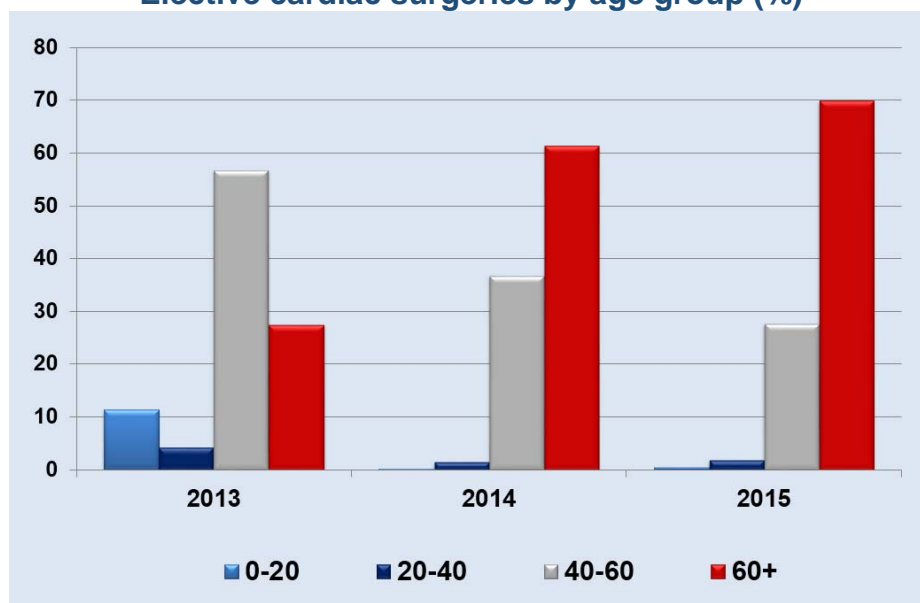


Source: Ministry of labour, health and social affairs of Georgia

By November 1, 2014, the number of beneficiaries enrolled in the primary health care centers, has reached 2,882,238; in 2015 the number has increased and reached 3,127,834. In the period of January 1 – November 21, 587,049 ambulatory cases were registered.

As an example The number of elective cardiac surgeries, covered by the State universal healthcare program, has increased 4-fold: in 2013 – 579 operations; in 2014 – 2,270. In 2015, 2,277 elective cardiac surgeries have already been conducted.

### Elective cardiac surgeries by age group (%)



Source: Ministry of labour, health and social affairs of Georgia

## Health care resources

### Health care resources, Georgia, 2014

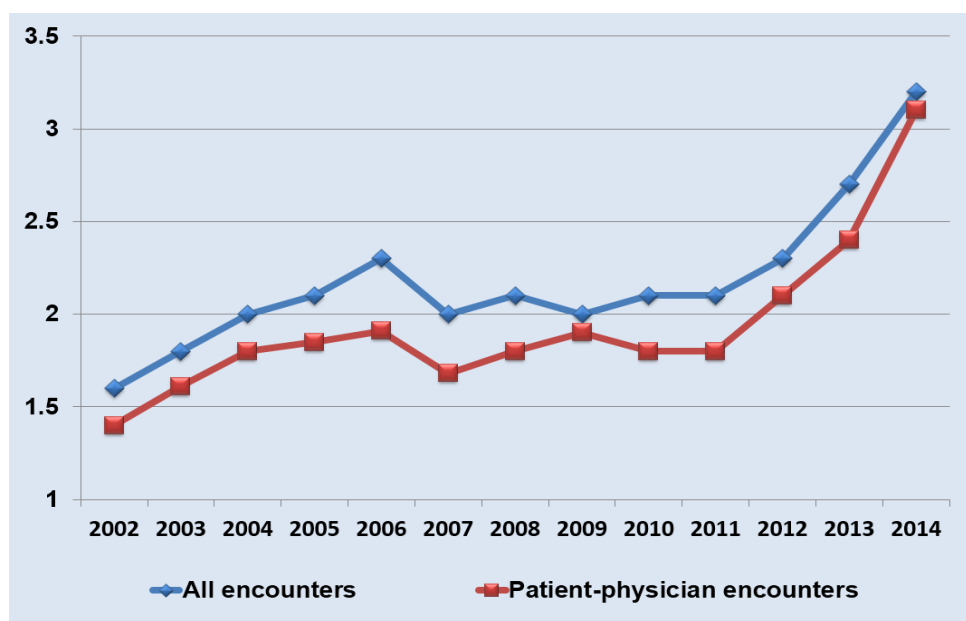
Physicians	21201	In-patient facilities	260
Number per 100000 population	568.8	Polyclinics	284
Nurses	14809	Women consultancy centers (independent)	29
Number per 100000 population	397.3	Ambulance stations	104
Number of hospital beds	11675	Blood transfusion facilities	20
Number per 100000 population	313.3	Nurseries for infants	1
Encounters with physicians	10971954	Scientific research institutes	11
Home visits of physicians	257520	Rural physician-entrepreneurs	1256



In 2014, the numbers of encounters of the population with outpatient and in-patient health facilities have increased. This could be explained by the increased accessibility of health services after the universal health care program implementation.

In 2014, the outpatient service utilization growth was registered; the number of contacts with outpatient facilities per capita (3.2) approached the World Bank recommended number for developing countries - 3.0.

### Annual number of outpatient encounters per capita, Georgia



Source: NCDC

The number of outpatient encounters is relatively low, compared to the European region and the CIS countries: according to the latest available the World Health Organization data, in 2013, the average number of such encounters in the European region was 7.5, per capita; in the CIS countries - 8.9 per.

In 2014, the number of surgical operations increased by 8%, compared to the previous year, the increase mainly was caused by the high number of heart and eye surgeries.

In 2014, the number of heart surgeries increased by 20.1%. From the total number of interventions, 4.4% were due to congenital heart anomalies; endovascular balloon dilatation was conducted in 1.3%, implanting of pacemakers - in 2.9%, coronary artery angioplasty in 54.1%. Invasive electrophysiology and ablation method was used in 115 cases.

There was a 27.6% increase of the number of eye surgeries.

The number of the hip and knee joint replacements, which is one indicator of the welfare of the population, decreased by 13%.

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 66 thousand donations were collected, of which about 20 thousand (about 31%) were free.

In 2014, 82 new ambulatories were built and equipped.

# Health expenditures

*In 2011-2014, In Georgia, the gross domestic product per capita increased by 14%. Last years along with the increase of the share of the government expenditures on the same time there was a decrease of the share of private expenditures on health.*

National health expenditures, Georgia

	2011	2012	2013	2014
GDP per capita (USD)	3,231	3,523	3,600	3,681
Government expenditure on health as % of GDP	1.7%	2.1%	2.7%	
Total health expenditures				
Governmental	18%	21%	29%	
Private	79%	76%	68%	
International donations	3%	3%	3%	

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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