MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOUR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

NATIONAL CENTRE FOR DISEASE CONTROL AND PUBLIC HEALTH

HEALTH CARE

STATISTICAL YEARBOOK

2017
Georgia






Tbilisi
2018

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PREFACE

The yearbook “Health Care” represents an annual edition of the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs containing the basic statistical indicators of the population health status and resources of the health care system. This type of periodical editions has been published since 1996.

The yearbook is prepared on the basis of the data collected by the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs and the National Center for Disease Control and Public Health named after L. Sakvarelidze of the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia.

Data are presented according to the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems.

The methodology, recommended by the WHO, which provides comparability of indicators over countries, is applied to the calculation of the indicators given in the yearbook.

This yearbook describes health services, maternal and child health status, and data on communicable and non-communicable diseases according to the classes of diseases, such as infectious and parasitic diseases, neoplasms, the circulatory system diseases, endocrine diseases, the respiratory system diseases, the genitourinary system diseases, mental and behavioral disorders, as well as basic demographic data, and other.

The results of the Population Census conducted in 2014 showed a sharp decline of the number of the population. The National Statistics Office of Georgia, based on the Census results, recalculated data for 1994-2014. The recalculated data included the mid-year population number, live births, deaths, internal and external migrations. Since the population data are used to calculate different types of health indicators, the above mentioned vital data has been used for recalculation of all health indicators. This process caused a difference between information in the current publication and indicators published in previous years.

Chapter 1.

The Sustainable Development Goals in Georgia

Sustainable Development Goals

In 2015, Sustainable Development Goals (SDGs) have been adopted at the UN Summit after a partial achievement of the Millennium Development Goals – MDGs, to maintain and further advance the successes.

SDGs represent a continuation of the Millennium Development Goals until 2030. The 17 goals of sustainable development are broader and more ambitious than the Millennium Development Goals, and represent the agenda that ensures that "no one should be left behind".

SDGs are aimed at the eradicating poverty, prioritizing of health, education, food security and accessibility, and cover a wide range of issues such as economics, social and environmental goals, aspiring more peaceful and engaged societies. The third strategic goal is to achieve healthy living and well-being for people of all ages, ensuring access to safe and effective medicines and vaccines, universal access to healthcare services, which is a major priority for global health.

In 2017, countries have integrated SDGs into their programs and have achieved progress in the framework of "Health 2020" policy. Georgia shares SDGs, "Health 2020" and prevention and control of non-communicable diseases global initiatives and is actively involved in monitoring the progress of the achievement of the abovementioned goals.

Global SDG indicates that Georgia occupies the 47th place among 156 countries (Figure 1.1).

Figure 1.1 SDG Global rank, Georgia is at the 47th place among 156 country, 2018

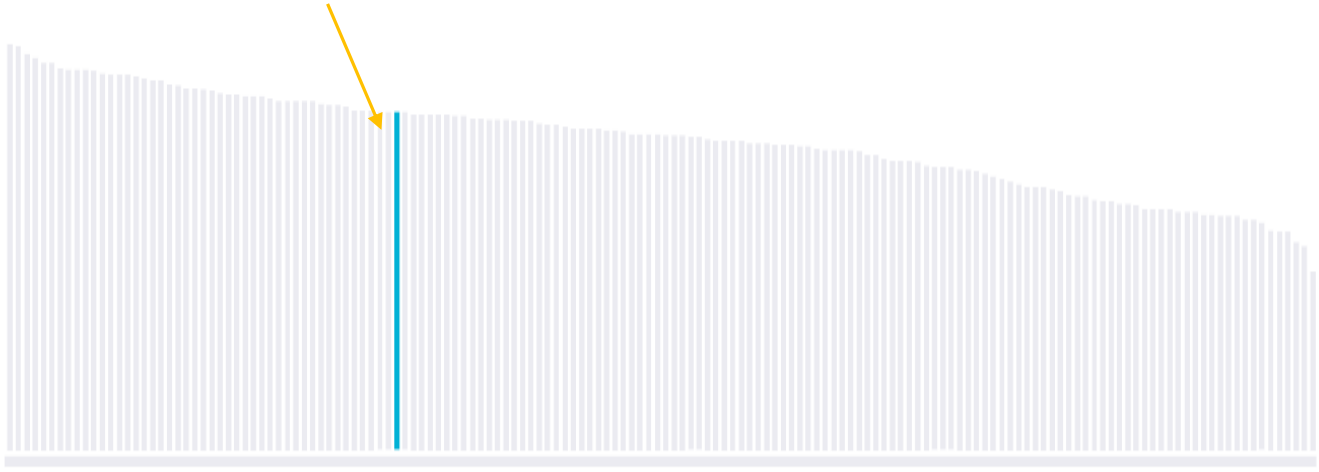
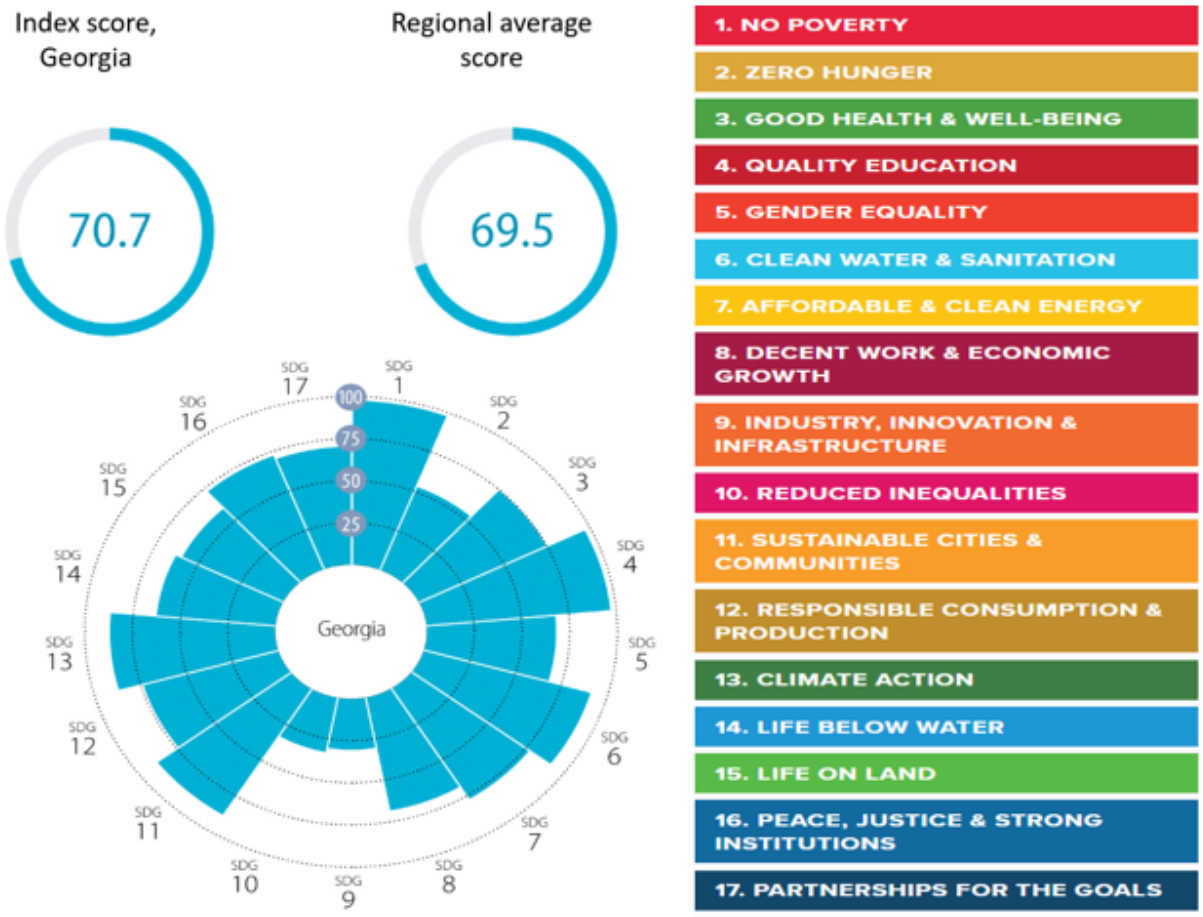
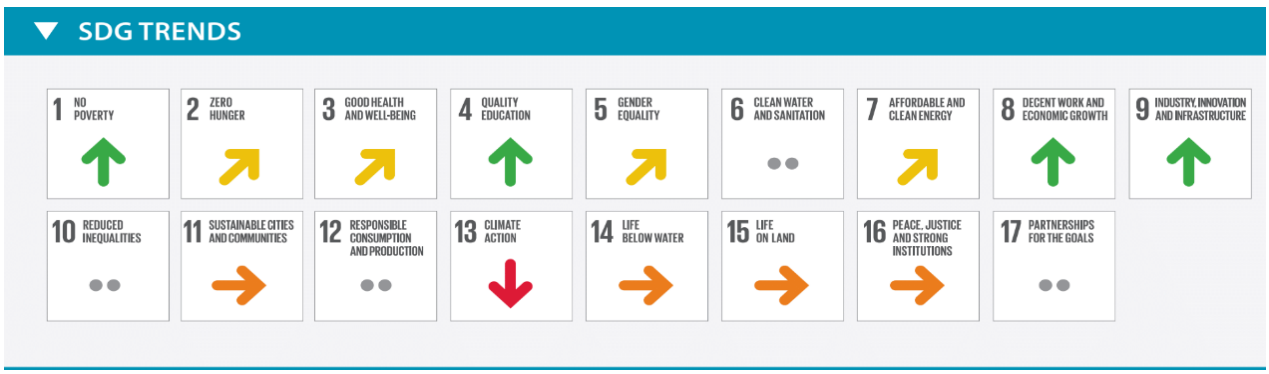


Figure 1.2 Average Performance by SDG, Georgia, 2018



SDG trends, Georgia, 2018

(http://www.healthdata.org/georgia, 2018 SDG Index Country Profiles)



Rating	Trend
SDG achieved	Mantaining SDG achievement
Challenges remain	On track to achieve goal by 2030
Significant challenges remain	Score moderately increasing, insufficient to attain goal
Major challenges remain	Score stagnating or in creasing at less than 50% of required rate
Information unavailable	Dicreasing
	Information unavailable

	Value	Rating	Trend
SDG1 – End Poverty			
Poverty headcount ratio at $1.90/day (% population)	2.4		
Projected poverty headcount ratio at $1.90/day in 2030 (% population)	0.2		
SDG2 – Zero Hunger			
Prevalence of undernourishment (% population)	7.0		
Prevalence of stunting (low height-for-age) in children under 5 years of age (%)	11.3		
Prevalence of wasting in children under 5 years of age (%)	1.6		
Prevalence of obesity, BMI ≥ 30 (% adult population)	21.7		
Cereal yield (t/ha)	2.5		
Sustainable Nitrogen Management Index	1.1		
SDG3 – Good Health and Well-Being			
Maternal mortality rate (per 100,000 live births)	36.0		
Neonatal mortality rate (per 1,000 live births)	7.1		
Mortality rate, Under-5 (per 1,000 live births)	10.7		
Incidence of tuberculosis (per 100,000 population)	92.0		
HIV prevalence (per 1,000)	0.0		
Age-standardised death rate due to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in populations age 30–70 years (per 100,000 population)	22.2		
Age-standardised death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	176.6		
Traffic deaths rate (per 100,000 population	11.6		
Healthy Life Expectancy at birth (years)	74.4		
Adolescent fertility rate (births per 1,000 women ages 15-19)	47.1		
Births attended by skilled health personnel (%)	99.9		
Surviving infants who received 2 WHO-recommended vaccines (%)	92.0		
Universal Health Coverage Tracer Index (0-100)	59.6		
Subjective Wellbeing (average ladder score, 0-10)	4.5		
SDG4 – Quality Education			
Net primary enrolment rate (%)	99.6		
Mean years of schooling	12.2		
Literacy rate of 15-24 year olds, both sexes (%)	99.7		
SDG5 – Gender Equality			
Unmet demand for contraception, estimated (% women married or in union, ages 15-49	23.3		
Female to male mean years of schooling of population age 25 + (%)	100.8		
Female to male labour force participation rate (%)	73.4		
Seats held by women in national parliaments (%)	16.0		
SDG6 – Clean Water and Sanitation			
High-income countries: population using safely managed water services (%)	NA		
Other countries: population using at least basic drinking water services (%)	NA		
High-income countries: population using safely managed sanitation services (%)	NA		
Other countries: population using at least basic sanitation services (%)	84.9		
Freshwater withdrawal as % total renewable water resources	4.6		
Imported groundwater depletion (m 3/year/capita)	5.3		
SDG7 – Affordable and Clean Energy			
Access to electricity (% population)	100.0		
Access to clean fuels & technology for cooking (% population)	55.0		
CO2 emissions from fuel combustion / electricity output (MtCO2/TWh)	0.8		
SDG8 – Decent Work and Economic Growth			
Adjusted GDP Growth (%)	0.6		
Slavery score (0-100)	80.0		
Adults (15 years +) with an account at a bank or other financial institution or with a mobile-money-service provider (%)	61.2		
Unemployment rate (% total labour force)	11.5		
SDG9 – Industry, Innovation and Infrastructure			
Proportion of the population using the internet (%)	58.8		
Mobile broadband subscriptions (per 100 inhabitants)	64,0		
Quality of overall infrastructure (1= extremely underdeveloped; 7= extensive and efficient by international standards)	3,9		
Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)	2,2		
The Times Higher Education Universities Ranking, Average score of top 3 universities (0-100)	12,4		
Number of scientific and technical journal articles (per 1,000 population)	0,1		
Research and development expenditure (% GDP)	0,3		

SDG10 – Reduced Inequalities			
Gini Coefficient adjusted for top income (1-100)	51,4	●	●●
	Value	**Rating**	**Trend**
SDG11 – Sustainable Cities and Communities			
Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) in urban areas (µg/m3	20,5	●	↓
Improved water source, piped (% urban population with access)	97,0	●	↑
Satisfaction with public transport (%)	73,0	●	↓
SDG12 – Responsible Consumption and Production			
Municipal Solid Waste (kg/day/capita)	1,7	●	●●
E-waste generated (kg/capita)	4,6	●	●●
Anthropogenic wastewater that receives treatment (%)	18,2	●	●●
Production-based SO2 emissions (kg/capita)	1,6	●	●●
Net imported SO2 emissions (kg/capita)	4,5	●	●●
Reactive nitrogen production footprint (kg/capita)	14,1	●	●●
Net imported emissions of reactive nitrogen (kg/capita)	35,5	●	●●
SDG13 – Climate Action			
Energy-related CO2 emissions per capita (tCO2/capita)	2,4	●	↓
Imported CO2 emissions, technology-adjusted (tCO2/capita)	0,8	●	●●
Climate Change Vulnerability Index	0,1	●	●●
CO2 emissions embodied in fossil fuel exports (kg/capita)	119,1	●	●●
SDG14 – Life Below Water			
Mean area that is protected in marine sites important to biodiversity (%)	NA	●	●●
Ocean Health Index-Biodiversity (0-100)	94,9	●	→
Ocean Health Index-Clean Waters (0-100)	54,8	●	↓
Ocean Health Index-Fisheries (0-100)	53,7	●	↓
Fish Stocks overexploited or collapsed by EEZ (%)	NA	●	●●
Fish caught by trawling (%)	6,4	●	↑
SDG15 – Life on Land			
Mean area that is protected in terrestrial sites important to biodiversity (%)	29,3	●	→
Mean area that is protected in freshwater sites important to biodiversity (%)	27,3	●	→
Red List Index of species survival (0-1)	0,9	●	↓
Annual change in forest area (%)	0,3	●	●●
Imported biodiversity threats (threats per million population)	4,0	●	●●
SDG16 – Peace, Justice and Strong Institutions			
Homicides (per 100,000 population)	2,7	●	●●
Prison population (per 100,000 population)	257,1	●	●●
Population who feel safe walking alone at night in the city or area where they live (%)	78,0	●	↓
Government Efficiency (1-7)	3,8	●	↓
Property Rights (1-7)	4,3	●	↑
Children under 5 years of age whose births have been registered with a civil authority (%)	99,6	●	●●
Corruption Perception Index (0-100)	56,0	●	→
Children 5–14 years old involved in child labour (%)	4,2	●	●●
Transfers of major conventional weapons (exports) (constant 1990 US$ million per 100,000 population)	0,2	●	●●
SDG17 – Partnerships for the Goals			
Government Health and Education spending (% GDP)	10,6	●	●●
High-income and all OECD DAC countries: International concessional public finance, including official development assistance (% GNI)	NA	●	●●
Other countries: Tax revenue (% GDP)	23,5	●	↓
Tax Haven Score (best 0-5 worst)	0,0	●	●●

Chapter 2.

Vital Statistics

Vital statistics*

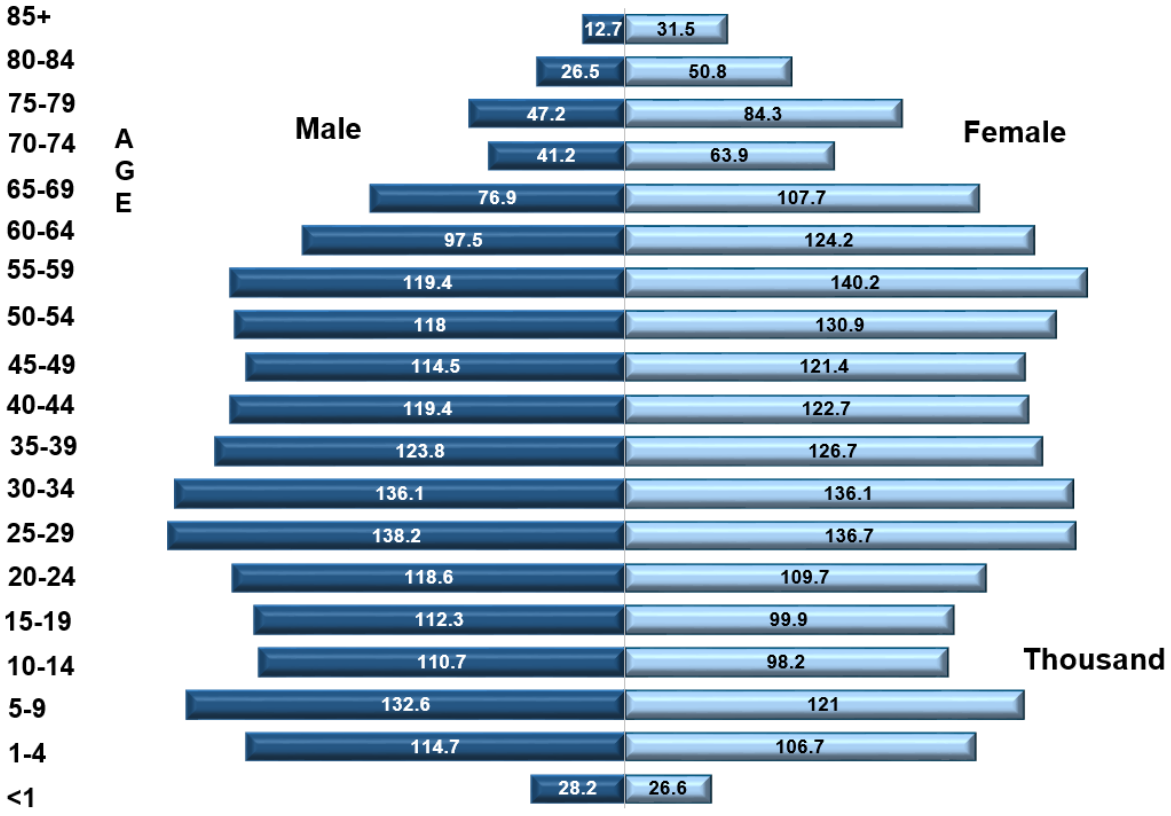
Georgia consists of 11 administrative regions and 64 districts.

Population

In 2017, the annual mid-year population number was 3728000.

Female population constituted 52.1% of total number; males - 47.9% (Figure 2.1).

Figure 2.1 Population pyramid, Georgia, 2017



Source: National Office for Statistics

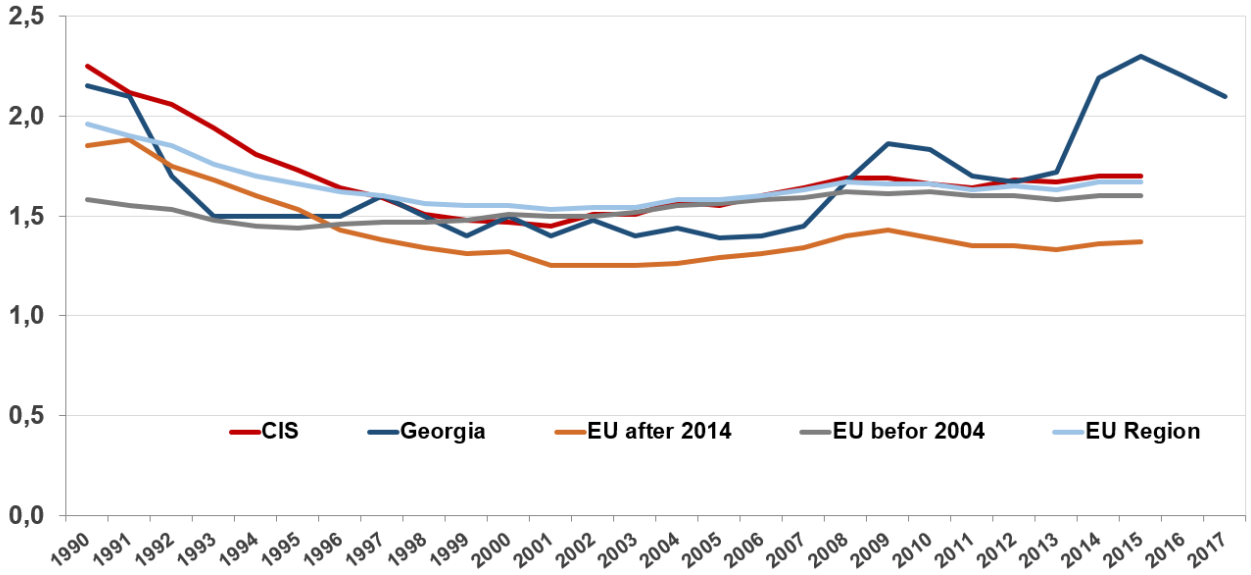
* *This chapter includes data of the National Statistics Office of Georgia (GeoStat)*

Birth rate

In 2017, the registered number of live births was 53293 (in 2015 – 56569), total birth rate was 14.3 per 1000 population. The shares of live births by birth the order were as follow: 1st – 38.9%, 2nd – 38.3%, 3rd – 17.4%.

According to the 2017 data, the secondary sex ratio increased, compared to the previous year (Figure 2.2).

Figure 2.2 Total Fertility Rate (TFR)

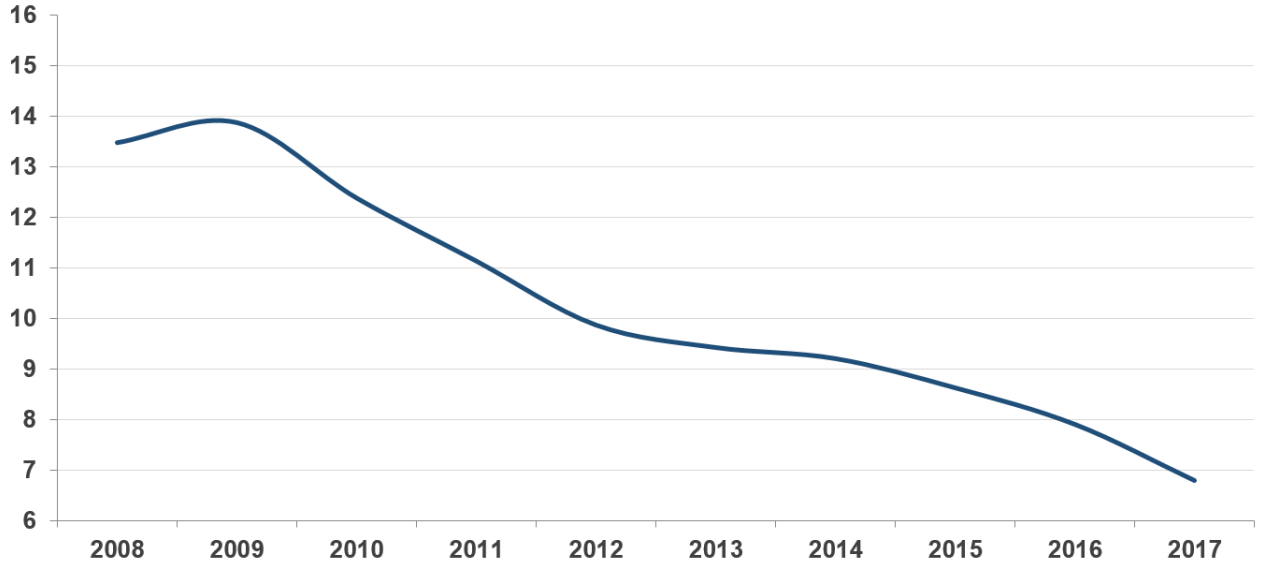


Source:National Office for Statistics; WHO HFA DB

In 2014, TFR was 1.3-fold higher, compared to the year 2013. This was caused by a decreased number of population, shown by the results of the National Census of population. In 2015, the total fertility rate increased by 5%, and indicator was 2.3. In 2017, the TFR decreased again and was 2.1.

The trend of decrease of the share of babies, born to women aged under 20, which began in 2010, has continued. In 2017, the share of such babies of total number of live births is 6.8% (Figure 2.3).

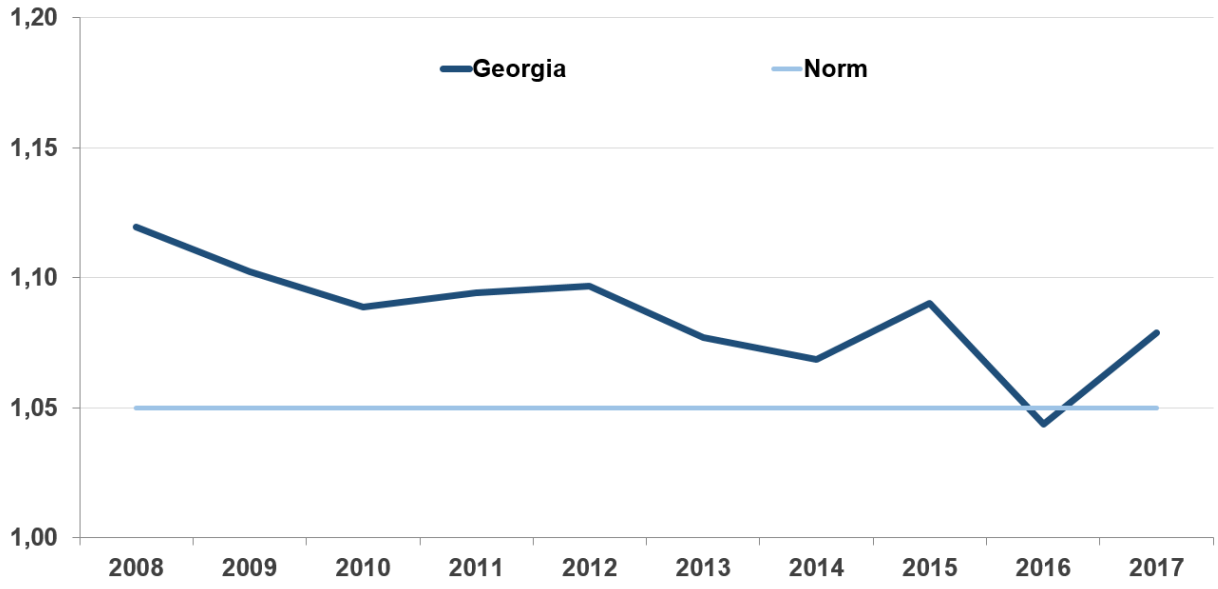
Figure 2.3 Share of babies, born to women aged under 20 in total number of live births, Georgia



Source:National Office for Statistics

In 2017, compared to the previous year, the secondary sex ratio at birth increased (Figure 2.4).

Figure 2.4 Total fertility rate (TFR), Georgia



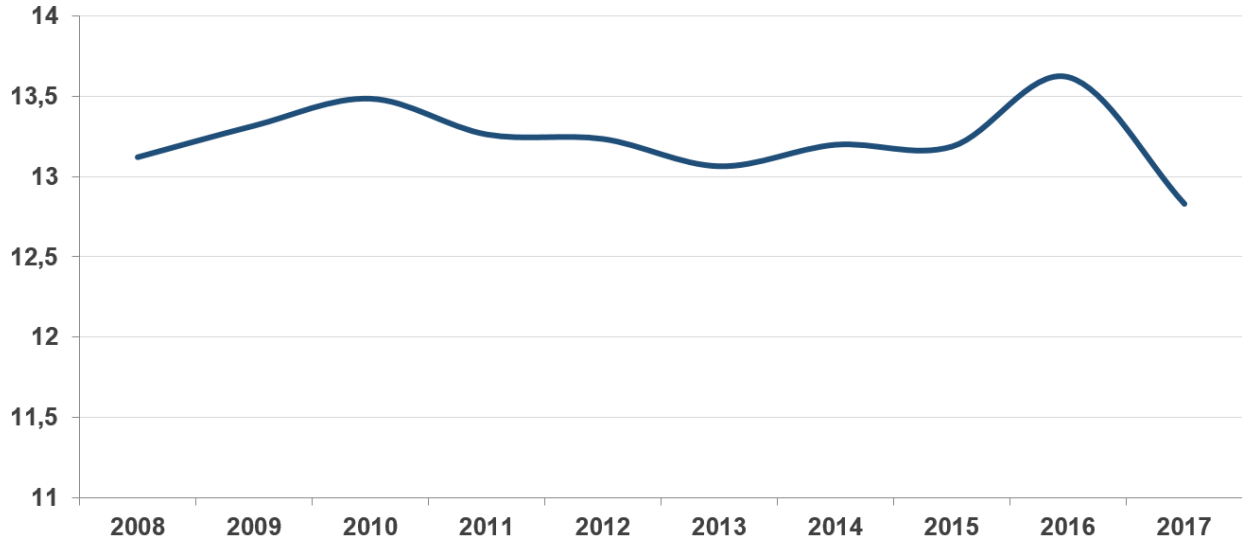
Source:National Office for Statistics

Mortality

Last few decades, a decrease of mortality and increase of life expectancy were mentioned in the world. Such change is partially associated with the increase of the number of non-fatal cases of noncommunicable diseases, the reduction of mortal cases caused by injuries, better control of risk factors, and early detection and improved management of diseases. In Georgia, similar to developed countries, the share of older population is increasing, which itself is reflected upon the mortality rate.

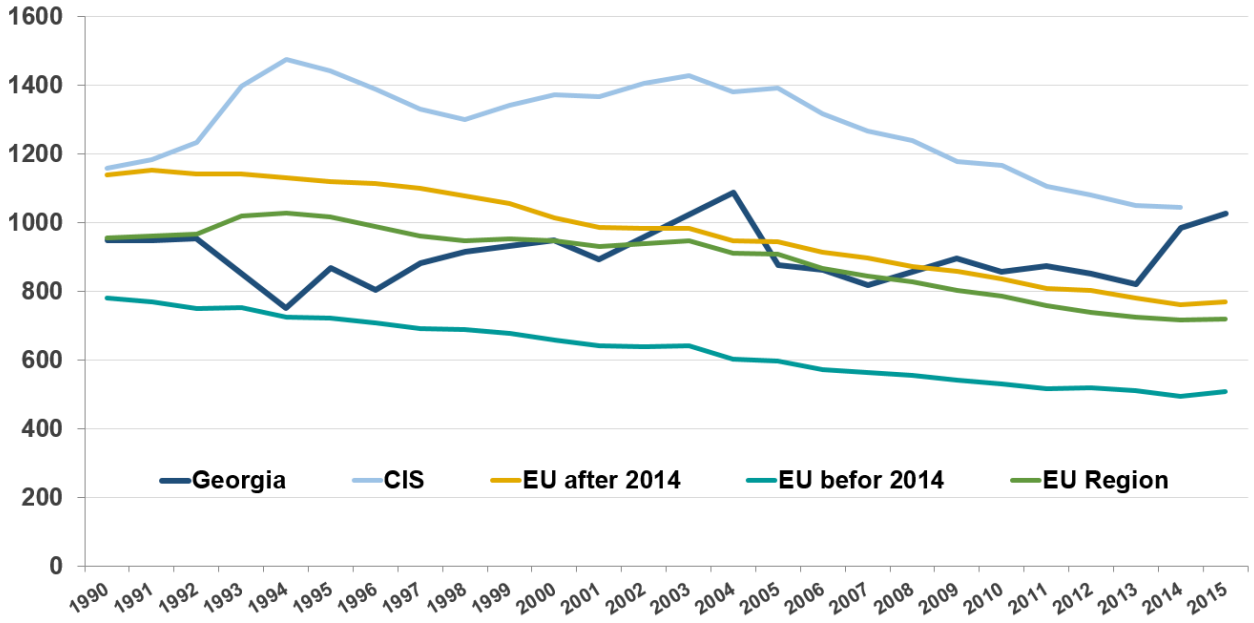
According to the National Statistics Office of Georgiain 2011-2015, the crude mortality remains stable. After an increase in 2016, in 2017, a reduction of the indicator was registered (Figure 2.5).

Figure 2.5 Crude mortality rate, Georgia



Source:National Office for Statistics

Figure 2.6 Age standardized mortality rate, Georgia

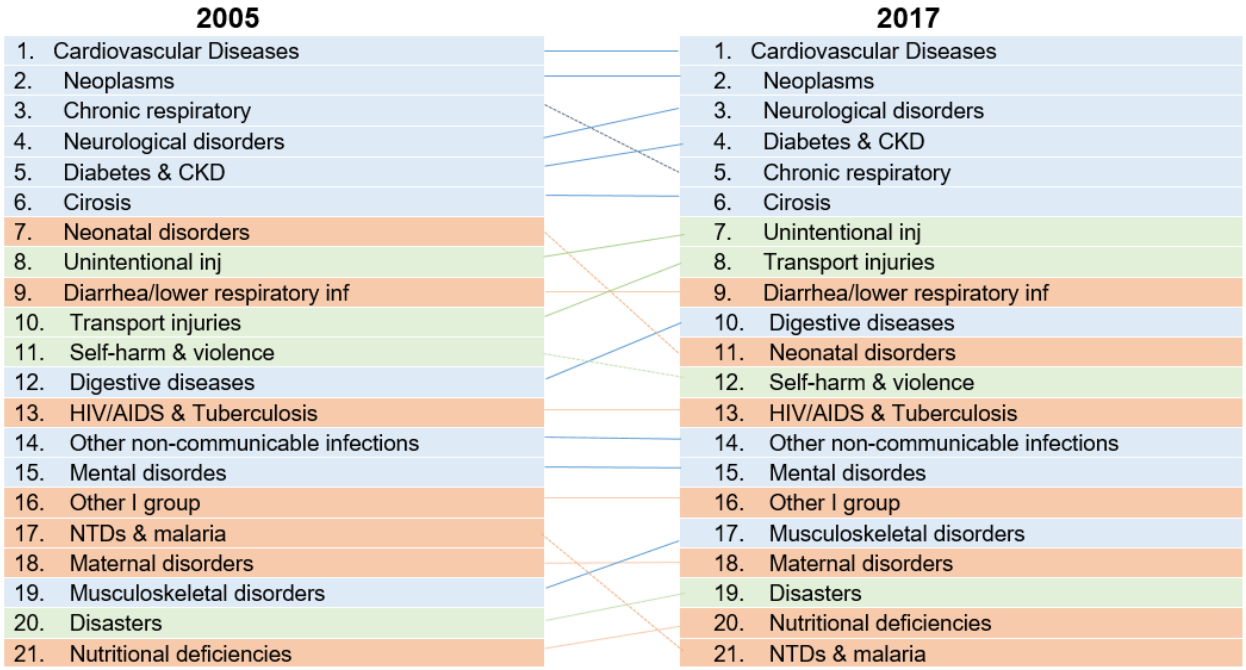


Source:National Office for Statistics; WHO HFA DB

51.1% of the total number of deaths were registered in males, 48.9% - in females;.1.5% of total number of deaths were registered in children Under-15, of which 72.5% were children Under-1.

In Georgia, like in the most countries the burden of mortality is mainly caused by noncommunicable diseases (Figure 2.7).

Figure 2.7 Main causes of death, Georgia



Source: https://vizhub.healthdata.org/gbd-compare/

A completeness of registration of mortal cases and a correct identification of the underlying causes of death are the main criteria for mortality registration quality assessment. Last years, significant changes of the Georgian system have happened. This was reflected in the international assessments, according to which the completeness of the registration exceeds 95%, although the quality of identifying the underlying causes of death still remains a challenge.

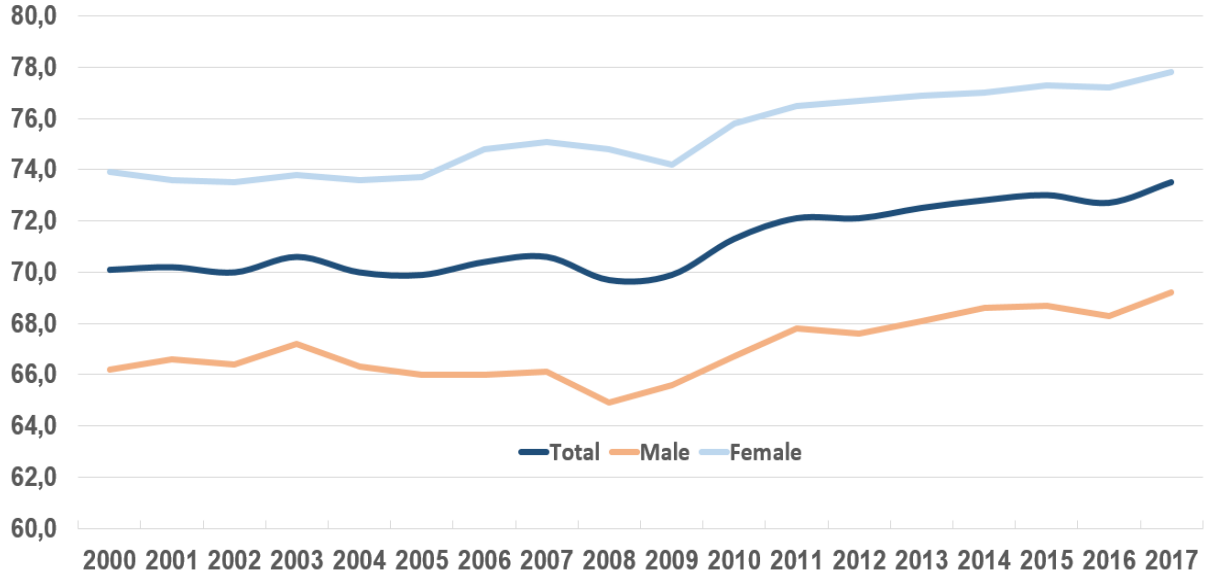
Natural population growth

In 2017, the natural population growth rate in Georgia was 1.5 per 1000 population. A negative natural growth rate was identified in: Imereti, Samegrelo-Zemo Svaneti, Guria, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti, and Kakheti.

Life expectancy

In 2017, life expectancy at birth was 73.5 years (in females – 77.8; in males – 69.2).

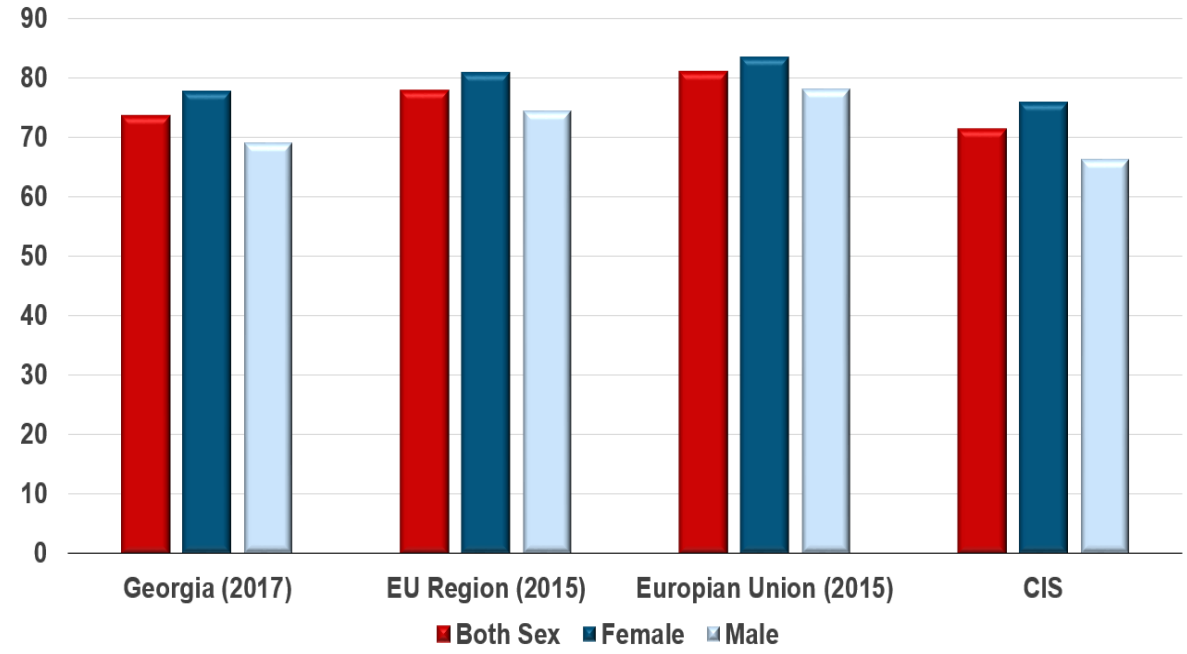
Figure 2.8 Life expectancy at birth, Georgia.



Source:National Office for Statistics

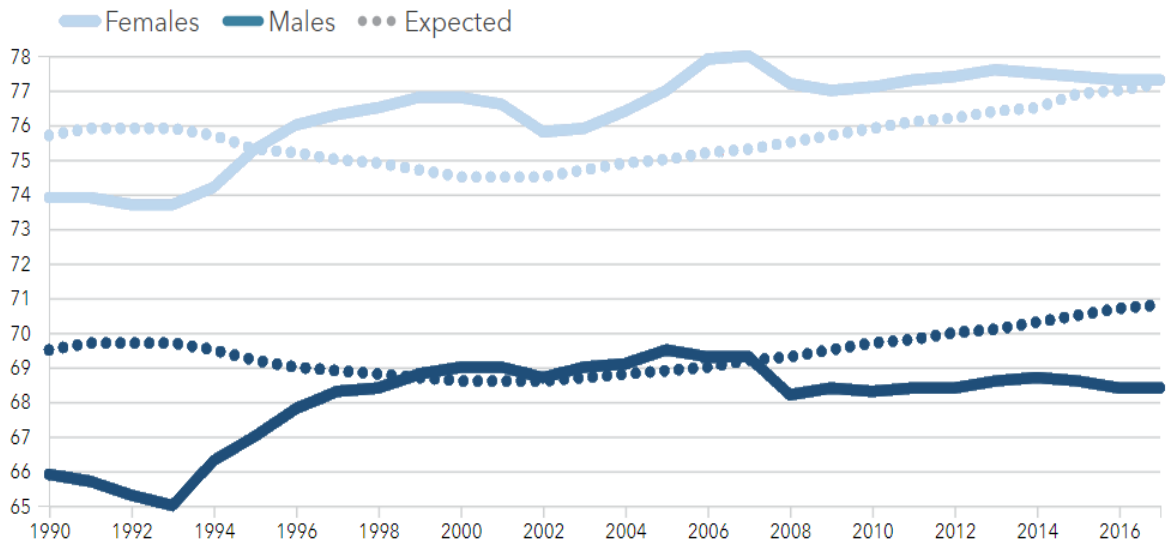
In Georgia, life expectancy at birth if high, compared to the CIS countries, and low, compared to the whole European Region (Figure 2.9).

Figure 2.9 Life expectancy at birth (last available year)



Source:National Office for Statistics; WHO HFA DB

Figure 2.10 Life expectancy at birth (last available year)



	Expected		Observed	
	1990	**2017**	**1990**	**2017**
Female	75.7	77.2	73.9	77.3
Male	69.5	70.8	65.9	68.4

Source: http://www.healthdata.org/georgia

Main demographic indicators, Georgia

	2016		2017	
	Number	**Indicator**	**Number**	**Indicator**
Number of life birth and birth rate per 1000 population	56569	15.2	53 293	14.3
Natural population growth and rate per 1000 population	5798	1.6	5 471	1.5
Number of death and mortality rate per 1000 population	50771	13.7	47 822	12.8
Infant mortality per 1000 life birth	507	8.6	512	9.0
Stillbirth and indicator per 1000 births	558	9. 8	506	9.4
Marriages and indicator per 1000 population	25101	6.7	23 684	6.4
Divorces and indicator per 1000 population	9539	2.6	10 222	2.7
Migration growth and migration balance	-8060	-8.1	-2 212	-0.6

Table 2.1 Mid-year population by regions (in thousands), Georgia

	2016	2017
Ajara	341.6	344.7
Tbilisi	1138.7	1152.1
Kakheti	316.8	315.3
Imereti	519.0	510.7
Samegrelo and Zemo Svaneti	326.3	322.5
Shida Kartli	261.2	259.8
Kvemo Kartli	428.9	431.0
Guria	111.9	111.0
Samtskhe-Javakheti	158.0	156.5
Mtskheta-Mtianeti	94.0	93.9
Racha-Lechkhumi and Kvemo Svaneti	31.2	30.5
Georgia	**3727.5**	**3728.0**

Table 2.2 Mid-year population by age and sex groups (in thousands), Georgia

	2016			2017		
Age	Both sexes	Males	Females	Both sexes	Males	Females
-1	57.8	29.8	28.0	54.8	28.2	26.6
1-4	213.8	111.0	102.7	221.5	114.7	106.7
5-9	247.7	129.8	117.9	253.7	132.6	121.0
10-14	206.8	109.6	97.2	209.0	110.7	98.2
15-19	218.6	115.7	102.9	212.1	112.3	99.9
20-24	239.1	123.1	116.1	228.3	118.6	109.7
25-29	277.0	138.9	138.2	275.0	138.2	136.7
30-34	269.8	134.4	135.5	272.2	136.1	136.1
35-39	249.3	122.7	126.6	250.6	123.8	126.7
40-44	242.2	118.9	123.4	242.1	119.4	122.7
45-49	236.7	114.1	122.5	235.9	114.5	121.4
50-54	257.6	121.2	136.4	248.9	118.0	130.9
55-59	255.5	117.1	138.4	259.6	119.4	140.2
60-64	217.6	95.4	122.2	221.6	97.5	124.2
65-69	177.6	74.0	103.6	184.6	76.9	107.7
70-74	103.2	40.5	62.8	105.1	41.2	63.9
75-79	138.9	50.2	88.7	131.6	47.2	84.3
80-84	73.5	25.6	47.9	77.3	26.5	50.8
85+	44.7	12.7	32.0	44.2	12.7	31.5
Total	**3727.5**	**1784.7**	**1942.8**	**3728.0**	**1788.6**	**1939.4**

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

Age	Both sexes	Males	Females
2010			
Total	**3786.7**	**1804.3**	**1982.3**
-15	685.2	362.7	322.6
15-64	2566.2	1237.6	1328.6
65+	535.3	204.1	331.2
2011			
Total	**3756.4**	**1789.7**	**1966.7**
-15	683.7	361.3	322.4
15-64	2545.5	1228.3	1317.2
65+	527.2	200.2	327.0
2012			
Total	**3728.9**	**1777.0**	**1951.8**
-15	681.8	359.7	322.1
15-64	2522.1	1218.6	1303.5
65+	525.1	198.8	326.3
2013			
Total	**3717.7**	**1773.1**	**1944.5**
-15	683.4	360.1	323.3
15-64	2508.1	1214.2	1293.9
65+	526.2	198.9	327.3
2014			
Total	**3719.4**	**1775.4**	**1944.1**
-15	694.1	364.9	329.1
15-64	2496.2	1210.5	1285.7
65+	529.1	199.9	329.3
2015			
Total	**3725.3**	**1780.4**	**1944.8**
-15	711.0	373.1	337.9
15-64	2480.4	1205.6	1274.8
65+	533.9	201.7	332.2
2016			
Total	**3727.5**	**1784.7**	**1942.8**
-15	726.1	380.3	345.8
15-64	2463.6	1201.5	1262.1
65+	537.9	202.9	335.0
2017			
Total	**3728.0**	**1788.6**	**1939.4**
-15	738.9	386.3	352.6
15-64	2446.3	1197.7	1248.6
65+	542.8	204.6	338.2

Table 2.4 Natural movement of the population, Georgia

Year	Live births		Deaths		Natural growth		Marriage		Divorce	
	Number	Rate per 1000 population	Number	Rate per 1000 population	Number	Rate per 1000 population	Number	Rate per 1000 population	Number	Rate per 1000 population
2008	52442	14.6	50490	13.1	1952	0.5	31414	8.2	3189	0.8
2009	56568	13.7	50794	13.3	5774	1.5	31752	8.3	4030	1.1
2010	55230	13.4	51066	13.5	4164	1.1	34675	9.2	4726	1.2
2011	51565	13.4	49818	13.3	1747	0.5	30863	8.2	5850	1.6
2012	49969	16.3	49347	13.2	622	0.2	30412	8.2	7136	1.9
2013	49657	15.9	48564	13.1	1093	0.3	34693	9.3	8089	2.2
2014	60635	15.2	49087	13.2	11548	3.1	31526	8.5	9119	2.5
2015	59249	14.3	49121	13.2	10128	2.7	29157	7.8	9112	2.4
2016	56569	14.8	50771	13.6	5798	1.6	25101	6.7	9539	2.6
2017	**53293**	**14.6**	**47822**	**12.8**	**5471**	**1.5**	**23684**	**6.4**	**10222**	**2.7**

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

Year	Age of mother							Total Fertility rate	Reproduction rate	
	-20	20-24	25-29	30-34	35-39	40-44	45+		Gross	Net
2008	48.0	129.1	100.8	58.7	24.8	5.6	0.3	1.8	0.9	0.8
2009	56.1	138.5	111.5	63.4	26.8	5.8	0.3	2.0	1.0	0.9
2010	52.2	132.6	111.0	67.0	29.1	6.8	0.3	2.0	1.0	0.9
2011	47.1	125.0	106.9	63.5	28.0	6.3	0.3	1.9	0.9	0.9
2012	43.0	120.3	105.5	65.6	28.5	6.9	0.4	1.9	0.9	0.9
2013	42.2	119.1	106.2	67.3	30.5	7.2	0.4	1.9	0.9	0.9
2014	51.5	144.7	131.3	86.5	38.9	9.2	0.7	2.3	1.1	1.1
2015	48.4	144.1	128.0	87.7	41.5	10.6	0.7	2.3	1.1	1.1
2016	43.4	134.9	127.5	86.4	43.7	11.2	0.8	2.2	1.1	1.1
2017	**36.2**	**126.1**	**126.9**	**84.5**	**44.0**	**10.5**	**0.5**	**2.1**	**1.0**	**1.0**

Table 2.6 Number of live births by regions, Georgia

	2016	2017
Ajara	5977	6108
Tbilisi	16784	14906
Kakheti	4870	4722
Imereti	7784	7574
Samegrelo and Zemo Svaneti	4797	4436
Shida Kartli	4074	3659
Kvemo Kartli	6892	6693
Guria	1535	1471
Samtskhe-Javakheti	2349	2178
Mtskheta-Mtianeti	1180	1205
Racha-Lechkhumi and Kvemo Svaneti	327	341
Georgia	**56569**	**53293**

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

Year	Total	Mother's age							
		- 20	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45+	Unknown
2007	49287	6549	18216	13021	7323	3058	727	79	314
2008	56565	7775	21025	14982	8392	3487	817	86	1
2009	63377	8896	22954	17250	9409	3920	864	84	0
2010	62585	7870	22126	17458	9878	4171	974	85	23
2011	58014	6513	20343	16787	9328	4038	899	93	13
2012	57031	5662	19571	16833	9734	4131	980	107	13
2013	57878	5462	19217	17238	10247	4522	1045	123	24
2014	60635	5578	19128	18233	11373	4936	1148	181	58
2015	59249	5108	17894	17712	11717	5266	1311	179	62
2016	**56569**	**4467**	**15643**	**17594**	**11706**	**5539**	**1386**	**208**	**26**

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

Year	Both sexes	Male	Female	(Male / Female) * 100
2008	52442	27698	24744	111.9
2009	56568	29660	26908	110.2
2010	55230	28787	26443	108.9
2011	51565	26942	24623	109.4
2012	49969	26138	23831	109.7
2013	49657	25747	23910	107.7
2014	60635	31325	29310	106.9
2015	59249	30902	28347	109.0
2016	56569	28887	27682	104.4
2017	**53293**	**27658**	**25635**	**107.9**

Table 2.9 Number of live births by birth order, Georgia

Year	Birth order					Total
	I	II	III	IV	V+	
2008	28978	16841	5040	1098	485	52442
2009	29953	18874	5959	1257	525	56568
2010	27303	19698	6338	1301	590	55230
2011	24559	19293	5989	1166	558	51565
2012	23075	19044	6065	1269	516	49969
2013	22478	18910	6387	1353	529	49657
2014	26355	23171	8724	1646	644	60635
2015	24684	22644	9189	1878	719	59249
2016	22949	21563	9389	1964	704	56569
2017	20742	20435	9291	2073	677	53293

Table 2.10 Number of deaths and mortality rates, Georgia, 2017

	Number of deaths			Mortality rate (per 1000 population)		
Age	**Both sexes**	**Male**	**Female**	**Both sexes**	**Male**	**Female**
-1	512	278	234	9.3	9.9	8.8
1-4	82	49	33	0.4	0.4	0.3
5-9	55	34	21	0.2	0.3	0.2
10-14	57	37	20	0.3	0.3	0.2
15-19	103	67	36	0.5	0.6	0.4
20-24	202	162	40	0.9	1.4	0.4
25-29	298	238	60	1.1	1.7	0.4
30-34	315	234	81	1.2	1.7	0.6
35-39	521	415	106	2.1	3.4	0.8
40-44	809	620	189	3.3	5.2	1.5
45-49	1159	865	294	4.9	7.6	2.4
50-54	1814	1343	471	7.3	11.4	3.6
55-59	2899	2105	794	11.2	17.6	5.7
60-64	3439	2315	1124	15.5	23.8	9.1
65-69	4346	2795	1551	23.5	36.4	14.4
70-74	3702	2119	1583	35.2	51.5	24.8
75-79	8541	4054	4487	64.9	85.8	53.2
80-84	8558	3523	5035	110.7	132.7	99.2
85+	10410	3170	7240	235.5	248.9	230.0
Total	**47822**	**24423**	**23399**	**12.8**	**13.7**	**12.1**

Table 2.11 Infant deaths by sex, Georgia

	Infant deaths			Neonatal deaths			Postneonatal deaths		
	Both sexes	**Male**	**Female**	**Both sexes**	**Male**	**Female**	**Both sexes**	**Male**	**Female**
2008	1384	792	592	1135	628	507	249	164	85
2009	1272	734	538	1012	589	423	260	145	115
2010	932	538	394	680	397	283	252	141	111
2011	714	430	284	507	296	211	207	134	73
2012	728	426	302	544	325	219	184	101	83
2013	654	386	268	465	274	191	189	112	77
2014	578	316	262	393	215	178	185	101	84
2015	507	275	232	345	186	159	162	89	73
2016	507	292	215	356	212	144	151	80	71
2017	512	278	234	362	201	161	150	77	73

Table 2.12 Mortality by underlying cause of death (rate per 100000 population), Georgia, 2017

	Number	Rate
Total	**47822**	**1283.0**
Certain infectious and parasitic diseases	636	17.1
Neoplasms	6545	175.6
Diseases of blood and blood-forming organs	563	15.1
Endocrine, nutritional and metabolic diseases	1002	26.9
Mental and behavioral disorders	111	3.0
Diseases of the nervous system	617	16.6
Diseases of the eye and adnexa	6	0.2
Diseases of the circulatory system	19857	532.7
Diseases of the respiratory system	2355	63.2
Diseases of the digestive system	1358	36.4
Diseases of the skin and subcutaneous tissue	53	1.4
Diseases of the musculoskeletal system and connective tissue	61	1.6
Diseases of the urinary system	796	21.4
Pregnancy, childbirth and the puerperium	14	0.4
Certain conditions originating in the perinatal period	359	9.6
Congenital malformations, deformations and chromosomal abnormalities	148	4.0
Ill-defined causes	11639	312.2
Injury, poisoning and certain other consequences of external causes	1702	45.7

Table 2.13 Under-15 mortality by underlying cause of death (rate per 100000 children of the corresponding age and sex), Georgia, 2017

	Total		Male		Female	
	Number	Rate	Number	Rate	Number	Rate
Total	706	88.4	398	103.0	308	87.3
Certain infectious and parasitic diseases	8	1.0	4	1.0	4	1.1
Neoplasms	28	3.5	15	3.9	13	3.7
Diseases of blood and blood-forming organs	12	1.5	7	1.8	5	1.4
Endocrine, nutritional and metabolic diseases	7	0.9	5	1.3	2	0.6
Diseases of the nervous system	35	4.4	21	5.4	14	4.0
Diseases of the circulatory system	11	1.4	5	1.3	6	1.7
Diseases of the respiratory system	23	2.9	15	3.9	8	2.3
Diseases of the digestive system	1	0.1	1	0.3	0	0.0
Diseases of the musculoskeletal system and connective tissue	2	0.3	2	0.5	0	0.0
Certain conditions originating in the perinatal period	359	44.9	199	51.5	160	45.4
Congenital malformations, deformations and chromosomal abnormalities	134	16.8	69	17.9	65	18.4
Ill-defined cases	21	2.6	16	4.1	5	1.4
Injury, poisoning and certain other consequences of external causes	65	8.1	39	10.1	26	7.4

Table 2.14 Infant mortality by underlying cause of death (rate per 100000 children of the corresponding age and sex), Georgia, 2017

	Total		Male		Female	
	Number	Rate	Number	Number	Number	Rate
Total	512	933.7	278	985.5	234	878.8
Certain infectious and parasitic diseases	2	3.6	1	3.5	1	3.8
Neoplasms	3	5.5	1	3.5	2	7.5
Diseases of blood and blood-forming organs	6	10.9	3	10.6	3	11.3
Endocrine, nutritional and metabolic diseases	3	5.5	2	7.1	1	3.8
Diseases of the nervous system	3	5.5	2	7.1	1	3.8
Diseases of the respiratory system	7	12.8	3	10.6	4	15.0
Diseases of the digestive system	0	0.0	0	0.0	0	0.0
Diseases of the genitourinary system	2	3.6	2	7.1	0	0.0
Certain conditions originating in the perinatal period	359	654.7	199	705.5	160	600.9
Congenital malformations, deformations and chromosomal abnormalities	120	218.8	63	223.3	57	214.1
Ill-defined cases	0	0.0	0	0.0	0	0.0
Injury, poisoning and certain other consequences of external causes	7	12.8	2	7.1	5	18.8

Table 2.15 Under-5 mortality by the underlying cause of death (rate per 100000 children of the corresponding age and sex), Georgia, 2017

	Total		Male		Female	
	Number	Rate	Number	Number	Number	Rate
Total	594	215.0	327	228.8	267	200.2
Certain infectious and parasitic diseases	3	1.1	2	1.4	1	0.7
Neoplasms	10	3.6	4	2.8	6	4.5
Diseases of blood and blood-forming organs	11	4.0	6	4.2	5	3.7
Endocrine, nutritional and metabolic diseases	3	1.1	2	1.4	1	0.7
Diseases of the nervous system	25	9.0	15	10.5	10	7.5
Diseases of the circulatory system	0	0.0	0	0.0	0	0.0
Diseases of the respiratory system	16	5.8	9	6.3	7	5.2
Diseases of the digestive system	0	0.0	0	0.0	0	0.0
Diseases of the musculoskeletal system and connective tissue	0	0.0	0	0.0	0	0.0
Diseases of the genitourinary system	2	0.7	2	1.4	0	0.0
Certain conditions originating in the perinatal period	359	129.9	199	139.2	160	120.0
Congenital malformations, deformations and chromosomal abnormalities	132	47.8	68	47.6	64	48.0
Ill-defined cases	8	2.9	6	4.2	2	1.5
Injury, poisoning and certain other consequences of external causes	25	9.0	14	9.8	11	8.2

Table 2.16 Number of deaths by regions, Georgia

	2015	2016
Ajara	3622	3480
Tbilisi	12720	11976
Kakheti	5099	4806
Imereti	9102	8733
Samegrelo and Zemo Svaneti	5532	5119
Shida Kartli	3717	3449
Kvemo Kartli	4855	4351
Guria	1832	1861
Samtskhe-Javakheti	2053	1941
Mtskheta-Mtianeti	1416	1370
Racha-Lechkhumi and Kvemo Svaneti	823	736
Georgia	**50771**	**47822**

Table 2.17 Population natural growth by regions, Georgia, 2016-2017

	2015	2016
Ajara	2355	2628
Tbilisi	4064	2930
Kakheti	-229	-84
Imereti	-1318	-1159
Samegrelo and Zemo Svaneti	-735	-683
Shida Kartli	357	210
Kvemo Kartli	2037	2342
Guria	-297	-390
Samtskhe-Javakheti	296	237
Mtskheta-Mtianeti	-236	-165
Racha-Lechkhumi and Kvemo Svaneti	-496	-395
Georgia	**5798**	**5471**

Table 2.18 Life expectancy at birth (in years), Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	**69.7**	**69.9**	**71.3**	**72.1**	**72.1**	**72.5**	**72.8**	**73.0**	**72.7**	**73.5**
Male	64.9	65.6	66.7	67.8	67.6	68.1	68.6	68.7	68.3	69.2
Female	74.8	74.2	75.8	76.5	76.7	76.9	77.0	77.3	77.2	77.8

Chapter 3.

Population Health Services

Healthcare provision

Health resources and resource utilization, Georgia, 2017

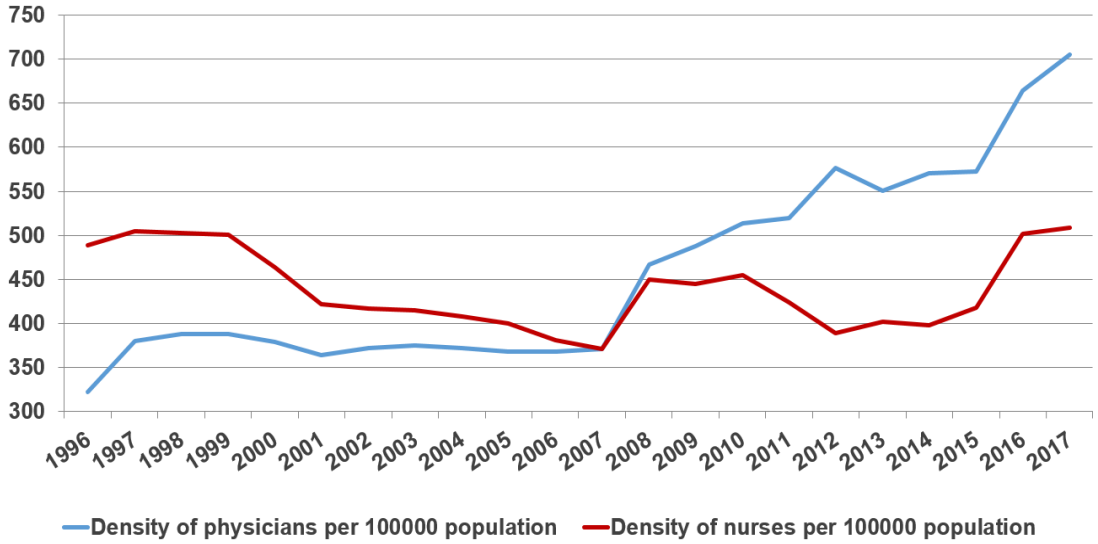
Number of physicians	**27362**	Number of In-patient facilities	**280**
Number of physicians per 100000 population	**734.0**	Number of out-patient facilities	**1092**
Number of nurses	**17998**	Antenatal care centers	**330**
Number of nurses per 100000 population	**482.8**	Ambulance stations	**82**
Number of hospital beds	**15084**	Blood transfusion facilities	**21**
Number of hospital beds per 100000 population	**404.6**	Nurseries for infants	**1**
Encounters with physicians	**10486447**	Scientific- research institutions	**9**
Home visits of physicians	**239103**	Rural physician-entrepreneurs	**1277**

Health workforce and Healthcare network

According to WHO strategy, an adequate number of health workforce in the country is very important to provide effective and productive medical services.

Densities of physicians and nurses (numbers of physicians and nurses per 100000 population) are main indicators of healthcare resources (Figure 3.1). In Georgia, an increase of the number of physicians per 100000 population has been observed since 2006. This indicator in Georgia is significantly higher than in the European region, the EU and the CIS countries (Figure 3.2). In 1998 – 2013, the number of nurses per 100000 population had a trend of reduction, and despite of the recently observed increase this indicators is significantly lower than the indicators of the European region, the EU and the CIS countries.

Figure 3.1 Numbers of professially active physicians[1] and nurses[2] per 100000 population, Georgia

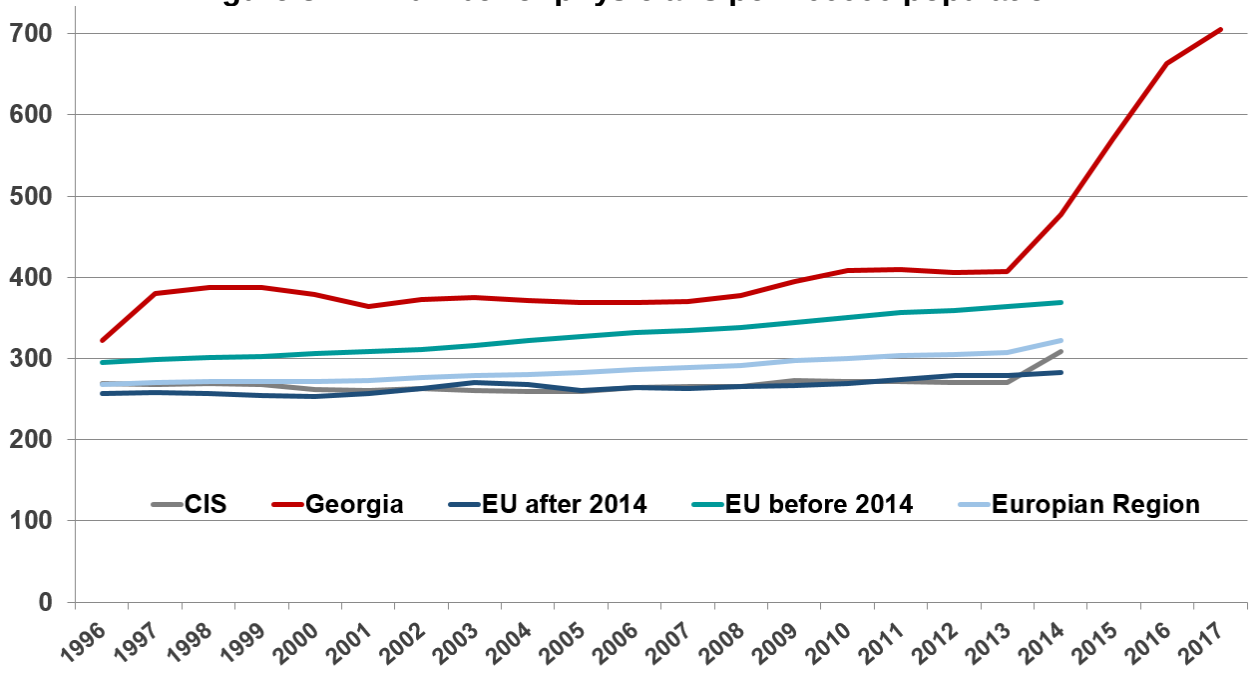


Source: WHO HFA DB; NCDC

[1] Professionally active physicians include practising physicians and other physicians for whom their medical education is a prerequisite for the execution of the job. Exclusion: students who have not yet graduated, dentists, stomatologists, dental and maxillofacial surgeons, physicians working in administration, research and in other posts that exclude direct contact with patients, unemployed physicians and retired physicians, physicians working abroad

[2] Professionally active nurses include practising and other (non-practising) nurses for whom their education is a prerequisite for the execution of the job. Exclusion: midwives who hold a post / job under which midwifery education is not required, unemployed, midwives and retired midwives, midwives working abroad.

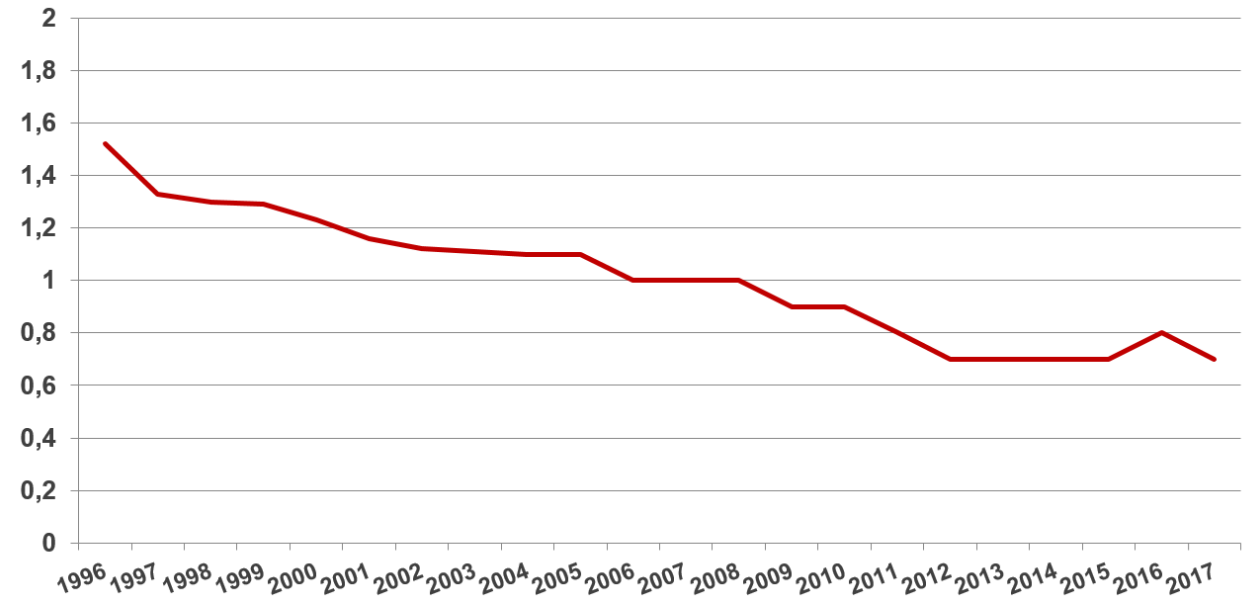
Figure 3.2 Number of physicians per 100000 population



Source: WHO HFA DB; NCDC

In the European region and EU countries, the ration of physicians to nurses is about 2-2.7 and the tendency of this indicator is positive. In Georgia,, the number of physicians prevails the number of nurses and the ratio of the number of nurses to the number of doctors over the last 5 years did not exceed 0.8 (Figure 3.3).

Figure 3.3 Ratio of nurses to physicians, Georgia



Source: NCDC

Table 3.1 Professionally active physicians*, Georgia

	Physicians		Including Practicing physicians	
	Total	Number per 100000 population	Total	Number per 100000 population
2008	17961	466.7	16571	430.6
2009	18591	487.4	17392	456.0
2010	19453	513.7	18227	481.3
2011	19514	519.5	18366	488.9
2012	21501	576.6	18235	489.0
2013	20474	550.7	18278	491.6
2014	21201	570.0	19270	518.1
2015	21312	572.1	20143	540.7
2016	24745	663.8	24082	646.1
2017	**26303**	**705.6**	**25084**	**672.9**

Table 3.2 Health staff working in inpatient facilities, Georgia

	Hospital personnel		Physicians		Nurses and auxiliary medical personnel	
	Total	Number per 100000 population	Total	Percent of Total	Total	Percent of Total
2008	30164	783.8	7881	43.9	10864	53.9
2009	30765	806.5	8137	43.8	10741	54.9
2010	30994	818.5	8404	43.2	10772	55.0
2011	28319	753.9	7942	40.7	9583	52.5
2012	24042	644.7	7951	33.1	8116	33.8
2013	25953	698.1	9385	36.2	8632	33.3
2014	26982	725.4	9680	42.0	8915	59.4
2015	30460	817.7	10699	50.2	9957	63.9
2016	31391	842.1	11822	49.1	10897	58.3
2017	**35121**	**942.1**	**13126**	**52.1**	**11905**	**66.6**

Table 3.3 Professionally active nurses**, Georgia

	Nurses		Auxiliary medical personnel	
	Total	Number per 100000 population	Total	Number per 100000 population
2008	17309	449.8	1061	27.6
2009	16958	444.6	955	25.0
2010	17211	454.5	913	24.1
2011	15940	424.3	661	17.6
2012	14493	388.7	634	17.0
2013	14935	401.7	594	16.0
2014	14809	398.2	607	16.3
2015	15574	418.1	593	15.9
2016	18701	501.7	489	13.1
2017	**18977**	**509.0**	**491**	**13.2**

* *Professionally active physicians include practising physicians and other physicians for whom their medical education is a prerequisite for the execution of the job. Exclusion: students who have not yet graduated, dentists, stomatologists, dental and maxillofacial surgeons, physicians working in administration, research and in other posts that exclude direct contact with patients, unemployed physicians and retired physicians, physicians working abroad*

** *Professionally active nurses include practising and other (non-practising) nurses for whom their education is a prerequisite for the execution of the job. Exclusion: midwives who hold a post / job under which midwifery education is not required, unemployed, midwives and retired midwives, midwives working abroad.*

Table 3.4 Physicians by specialization, Georgia

	General practitioners		Paediatricians		Obstetricians-Gynecologists		Psychiatrists		Surgeons	
	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population	Total	Number per 100000 population
2008	2408	62.6	1858	48.3	1462	38.0	278	7.2	1382	35.9
2009	2977	78.0	1579	41.4	1467	38.5	294	7.7	1504	39.4
2010	3146	83.1	1560	41.2	1499	39.6	291	7.7	1559	41.2
2011	3273	87.1	1473	39.2	1434	38.2	258	6.9	1581	42.1
2012	4172	111.9	1428	38.3	1453	39.0	283	7.6	1759	47.2
2013	3964	106.6	1444	38.8	1561	42.0	393	10.6	1953	52.5
2014	4757	127.9	1367	36.8	1659	44.6	391	10.5	2118	56.9
2015	5142	138.0	1186	31.8	1775	47.6	367	9.9	1974	53.0
2016	6775	181.8	1333	35.8	1874	50.3	471	12.6	2565	68.8
2017	**6667**	**178.8**	**1428**	**38.3**	**1899**	**50.9**	**471**	**12.6**	**2980**	**79.9**

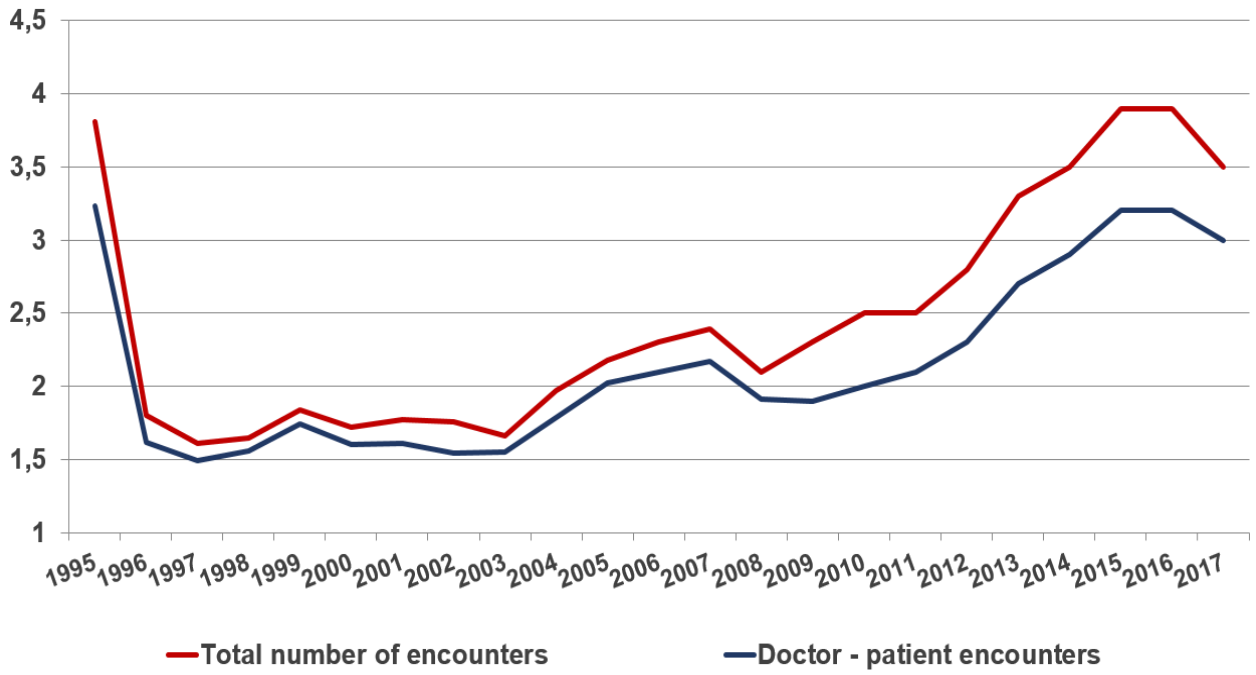
Table 3.5 Healthcare facilities network, Georgia, 2017

Type of facility	Total number
Inpatient facilities	**280**
Hospitals and medical centers	272
Including specialized	117
Including independent maternity hospitals	32
Scientific research institutes with in-patient care unit	6
Dispenseries with in-patient care unit	2
Outpatient facilities and rural doctors	**2369**
Including outpatient centers and policlinics	945
Including Dental Clinics and Offices	625
Ambulatory care clinics	24
Women consultancy centers independent	32
Health Offices (except Dental clinics)	70
Rural physician-entrepreneur	1277
Scientific research institutes without in-patient care unit	3
Dispensaries	18
Ambulance stations	82
Blood transfusion	21
Epidemiological centers	64
Other	31

Health resources utilization

According to WHO last avaible data, ***encounters*** of the population ***with outpatient facilities*** in European Region is about 6 per capita. In Georgia, last two decades this indicator did not exceed 2.2. After the universal healthcare care program implementation in the country, the numbers of encounters of the population with outpatient and in-patient health facilities have significantly increased. In 2017, the numbers of encounters of the population with outpatient facilities was 3.5 per capita per year (Figure 3.4).

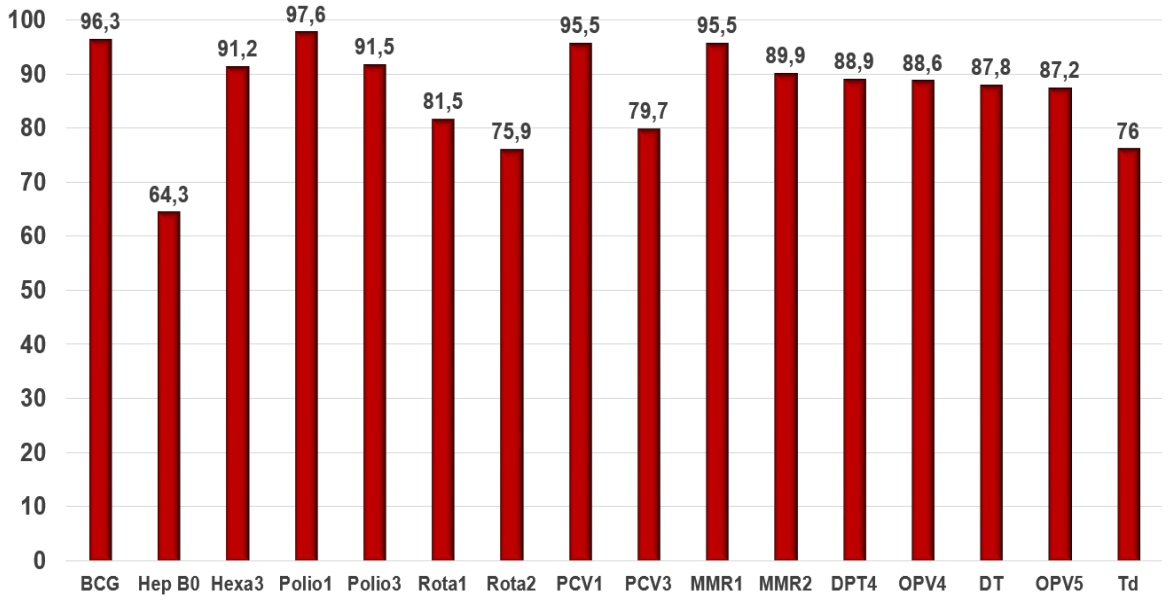
Figure 3.4 Number of encounters per capita per year, Georgia



Source:NCDC

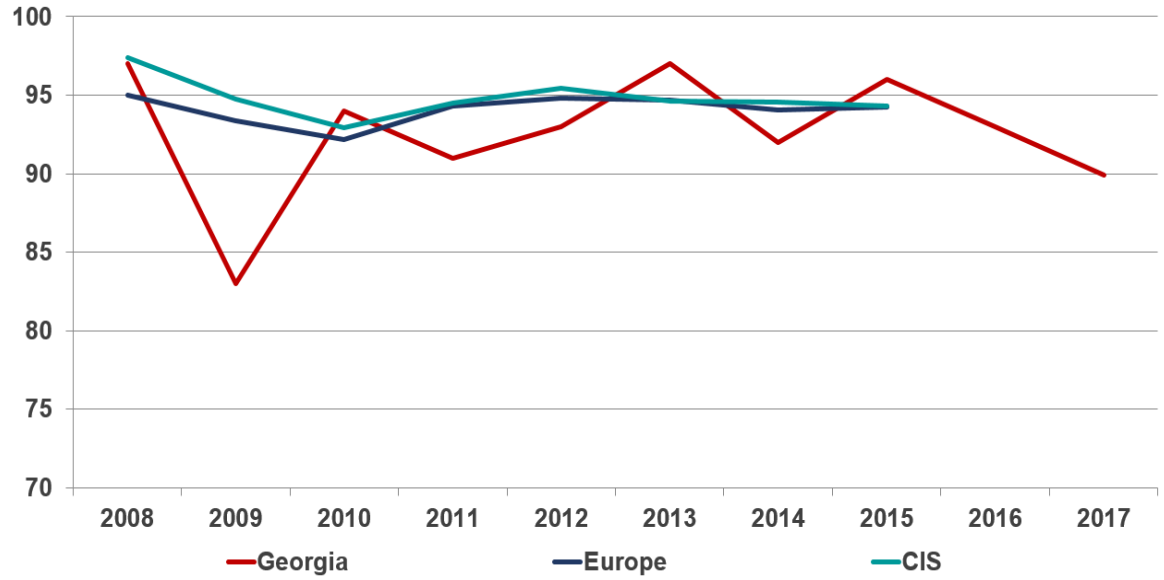
All ***vaccinations*** included into the National vaccination calendar are free of charge for the population. To guarantee high quality and safe immunization, for immunization of the population State purchases vaccines, which are prequalified by the World Health Organization. In 2016, compared to 2015, in the frame of the State immunization program, the vaccination coverage rates for most antigens is higher, although, coverage rates for all vaccines have not yet reached 95% even in 2017 (Figure 3.5).

Figure 3.5 Immunization coverage (%), Georgia



Source: NCDC

Figure 3.6 Percent of children aged 1 year vaccinated against measles



Source: HFA Database, NCDC

In 2017, annual statistical reports were submitted to the National CENTER for Disease Control and Public Health by 280 ***in-patient facilities*****.**

In 2017, a trend of increase of the number of hospital admissions continued. This is result of the universal healthcare care program implementation. The number of hospitals per 100000 population increased, compared to 2012.

In 2017, the number of hospital patients was 9% higher than during previous year; 502658 patients were admitted to in-patient facilities. Among diagnosis at discharge, the respiratory system diseases constituted 19.7%, cardiovascular disorders – 19.4%, and pregnancy, childbirth and puerperium – 12%. Total hospital case fatality rate was 2.6% (the same as in 2016).

During 2017, there were 253642 ***surgeries*** conducted (indicator – 68.0 per 1000 population) in Georgian hospitals, postoperative case fatality rate – 0.1%. 28294 surgeries were conducted in children Under-15 (indicator – 38.3 per 1000 children; case fatality rate – 0.5%).

Elective surgeries share was 65.8% of total.

Obstetric and gynecological surgeries (22%), and surgeries on the genitourinary system (37.9%) constitute the largest share of the elective surgery structure.

In 2017, 18480 heart surgeries (elective and urgent) were performed, including 624 in children. Last years, the number of heart surgeries increased, mainly due to cardiovascular repairing surgeries. In 2017, compared to the previous year, the total number of heart surgeries, numbers of coronary bypass operations and coronary arteries angioplasty were not changed sufficiently.

4.3% heart surgeries were done due to congenital heart anomalies; endovascular balloon dilatations constituted 1.1%; pacemaker implantations – 3.9%; angioplasty of coronary arteries – 45.3%.

Hip and knee joints prosthesis constitutes 37.0% of musculoskeletal surgeries,. This is one of the indicators of the well-being of the population. Compared to 2016, the number of these operations increased by 28%.

The share of urgent surgeries constituted of 34.2% of total of operations.

The ***ambulance*** system is providing free emergency medical care for the population. In 2017, the ambulance services completed 1451725 emergency visits; this 0.4 encounters per capita.

All licensed blood banks (21 bank) collected 92900 ***blood donations***, including 27660 free donations (29.8%). Banks working under the “Safe blood” program (13 banks) collected 83335 donations, including 25095 free donations (30%).

Table 3.6 Number of encounters with outpatient facilities per capita, Georgia

	2009	2010	2011	2012	2013	2014	2015	2016	2017
All encounters	**2.3**	**2.5**	**2.5**	**2.8**	**3.3**	**3.5**	**3.9**	**3.9**	**3.5**
Including:									
Encounters to physicians	1.9	2.0	2.1	2.3	2.7	2.9	3.2	3.2	3.0
Encounters of children aged Under-15	2.9	2.8	2.6	2.7	3.0	3.3	3.6	3.6	3.4
Ambulance calls	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Ambulance calls to children aged Under-15	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.2

Table 3.10 Number of outpatient surgeries, Georgia

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of surgical operations	**34398**	**37734**	**47645**	**68570**	**78670**	**77289**	**101602**	**102120**	**105604**
Including:									
On eye	6751	7365	6961	6471	15941	17576	27517	27185	31369
Including glaucoma	730	318	748	770	8979	945	1169	1633	1622
cataract	4123	4370	4351	3826	7517	9121	16386	15171	15624
Microsurgery	3162	5123	1459	1655	2957	9894	10490	10423	12752
On throat-ear-nose	1240	1684	2629	9595	2816	4149	4243	14152	12059
On blood vessels	46	121	59	219	1202	1615	428	642	373
On organs of abdominal cavity	431	415	1426	1343	1318	772	732	785	679
Of which dissection of no strangulated hernia	120	130	133	175	740	113	123	168	112
Obstetrical & gynecological	9098	10580	14941	20394	27167	23862	15655	14905	14628
On mammary glands	1058	214	137	236	231	394	404	434	353
On skin and subcutaneous tissues	9070	11979	11724	20653	17863	16335	22030	18620	15604

Table 3.8 Data on vaccination and immunization, Georgia, 2017

Vaccine	Time line	The number of vaccinated according to the calendar	Coverage (%)
BCG–1	0 – 5 days	49703	96.3%
Viral Hepatitis B-0	0 – 12 hours	49446	64.3%
DPT+HIB+HEPB/DPT+HIB+HEPB+IPV/DPT1	from 2 months– till 11 months 29 days	50669	
DPT+HIB+HEPB/DPT+HIB+HEPB+IPV/DPT3	From 4 months – till 11 months 29 days	47320	91.2%
DPT– 4	18 – 24 months	46299	88.9%
POLIO– 1	from 2 months– till 11 months 29 days	50669	97.6%
POLIO– 3	from 4 months– till 11 months 29 days	47461	91.5%
OPV– 4	18 – 24 months	46081	88.6%
OPV – 5	from 5 years – 5 years 11 months 29 days	46321	87.2%
MMR – 1	12 – 24 months	50006	95.5%
MMR – 2	from 5 years – 5 years 11 months 29 days	47734	89.9%
ROTAVIRUS -1	2 months	42273	81.5%
ROTAVIRUS -2	3 months	39394	75.9%
DT	from 5 years – 5 years 11 months 29 days	46636	87.8%
PNEUMOCOCCUS - 1	from 2 months– till 11 months 29 days	49579	95.5%
PNEUMOCOCCUS - 2	from 2 months– till 11 months 29 days	47378	91.3%
PNEUMOCOCCUS - 3	12 – 24 months	41368	79.7%
TD	14 years	29019	76.0%

Table 3.9 Immunization coverage (percent) by regions, Georgia, 2017

	BCG-1	DPT+HIB+HEPB/DPT+HIB+HEPB+IPV/DPT3	Polio-3	MMR – 1	MMR – 2
Ajara	94.3%	92.7%	92.7%	94.2%	90.8%
Tbilisi	93.3%	90.7%	91.4%	95.7%	87.1%
Kakheti	92.3%	93.3%	93.3%	94.4%	91.4%
Imereti	93.7%	93.1%	93.1%	97.5%	93.9%
Samegrelo and Zemo Svaneti	92.2%	92.3%	92.3%	95.3%	91.2%
Shida Kartli	93.5%	88.8%	88.8%	95.7%	92.6%
Kvemo Kartli	93.5%	91.5%	91.5%	96.0%	90.0%
Guria	95.1%	86.9%	86.9%	83.3%	89.0%
Samtskhe-Javakheti	97.1%	87.5%	87.5%	94.7%	89.4%
Mtskheta-Mtianeti	100.0%	85.7%	85.7%	100.4%	89.8%
Racha-Lechkhumi and Kvemo Svaneti	97.4%	89.3%	89.3%	106.2%	90.5%
Georgia	**93.5%**	**91.2%**	**91.5%**	**95.5%**	**89.9%**

Table 3.10 Performance of ambulance stations, Georgia

	2010	2011	2012	2013	2014	2015	2016	2017
Total number of ambulance stations	**78**	**75**	**78**	**75**	**104**	**78**	**79**	**82**
Total number of visits	956550	966493	1061690	1231225	1247588	1479212	1617704	1451725
Number of population with assistance covered by the State Programs	933741	908000	993089	1148445	1201793	1436980	1459415	1345002

Table 3.11 Number of population, who received ambulance assistance, Georgia

	Total number of population, who received care	Including					
		Due to accidents		Due to sudden illness		Due to childbirth and pregnancy pathologies	
		Total	%	Total	%	Total	%
2008	768167	10912	1.4	751945	979	5310	0.7
2009	883129	14579	1.6	863589	978	4961	0.6
2010	933877	13286	1.4	915319	980	5272	0.6
2011	936614	12323	1.3	919953	982	4338	0.5
2012	1035270	29242	2.8	1001494	967	4534	0.4
2013	1199884	15017	1.3	1179681	983	5186	0.4
2014	1221404	26074	2.1	1188006	973	6484	0.5
2015	1452857	24712	1.7	1417200	975	8734	0.6
2016	1530237	24778	1.6	1494058	976	9068	0.6
2017	**1413410**	**20106**	**1.4**	**1382520**	**97.8**	**8417**	**0.6**

Table 3.12 Number of population, who received ambulance assistance by regions, Georgia

	2010	2011	2012	2013	2014	2015	2016	2017
Ajara	80762	75660	77756	91550	102174	116280	127656	117387
Tbilisi	377066	442363	505492	602591	640885	709320	735182	686311
Kakheti	70184	56317	64832	66977	59022	79331	90895	84009
Imereti	111606	101023	108989	108989	123975	158375	154547	142339
Samegrelo and Zemo Svaneti	82059	60625	80447	82854	69251	98156	106168	91586
Shida Kartli	47313	43370	48993	53702	51887	76421	71258	64590
Kvemo Kartli	66413	69968	67959	87380	83890	107578	128216	116109
Guria	26869	23924	21926	21693	23387	28216	32758	30947
Samtskhe-Javakheti	29992	30887	23177	30109	24550	33040	36865	34788
Mtskheta-Mtianeti	25982	19565	22677	27800	30438	34066	34230	33351
Racha-Lechkhumi and Kvemo Svaneti	15631	12922	13022	12185	11945	12074	12462	11993
Georgia	**933877**	**936614**	**1035270**	**1199884**	**1221404**	**1452857**	**1530237**	**1413410**

Table 3.13 Hospital beds utilization, Georgia

	Number of hospital beds	Number of beds per 100000 population	Bed occupancy rate	Average length of stay	Bed turnover
2008	14069	365.6	792.0	3.0	26.2
2009	13633	357.4	148.2	6.3	23.4
2010	13378	353.3	160.0	6.4	25.2
2011	12599	335.4	173.6	7.0	24.8
2012	11348	304.3	228.9	7.0	32.7
2013	11600	312.0	181.4	5.4	33.6
2014	11675	313.9	188.3	5.2	36.3
2015	12830	344.4	193.3	5.3	36.4
2016	13840	371.3	189.3	5.0	37.8
2017	**15084**	**404.6**	**180.5**	**5.2**	**35.0**

Table 3.14 Hospital discharges by the ICD10 chapters, all ages, Georgia, 2017

	Number of hospital discharges	Including deaths	Case fatality rate (%)
Total	**502658**	**12940**	**2.6**
Certain infectious and parasitic diseases	24621	303	1.2
Neoplasms	24202	891	3.7
Diseases of blood and blood-forming organs	5577	202	3.6
Endocrine, nutritional and metabolic diseases	5260	57	1.1
Mental and behavioral disorders	9549	36	0.4
Diseases of the nervous system	18023	204	1.1
Diseases of the eye and adnexa	9929	1	0.0
Diseases of the ear and mastoid process	583	0	0.0
Diseases of the circulatory system	97557	4516	4.6
Diseases of the respiratory system	99052	2974	3.0
Diseases of the digestive system	44311	1068	2.4
Diseases of the skin and subcutaneous tissue	4971	56	1.1
Diseases of the musculoskeletal system and connective tissue	9901	10	0.1
Diseases of the genitourinary system	26785	262	1.0
Pregnancy, childbirth and the puerperium	60097	6	0.0
Certain conditions originating in the perinatal period	6916	341	4.9
Congenital malformations, deformations and chromosomal abnormalities	3218	46	1.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	15191	1522	10.0
Injury, poisoning and certain other consequences of external causes	33367	444	1.3
Factors influencing health status and contact with health services	3548	1	0.0
Other reason for hospitalization	**502658**	**12940**	**2.6**

Table 3.15 Hospital discharges by the ICD10 chapters, children Under-15, Georgia, 2017

	Number of hospital discharges	Including deaths	Case fatality rate (%)
Total	**94658**	**531**	**0.6**
Certain infectious and parasitic diseases	13725	10	0.1
Neoplasms	1362	17	1.2
Diseases of blood and blood-forming organs	584	1	0.2
Endocrine, nutritional and metabolic diseases	469	0	0.0
Mental and behavioral disorders	101	0	0.0
Diseases of the nervous system	1091	14	1.3
Diseases of the eye and adnexa	566	0	0.0
Diseases of the ear and mastoid process	121	0	0.0
Diseases of the circulatory system	153	11	7.2
Diseases of the respiratory system	49585	44	0.1
Diseases of the digestive system	4101	5	0.1
Diseases of the skin and subcutaneous tissue	495	0	0.0
Diseases of the musculoskeletal system and connective tissue	550	0	0.0
Diseases of the genitourinary system	2438	0	0.0
Pregnancy, childbirth and the puerperium	26	0	0.0
Certain conditions originating in the perinatal period	6915	341	4.9
Congenital malformations, deformations and chromosomal abnormalities	2491	42	1.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3539	25	0.7
Injury, poisoning and certain other consequences of external causes	5805	21	0.4
Factors influencing health status and contact with health services	541	0	0.0

Table 3.16 Hospital discharges by the ICD10 chapters, infants, Georgia, 2017

	Number of hospital discharges	Including hospital deaths	Case fatality rate (%)
Total	**24572**	**433**	**1.8**
Certain infectious and parasitic diseases	3053	5	0.2
Neoplasms	304	4	1.3
Diseases of blood and blood-forming organs	81	0	0.0
Endocrine, nutritional and metabolic diseases	12	0	0.0
Mental and behavioral disorders	1	0	0.0
Diseases of the nervous system	207	4	1.9
Diseases of the eye and adnexa	30	0	0.0
Diseases of the ear and mastoid process	7	0	0.0
Diseases of the circulatory system	16	2	12.5
Diseases of the respiratory system	11098	16	0.1
Diseases of the digestive system	366	3	0.8
Diseases of the skin and subcutaneous tissue	57	0	0.0
Diseases of the musculoskeletal system and connective tissue	19	0	0.0
Diseases of the genitourinary system	352	0	0.0
Pregnancy, childbirth and the puerperium	6897	339	4.9
Certain conditions originating in the perinatal period	928	42	4.5
Congenital malformations, deformations and chromosomal abnormalities	725	16	2.2
Ill-defined cases	330	2	0.6
Injury, poisoning and certain other consequences of external causes	89	0	0.0

Table 3.17 Inpatient surgeries, Georgia

	Total number of surgeries, all ages			Total number of surgeries, children Under-15		
	Total	Rate per 1000 population	Case Fatality Rate (%)	Total	Rate per 1000 population	Case Fatality Rate (%)
2008	121189	31.5	0.5	13943	20.3	0.6
2009	123900	32.5	0.5	11361	16.6	0.5
2010	134941	35.6	0.4	14539	21.2	0.4
2011	143262	38.1	0.4	15860	23.2	0.3
2012	165679	44.4	0.4	19679	28.9	0.4
2013	189478	51.0	0.4	15670	22.9	0.4
2014	204553	55.0	0.3	20526	29.6	0.6
2015	246457	66.2	0.5	27438	38.6	0.2
2016	268089	71.9	0.4	29470	40.6	0.2
2017	**253642**	**68.0**	**0.1**	**28294**	**38.3**	**0.5**

Table 3.18 Elective inpatient surgeries, Georgia, 2017

	Total number	Including children
All operations	**166962**	**20315**
Surgeries on organs of nervous system	**4290**	**109**
Including on: brain	787	65
spinal cord	199	21
peripheral nervous system	99	3
intervertebral discs	2194	3
Other surgeries for non-traumatic disorders	966	16
Surgeries on organs of endocrine system	**2926**	**5**
Including on: hypophysis	21	0
thyroid gland	2345	4
parathyroidectomy	110	0
adrenalectomy	20	0
Surgeries on eye	**13142**	**820**
Including: due to glaucoma	1555	13
enucleation	221	0
due to cataract	6463	68
Surgeries on ear, nose	**17577**	**6273**
Including: on ear	591	159
adenoidectomy	3985	3252
Surgeries on the oral cavity	**15066**	**8889**
Including on: tongue	156	102
tonsils	12240	7132
Surgeries on respiratory organs	**1138**	**99**
Including: pulmonectomy	42	0
pulmonary lobe resection	97	0
segmental resection of lung	92	1
on larynx	248	2
resection of trachea	65	0
bronchial resection	4	1
pleural resection	12	4
Heart operations	**8110**	**374**
Due to Congenital malformation of heart	705	193
Including: valve correction	135	71
Valve prosthesis	161	83
Due to acquired deformity of heart	483	0
Including: valve correction	158	0
Valve prosthesis	288	0
Endovascular balloon dilatation		0
By pass surgeries of coronary arteries	1579	1
Angioplasty of *coronary arteries*	3675	84
Including: stent implantation	2088	4
Arrhythmogenic operations	899	17
Including: implantation of a cardio stimulator	313	5
Pericardectomy	14	0
Surgeries on blood vessels	**6917**	**25**
Surgeries on organs of the digestive tract and abdominal cavity	**16541**	**1173**
Surgeries on genitourinary system	**63264**	**1209**
Including: on kidneys and ureters	3888	146
kidney transplantation	19	0
on the prostate gland	1722	7
on female pelvic organs	14125	9
obstetrical and gynecological operations	36676	1
Surgeries on the musculoskeletal system	**10131**	**759**
Including: bone transplantation	38	8
replacement of hip joint	3100	5
replacement of knee joint	648	3
amputation of extremity or its part	194	17
including amputation of extremity or its part due to diabetes	101	0
Surgeries on breast	**3390**	**2**
Surgeries on skin and subcutaneous tissue	**3829**	**561**
Surgeries on organs of the immune system	**641**	**17**
Except the above: plastic surgeries	**3099**	**16**

Table 3.19 In-patient urgent surgeries, Georgia, 2017

	Number of urgent operations		
	All ages	Including in children	
		Under-15	Under-1
Total number	**86680**	**7979**	**1334**
Including due to non-traumatic pathologies	71876	6138	988
Pathological (non-traumatic) conditions of the nervous system	**2070**	**322**	**177**
Including: due to meningitis, encephalitis, myelitis and encephalomyelitis	262	233	142
Damage of intracranial nerve and plexus	206	9	3
Surgeries on heart	**10370**	**250**	**188**
Including: Valve adjustment	119	69	58
Valve prosthesis	147	82	74
Coronary bypass	1632		
Coronary artery angioplasty	5466	74	35
Rhythm regulation interventions	456	10	7
Other surgeries on heart	2550	15	14
Surgeries on blood vessels	**2335**	**4**	**0**
Including: due to thrombosis or embolism of large blood vessels and aneurysm rupture	837	0	0
Surgeries on the respiratory organs	**3508**	**354**	**85**
Including: Lung resection	38	10	3
Due to peritonsillar, retro- and parapharyngeal abscess	56	5	0
Acute laryngeal stenosis due to tracheostomy	297	1	0
Surgeries on organs of the digestive tract and abdominal cavity	**27740**	**3369**	**295**
Including: phlegm on and abscess of mouth	1046	65	1
Perforated ulcer of the stomach and intestines	615	10	0
Strangulated hernia, with gangrene / without gangrene	4586	384	90
Due to acute ileus	1415	51	31
Due to acute appendicitis	8856	2134	12
Due to acute cholecystitis	3947	162	4
Including: obstructive cholecystitis and biliary colic	691	0	0
Acute peritonitis	820	55	3
Intestinal infarction	85	0	0
Acute pancreatitis	48	0	0
Diseases of spleen	64	4	0
Other surgeries on organs of the digestive tract and abdominal cavity	5914	503	154
Surgeries on genitourinary system	**10513**	**256**	**30**
Including: Nephrectomy	67	1	0
Orchiectomy	96	5	3
Ovariectomy	432	0	0
Due to ectopic pregnancy	662	0	0
Other surgeries on genitourinary system	9236	250	27
Surgeries on the musculoskeletal system	**12437**	**1339**	**185**
Including: Amputation of extremity or its part	1021	3	1
Including: as a result of diabetes	645	0	0
as a result of atherosclerosis	110	0	0
Due to gas gangrene	14	0	0
Surgeries due to traumatic injuries	**14804**	**1841**	**346**

Table 3.20 Postoperative case fatality rates (urgent surgeries), Georgia, 2017

	Number of post-operative deaths					
	All ages	Case fatality rate (%)	Including in children		Case fatality rate (%)	
			Under-15	Under-1	Under-15	Under-1
Total number	**2207**	**9.2**	**82**	**72**	**0.01**	**5.4**
Including due to non-traumatic pathologies	2148	3.0	80	71	1.30	7.19
Pathological (non-traumatic) conditions of the nervous system	**444**	**21.4**	**9**	**0**	**2.8**	**0.0**
Including: due to meningitis, encephalitis, myelitis and encephalomyelitis	5	1.9	5	3	2.1	2.1
Damage of intracranial nerve and plexus	38	18.4	0	0	0.0	0.0
Surgeries on heart	232	2.2	18	18	7.2	9.6
Including: Valve adjustment	13	10.9	6	6	8.7	10.3
Valve prosthesis	12	8.2	10	10	12.2	13.5
Coronary bypass	59	3.6	0	0	0.0	0.0
Coronary artery angioplasty	36	0.7	0	0	0.0	0.0
Rhythm regulation interventions	6	1.3	0	0	0.0	0.0
Other surgeries on heart	106	4.2	2	2	13.3	14.3
Surgeries on blood vessels	**68**	**2.9**	**0**	**0**	0.0	0.0
Including: due to thrombosis or embolism of large blood vessels and aneurysm rupture	21	2.5	0	0	0.0	0.0
Surgeries on the respiratory organs	**609**	**17.4**	**36**	**31**	**10.2**	**36.5**
Including: Lung resection	1	2.6	0	0	0.0	0.0
Due to peritonsillar, retro- and parapharyngeal abscess	0	0.0	0	0	0.0	0.0
Acute laryngeal stenosis due to tracheostomy	37	12.5	0	0	0.0	0.0
Surgeries on organs of the digestive tract and abdominal cavity	**648**	**2.3**	**15**	**13**	**0.5**	**4.4**
Including: phlegm on and abscess of mouth	1	0.1	0	0	0.0	0.0
Perforated ulcer of the stomach and intestines	25	4.1	0	0	0.0	0.0
Strangulated hernia, with gangrene / without gangrene	16	0.3	0	0	0.0	0.0
Due to acute ileus	46	3.3	1	1	2.0	3.2
Due to acute appendicitis	7	0.1	1	0	0.1	0.0
Due to acute cholecystitis	36	0.9	0	0	0.0	0.0
Including: obstructive cholecystitis and biliary colic	4	0.6	0	0	0.0	0.0
Acute peritonitis	56	6.8	0	0	0.0	0.0
Intestinal infarction	23	27.1	0	0	0.0	0.0
Acute pancreatitis	4	8.3	0	0	0.0	0.0
Diseases of spleen	0	0.0	0	0	0.0	0.0
Other surgeries on organs of the digestive tract and abdominal cavity	415	7.0	13	12	2.6	7.8
Surgeries on genitourinary system	**21**	**0.2**	**1**	**1**	**0.4**	**3.3**
Including: Nephrectomy	0	0.0	0	0	0.0	0.0
Orchiectomy	0	0.0	0	0	0.0	0.0
Ovariectomy	0	0.0	0	0	0.0	0.0
Due to ectopic pregnancy	0	0.0	0	0	0.0	0.0
Other surgeries on genitourinary system	21	0.2	1	1	0.4	3.7
Surgeries on the musculoskeletal system	**100**	**0.8**	**0**	**0**	**0.0**	**0.0**
Including: Amputation of extremity or its part	23	2.3	0	0	0.0	0.0
Including: as a result of diabetes	12	1.9	0	0	0.0	0.0
as a result of atherosclerosis	3	2.7	0	0	0.0	0.0
Due to gas gangrene	0	0.0	0	0	0.0	0.0
Surgeries due to traumatic injuries	**59**	**0.4**	**2**	**1**	**0.1**	**0.3**

Universal Healthcare and “vertical” programs

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

After general elections of October 2012, a new Government came into power with a clear determination to improving social and health status of the Georgian population. The strong political will pledged in the election platform was translated into an unprecedented, almost 2-fold expansion of budgetary allocation for health in 2013.

The second major step towards securing enjoyment of health rights in the country was the launch of a Universal Health Care Program in February 2013. Georgia now has a foundation of universal entitlements within its health system, representing a major step towards improving access to health services for the entire population.

Each citizen is provided with medical care. More than 90% of the population are covered by the UHC program.

From February 28 to July 1, 2013, the first phase of the UHC program provided the primary healthcare services by the family physician and emergency outpatient and inpatient care.

The second phase of UHC program launched in July 1, 2013 extended the services covered and include planned ambulatory care, urgent outpatient and inpatient care, elective surgery, chemo-, hormone-, and radiotherapy, obstetrics and cesarean sections, basic drugs for target groups of the population.

In May 2017, to further reform the program, elaboration of new criteria for differentiation of beneficiaries (according to beneficiaries' revenue) has been implemented for provision of more needs oriented services and development of "social justice" approach.

From July 1, 2017, persons suffering from chronic conditions, who are registered in the unified database of "socially vulnerable families" with the rating score not exceeding 100,000, are eligible for the state program providing drugs for chronic conditions. The program provides patients with selected drugs for chronic cardiovascular diseases, chronic obstructive pulmonary disease, diabetes (type 2) and thyroid conditions (Figure 3.6-3.7)

Figure 3.6 Coverage with healthcare services in the frame of the UHC program

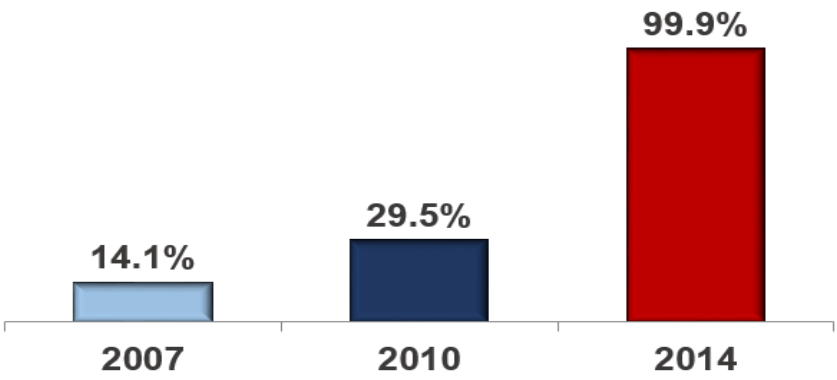
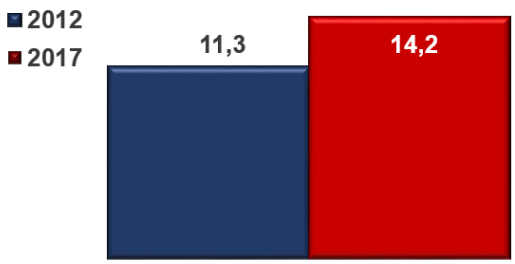
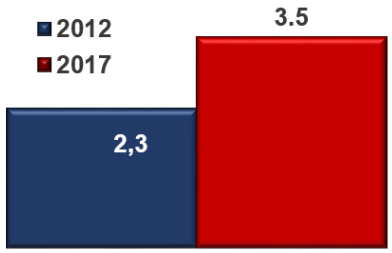


Figure 3.7 Service utilization in the frame of the UHC program



Hospital admissions per 100 population



Ambulatory care visits per person per years

According to the WHO European Health Report, 2015, Universal Healthcare Program was recognized as successful. Survey conducted by the US Agency for International Development in 2014 showed that 80.3% of the surveyed beneficiaries were satisfied with the outpatient service and 96.4% expressed satisfaction with hospital level emergency care within the universal health care program.

According to the WHO latest available data, the average number of out-patient encounters in the European Region is about 6 per capita. In Georgia, last 2 decades, this indicator did not exceed 2.2. In the frame of the UHC program the numbers of out- and in-patient encounters continued to grow due to increased accessibility of healthcare services. In 2017, the number of contacts with out-patient facilities per capita reached 3.5.

According to the survey conducted by the World Bank, WHO and the USAID, the main achievements of the Universal Healthcare Program are: increased accessibility to the medical services; increased utilization of the medical services; reduced financial barriers and increased coverage.

In addition to the universal health care program, the state's obligations to the population are carried out through programs providing healthcare services to the population in public health and priority areas.

Public health programs include:

- State Program on Disease Early Detection and Screening
- State Immunization Program
- State program on Epidemiological Surveillance
- Safe blood State program
- State program on Prevention of occupational diseases
- TB management State program
- HIV/AIDS management State program
- Maternal and child health State program
- Treatment of patients with drug addiction
- Health promotion State program
- State Program on Management of Hepatitis C

State health program in priority area include:

- Management of the Infectious diseases
- Mental Health
- Management of Diabetes
- Treatment of patients with drug addiction
- Services for child oncological hematology diseases

- Provide medicines for the treatment of chronic diseases
- Dialysis and kidney transplantation
- Palliative care of incurable patients
- Treatment with patients suffering from rare diseases and permanent replacement treatment
- Ambulance and emergency care
- Rural doctors
- Medical examination for army recruits
- Referral service

State Health programs Expenditure, mill GEL

	2013	2014	2015	2016	2017
Universal health care	70	338	574	681	710
Public health programs	31	53	69	73	73
Programs in priority areas	95	124	140	149	158
Total	**436**	**583**	**783**	**903**	**941**

Healthcare expenditures

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

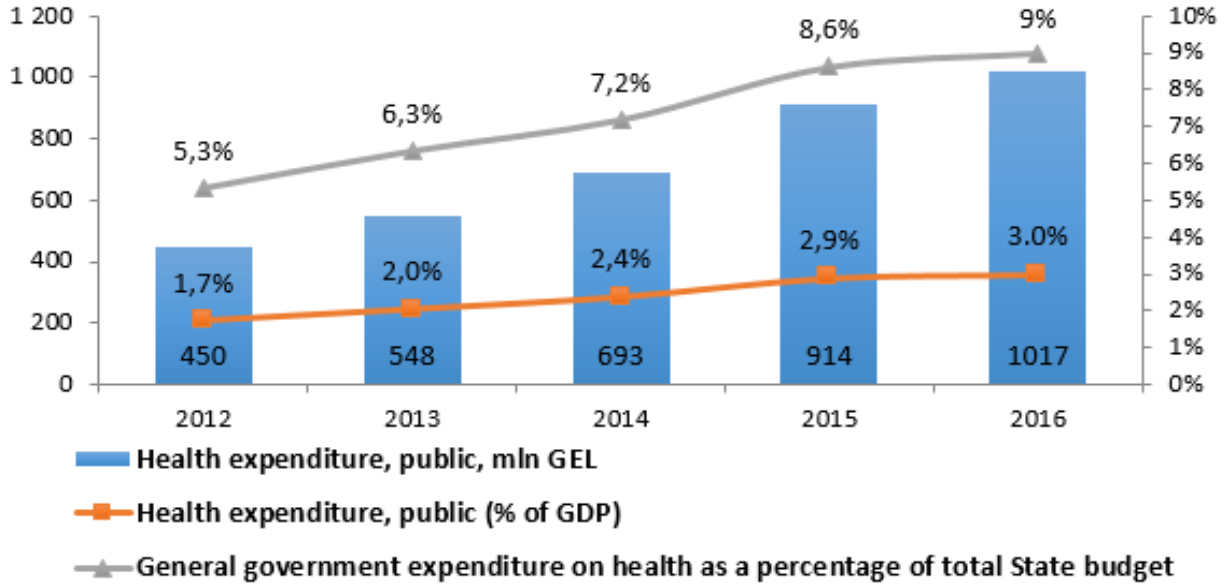
Since 2013, the Government of Georgia has laid the foundation for public health and welfare oriented health policy. Last years the state budget allocations for the health sector substantially increased (in 2012 - 450 million GEL; in 2016 - 1063 million GEL). State expenditure on health, as a share of the GDP is growing annually (in 2012 - 1.7%, in 2016 – 3.1%), although, this share is still lower than in the Western Europe (EU15) - 8%, EU (EU28) – 7.3%, and the average for European 53 countries – 5.7%.

In 2015-2016, the State spending on health per capita substantially increased: in 2015 - 246 GEL, in 2016 - 358 GEL. According to the WHO and the World Bank, the country has improved access to health care and provided better financial protection for the population by implementing cost-effective reforms.

In 2012-2016, the sources of healthcare financing were distributed as follows: State (in 2012 - 21%; in 2015 - 36%, 2016 – 37%), private (in 2012 - 77%; in 2015 - 62%, 2016 – 61%), international aid and grants (in 2012 - 2.3%; in 2015 - 1.8%, 2016 – 1.6%). To compare the trends, since 2015, a cost of hepatitis C treatment drugs provided by a pharmaceutical company Gilead to the country, (1,2 billion lari) was not included into the National Health Accounts.

Out-of pocket payments constituted the highest share of private expenditure, of which only 7% was spent on direct insurance payments, the rest funds were spent on healthcare services. The share of the out-of-pocket payments in total health expenditures has significantly decreased from 73% (in 2012) to 56% (in 2016), mainly due to the lower cost of hospitalization, which is a direct consequence of the universal healthcare program.

Figure 3.8 Dynamics of the Health Expenditures, Georgia



Healthcare expenditures, Georgia

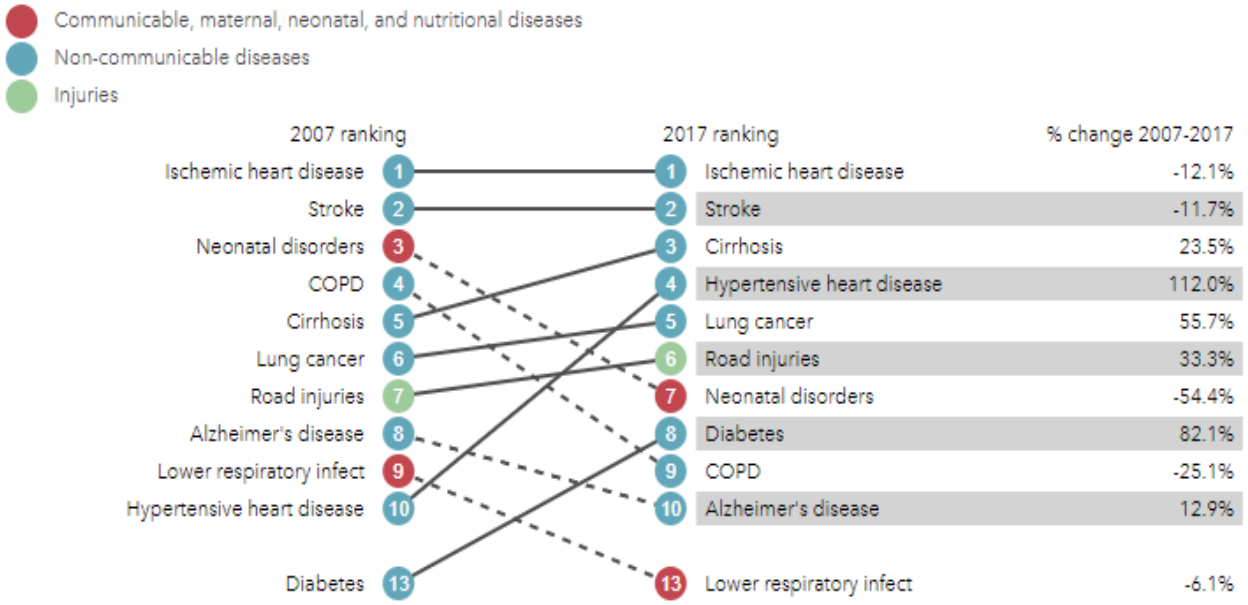
	2012	2013	2014	2015	2016
GDP, mln GEL	26167.3	26847.4	29150.5	31755.6	34028.5
Total expenditure on health, mln GEL	2190.5	2254.3	2460.2	2518.7	2860.6
Health expenditure, total (% of GDP)	8.4%	8.5%	8.5%	8.5%	8.4%
Health expenditure, public, mln GEL	450.3	547.9	693.2	914.0	1063.7
Health expenditure, public (% of total health expenditure)	20.6%	24.3%	28.2%	36.3%	37.2%
Health expenditure, public (% of GDP)	1.7%	2.0%	2.4%	2.9%	3.1%
General government expenditure on health as a percentage of total State budget	5.3%	6.3%	7.2%	8.6%	9.7%
Health expenditure, private, mln GEL	1689.7	1655.5	1720.4	1558.9	1750.5
Health expenditure, private (% of total health expenditure)	77.1%	73.4%	69.9%	61.9%	61.2%
Direct out-of-pocket health expenditure, mln GEL	1608. 8	1 557.0	1623.4	1443.8	1591.0
International aid for healthcare, mln GEL	50.5	50.9	46.5	45.8	46.5
International aid for healthcare, (% of total health expenditure)	2.3%	2.3%	1.9%	1.8%	1.6%
Total expenditures on health per capita, GEL	488	502	660	677	767
Total expenditures on health per capita, USD	295	302	374	298	324
Total expenditures on health per capita, international dollars	571	601	772	792	898
Public health expenditure per capita, GEL	100	122	186	246	358
Public health expenditure per capita, USD	61	73	105	108	121
Public health expenditure per capita, international dollars	117	146	218	288	335
Out-of-pocket expenditure on health per capita, GEL	376	369	462	419	470
Out-of-pocket expenditure on health per capita, USD	228	222	261	185	198
Out-of-pocket expenditure on health per capita, international dollars	440	441	540	490	549
International aid for health per capita, GEL	11	11	12	12	12
International aid for health per capita, USD	7	7	7	5	5
International aid per capita on health, international dollars	13	14	15	14	15

Source: the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs

Chapter 4.

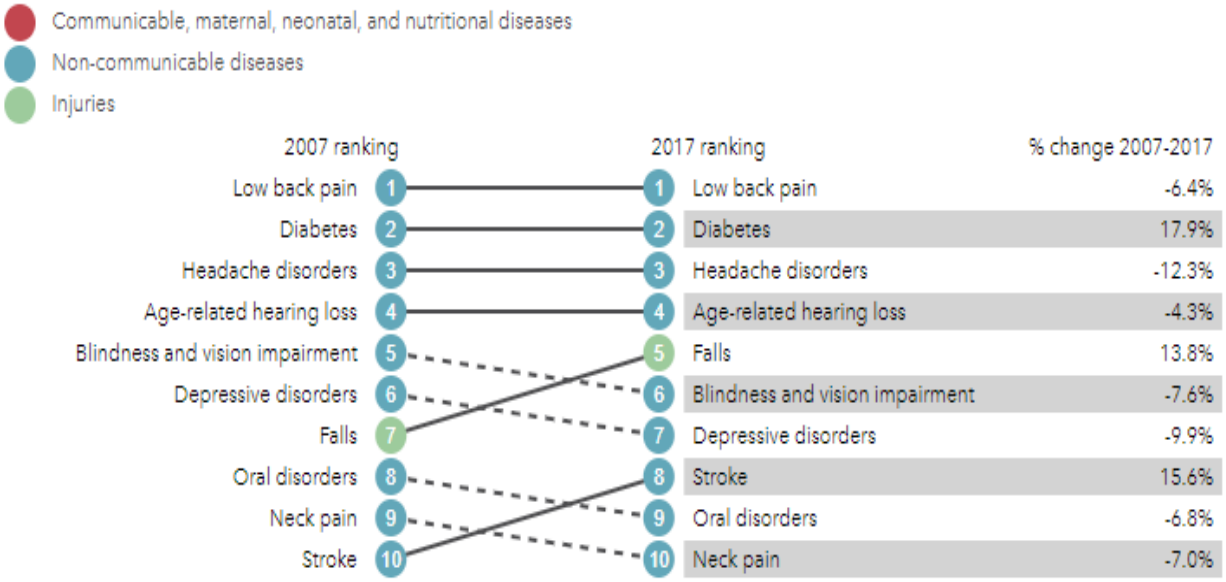
Population Health Status

Top 10 causes of years of life lost (YLLs) in 2017 and percent change, Georgia



Source: http://www.healthdata.org/georgia

Top 10 causes of years lived with disability (YLDs) in 2017 and percent change, Georgia

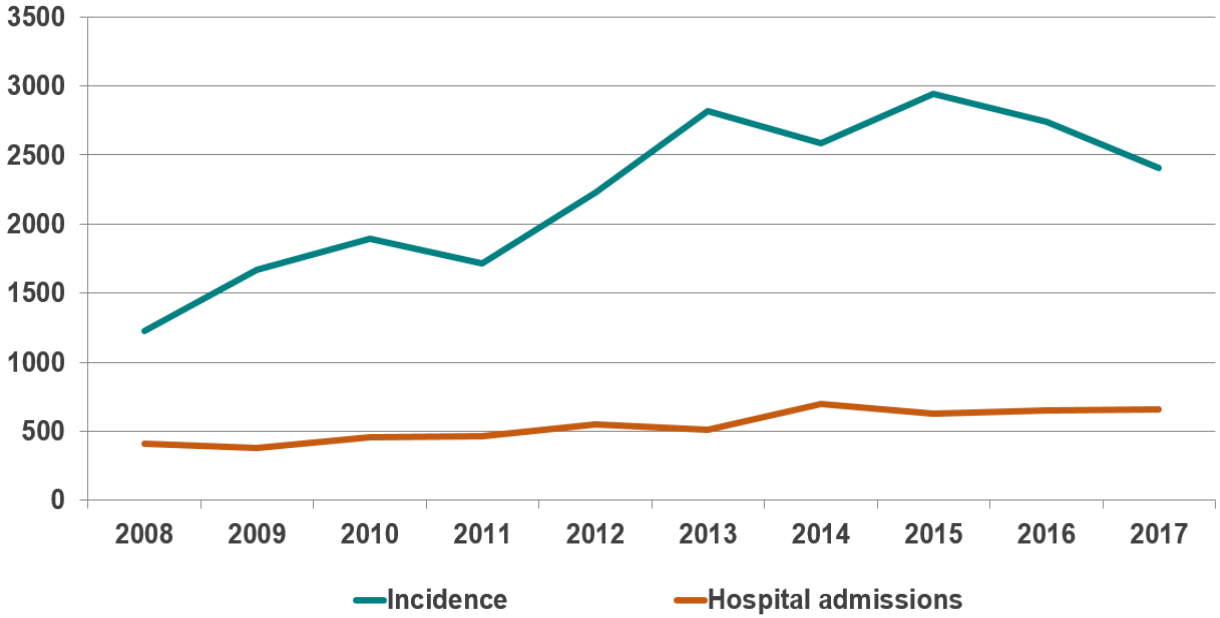


Source: http://www.healthdata.org/georgia

Communicable diseases

In 2017, incidence rate of infectious and parasitic diseases decreased, especially in children. The same time, hospital admissions rate slightly increased in the total population, and slightly decreased in children (Figures 4.1, 4.2).

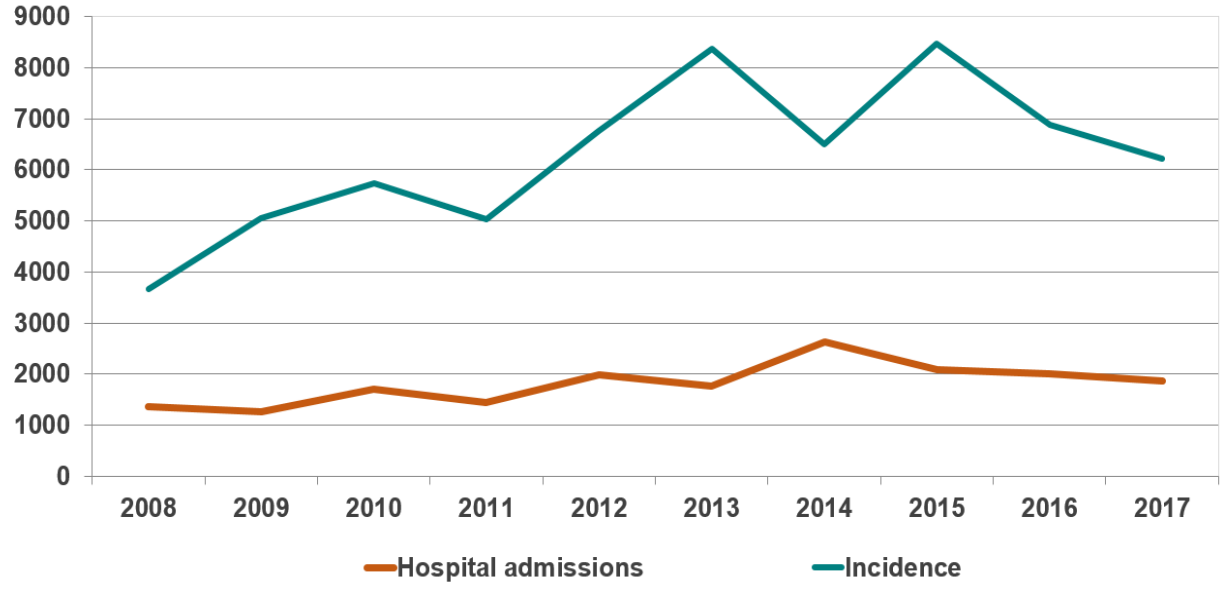
Figure 4.1 Infectious and parasitic diseases, incidence and hospital admission rates per 100000 population, Georgia



Source: NCDC

During the reporting period, Intestinal infections constituted the main cause of hospital admissions of children. The share of such infections in children Under-15 was 56.1%, in infants – 64.1%. Meningococcal infection is a leading cause of the hospital case fatality rate.

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



Source: NCDC

Table 4.1 Certain infectious and parasitic diseases, incidence per 100000 population, Georgia

	All ages		Children aged Under-15	
	Number of cases	Incidence	Number of cases	Incidence
2008	47124	1224.5	25120	3656.2
2009	63510	1665.0	34583	5054.9
2010	71642	1891.9	39265	5730.1
2011	64378	1713.8	34362	5025.7
2012	83014	2226.2	46129	6766.2
2013	104868	2820.8	57197	8369.6
2014	96151	2585.1	45123	6501.3
2015	109557	2940.9	60213	8468.6
2016	102159	2740.7	49916	6875.0
2017	**89756**	**2407.6**	**45954**	**6219.1**

Table 4.2 Certain infectious and parasitic deseases, hospital discharges, all ages,Georgia

	2016			2017		
	Number of hospital discharges	Including deaths	Case fatality rate (%)	Number of hospital discharges	Including deaths	Case fatality rate (%)
Certain infectious and parasitic diseases	**24211**	**273**	**1.1**	**24621**	**303**	**1.2**
Including:						
Intestinal infections	12907	6	0.0	11849	8	0.1
Respiratory tuberculosis	1977	19	1.0	1507	8	0.5
Meningococcal infection	9	1	11.1	19	2	10.5
Septicaemia	466	121	26.0	783	178	22.7
Viral hepatitis	1268	51	4.0	1302	46	3.5
Human immunodeficiency virus (HIV) disease	492	27	5.5	750	23	3.1

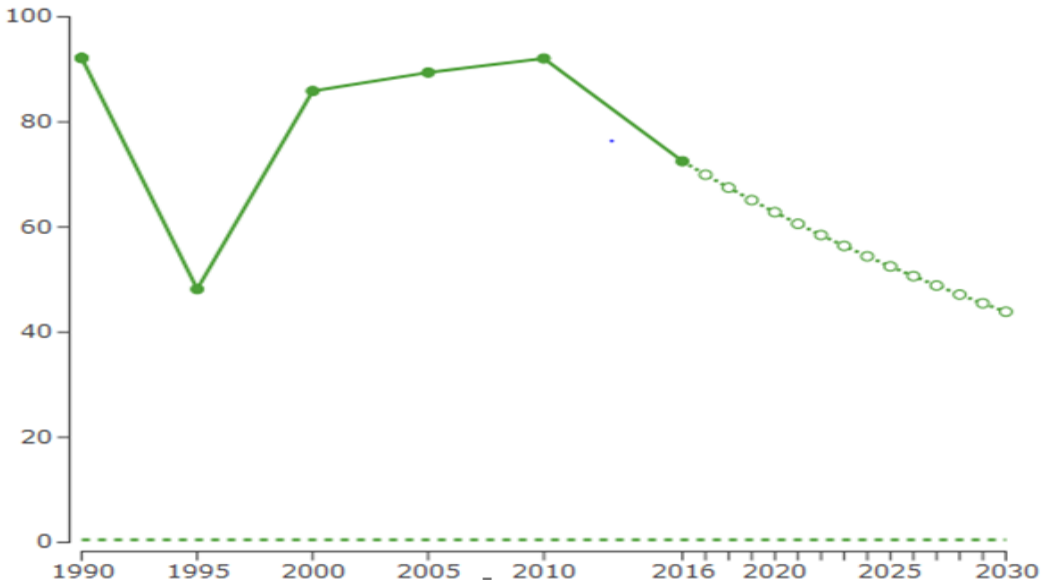
Table 4.3 Notifiable diseases, incidence per 100000 population, Georgia, 2017

	All ages		Children	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Diphtheria	0	0	0	0
Whooping cough	280	7.5	255	34.5
Tetanus	5	0.1	2	0.3
Acute flaccid paralysis / poliomyelitis	11	0.3	11	1.5
Measles	94	2.5	63	8.5
Rubella	5	0.1	4	0.5
Mumps	28	0.8	24	3.2
Acute viral hepatitis A	3	0.1	1	0.1
Acute viral hepatitis B	63	1.7	0	0
Chronic viral hepatitis B	1559	41.8	0	0
Viral hepatitis C	7860	210.8	15	2
Other viral hepatitis	64	1.7	4	0.5
Other salmonella infections	158	4.2	60	8.1
Shigellosis	476	12.8	435	58.9
Enterohaemorrhagic escherichiosis	4	0.1	2	0.3
Other bacterial foodborne intoxications	34026	912.7	13444	1819.5
Including botulism	8	0.2	3	0.4
Diarrhoea and gastroenteritis of presumed infectious origin	16759	449.5	10337	1399
Tularemia	13	0.3	1	0.1
Anthrax	35	0.9	0	0
Brucellosis	217	5.8	23	3.1
Lyme disease (Borreliosis)	180	4.8	46	6.2
Pox viral infections	34	0.9	1	0.1
Rickettsioses	5	0.1	2	0.3
Rabies	0	0	0	0
Hemorrhagic fevers of presumed viral origin	9	0.2	0	0
Hantavirus infection	21	0.6	1	0.1
Crimea-Congo fewer	5	0.1	0	0
Leptospirosis	75	2	2	0.3
Scarlet fever	1366	36.6	1285	173.9
Chiken pox	8025	215.3	6813	922
Viral meningitis	16	0.4	7	0.9
Bacterial meningitis	138	3.7	44	6
Meningococcaemia	16	0.4	15	2
Meningitis caused by N. meningitidis	3	0.1	2	0.3
S. pneumonae infection	28	0.8	25	3.4
Meningitis caused by S. pneumonae	14	0.4	6	0.8
Meningitis caused by M. tuberculosis	45	1.2	3	0.4
Post-vaccination unusual reactions and complications	9	0.2	6	0.8
Nosocomial infections of the urinary tract	43	1.2	1	0.1
Nosocomial pneumonia	263	7.1	1	0.1
Sepsis	35	0.9	9	1.2
Surgical wound infection	56	1.5	1	0.1
Leishmaniosis	39	1	31	4.2
Echinococcosis	88	2.4	7	0.9
Malaria	0	0	0	0
Trichinellosis	6	0.2	0	0
Amebiasis	2	0.1	0	0
Fascioliasis	26	0.7	7	0.9

Pulmonary and extrapulmonary tuberculosis

According to the World Health Organization estimates, there is a trend of decrease of tuberculosis morbidity in Georgia, although, indicators are high, compared to the European region and the EU countries. In 2017, there were 2 927 cases of tuberculosis registered, including 2 597 new cases and relapses. The prevalence rate of all forms of tuberculosis was 78.5 per 100000 population; incidence rate for new cases and relapses – 69.6 (Figure 4.3).

Figure 4.3 Tuberculosis incidence rate per 100000 population, Georgia

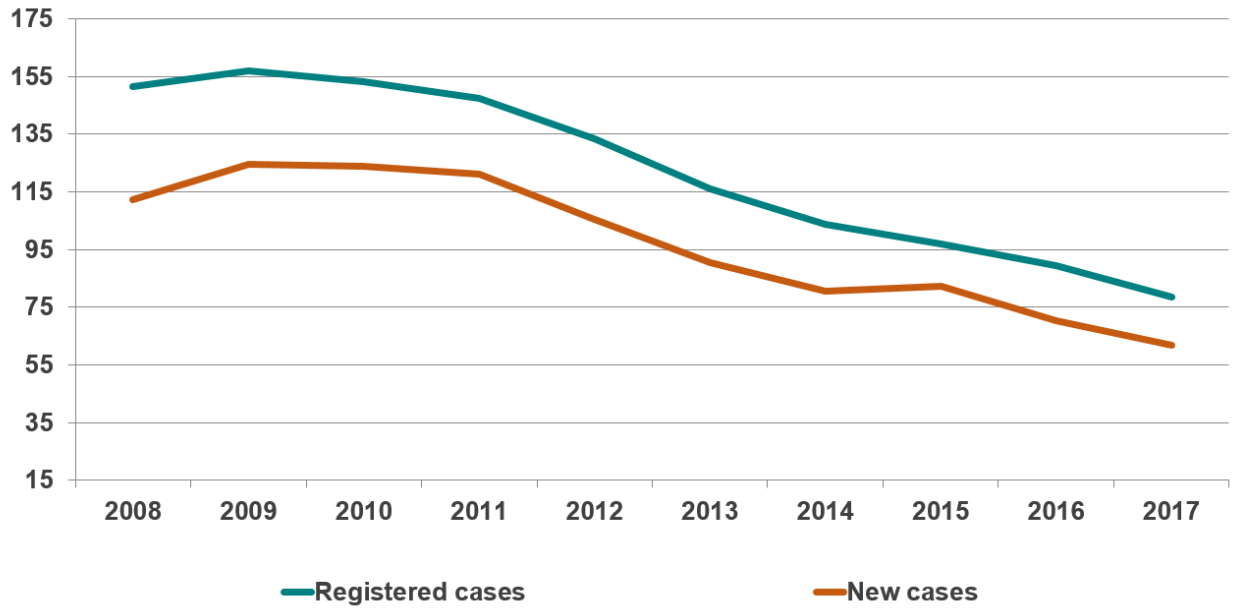


Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

2.8% of new cases and relapses was registered in penitatiary system. The share of pulmonary tuberculosis constitued 77.2% of all new cases.

In 2017, according to the National Statistics Office of Georgia, mortality caused by tuberculosis was 1.9 cases per 100,000 population (Figure 4.4).

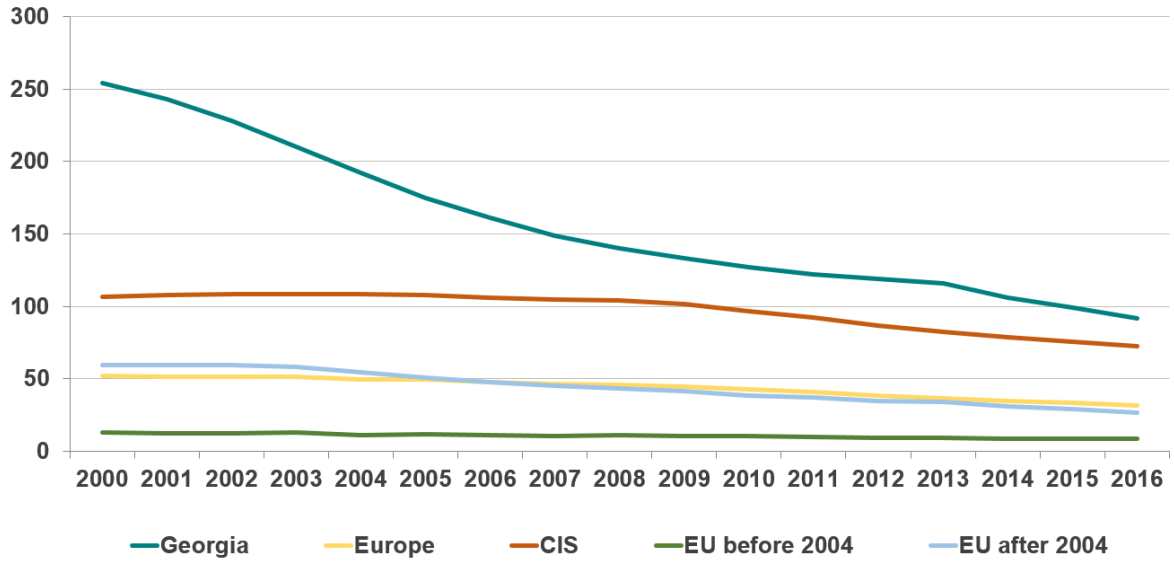
Figure 4.4 Tuberculosis morbidity rates per 100000 population, Georgia



Source: NCDC; National Institute of Tuberculosis and other Pulmonary Diseases

Despite of the decline, TB morbidity rates in Georgia are higher compared to the European Region and the EU countries (Figure 4.5).

Figure 4.5 TB incidence, WHO estimates



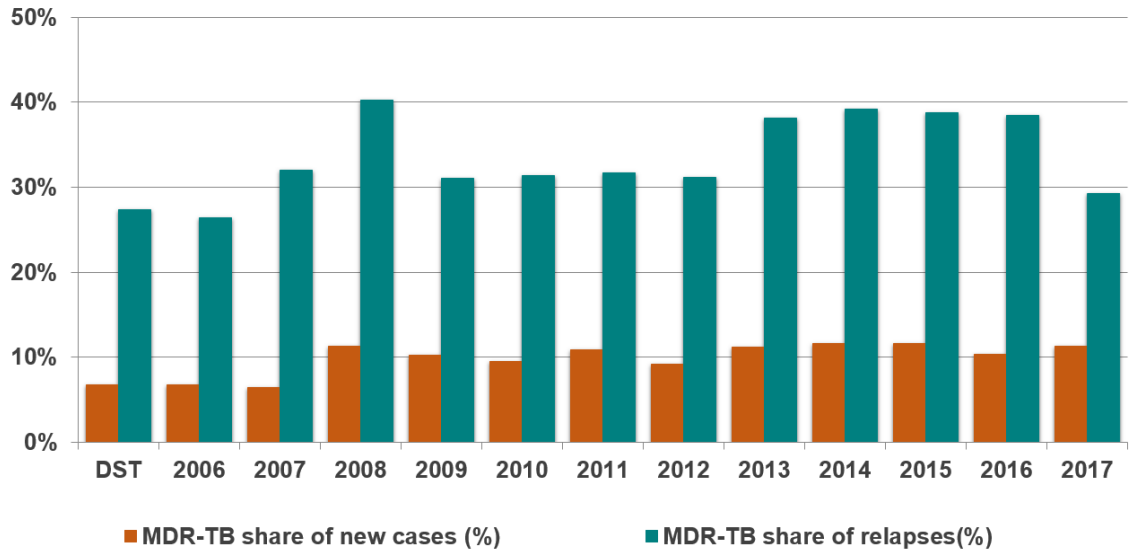
Source: WHO HFA DB

The "successful treatment" of the new cases of pulmonary BK+ tuberculosis repersents a good assessment characteristic of the tuberculosis control and management. In 2005, "successful treatment" of new cases of pulmonary BK+ tuberculosis showed only 64.1%. In 2014 and 2015, this indicator increased up to 81% (cohort of 2013), in 2017 – 83% (cohort of 2016).

The share of extensively resistant tuberculosis (XDR-TB) among MDR-TB cases has got a growing tendency and, in 2017, has reached 15%. The share of HIV co-infection in new MDR cases is 5.2%. The shares of new and retreated M/XDR cases constituted 11.3% and 29.9% of the total number of tuberculosis cases correspondingly (Figure 4.6).

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

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



Source: NCDC; National Institute of Tuberculosis and other Pulmonary Diseases

Table 4.4 Tuberculosis morbidity rates per 100000 population, Georgia

	All forms of tuberculosis		Pulmonary tuberculosis	
	Number of registered cases	Rate per 100000 population	Number of registered cases	Rate per 100000 population
2008	5836	132.7	4471	116.2
2009	5978	135.5	4587	120.3
2010	5796	130.2	4524	119.5
2011	5533	123.4	4369	116.3
2012	4974	110.8	3905	104.7
2013	4319	96.2	3502	94.2
2014	3850	103.3	3094	83.2
2015	3611	97.1	2916	78.3
2016	3330	89.5	2709	72.7
2017	**2927**	**78.5**	**2373**	**63.7**

Table 4.5 Tuberculosis, new cases and relapses, Georgia

	All forms				Pulmonary			
	New cases	Rate per 100000 population	New Cases and Relapses	Rate per 100000 population	New cases	Rate per 100000 population	New Cases and Relapses	Rate per 100000 population
2008	4148	94.3	4318	98.2	2931	66.6	3195	72.6
2009	4457	101.0	4757	107.8	3174	72.0	3449	78.2
2010	4383	98.4	4679	105.1	3228	72.5	3519	79.0
2011	4223	94.2	4554	101.6	3167	70.6	3490	77.8
2012	3778	84.1	3942	87.8	2834	63.1	2995	66.7
2013	3133	69.8	3434	76.5	2412	53.8	2693	60.0
2014	2807	75.3	3200	85.9	2149	57.7	2496	67.0
2015	2622	70.5	3152	84.8	2006	54.0	2483	66.8
2016	2463	66.2	2983	80.2	1901	51.1	2371	63.7
2017	**2164**	**58.0**	**2597**	**69.6**	**1687**	**45.3**	**2068**	**55.5**

Table 4.6 Tuberculosis morbidity rates per 100000 population by regions, Georgia, 2017

	Number of registered cases	Rate per 100000 population	New cases	Rate per 100000 population	New cases and relapses	Rate per 100000 population
Ajara	358	103.9	267	77.5	298	86.5
Tbilisi	969	84.1	743	64.5	779	67.6
Kakheti	197	62.5	153	48.5	161	51.1
Imereti	293	57.4	206	40.3	220	43.1
Samegrelo and Zemo Svaneti	387	120.0	284	88.1	307	95.2
Shida Kartli	150	57.7	117	45.0	121	46.6
Kvemo Kartli	287	66.6	211	49.0	221	51.3
Guria	53	47.7	38	34.2	39	35.1
Samtskhe-Javakheti	80	51.1	51	32.6	53	33.9
Mtskheta-Mtianeti	64	68.2	44	46.9	47	50.1
Racha-Lechkhumi and Kvemo Svaneti	11	36.1	7	23.0	7	23.0
Other departments	78	--	46	--	52	--
Georgia	**2927**	**78.5**	**2167**	**59.3**	**2305**	**63.0**

Table 4.7 Pulmonary tuberculosis morbidity rates per 100000 population by regions, Georgia, 2017

	Number of registered cases	Rate per 100000 population	New cases	Rate per 100000 population	New cases and relapses	Rate per 100000 population
Ajara	286	83.0	201	58.3	232	67.3
Tbilisi	754	65.4	561	48.7	597	51.8
Kakheti	159	50.4	19	6.0	127	40.3
Imereti	244	47.8	168	32.9	182	35.6
Samegrelo and Zemo Svaneti	325	100.8	230	71.3	253	78.4
Shida Kartli	130	50.0	100	38.5	104	40.0
Kvemo Kartli	238	55.2	167	38.7	177	41.1
Guria	47	42.3	32	28.8	33	29.7
Samtskhe-Javakheti	59	37.7	31	19.8	33	21.1
Mtskheta-Mtianeti	52	55.4	35	37.3	38	40.5
Racha-Lechkhumi and Kvemo Svaneti	11	36.1	7	23.0	7	23.0
Other departments	68	--	37	--	43	--
Georgia	**2373**	**63.7**	**1588**	**42.6**	**1826**	**49.0**

Table 4.8 Results of treatment of new cases of smear positive pulmonary tuberculosis, registered 12 months ago, Georgia

	2010	2011	2012	2013	2014	2015	2016	2017
Number of registered cases	**2055**	**2143**	**2028**	**1647**	**1332**	**1003**	**782**	**725**
% of total:								
Recovered	63.7	67.0	68.3	65.6	64.1	73.0	77.1	77.3
Completed treatment	11.6	9.5	7.7	8.8	7.1	7.9	6.0	6.6
Unsuccessful treatment	3.5	1.9	3.1	4.3	3.8	4.6	4.6	3.7
Died	3.1	2.9	2.3	2.0	3.2	4.2	4.3	3.4
Interrupted treatment	7.3	6.7	5.1	5.5	6.6	7.7	6.5	6.7
Not evaluated	1.3	1.4	1.2	2.3	2.9	2.7	1.4	2.0

Table 4.9 Incidence of extrapulmonary tuberculosis by regions, Georgia

	2016			2017		
	Number of new cases	Rate per 100000 population	% of total number of new cases of tuberculosis	Number of new cases	Rate per 100000 population	% of total number of new cases of tuberculosis
Ajara	77	22.8	21.1	66	19.1	18.0
Tbilisi	195	17.5	21.3	182	15.8	18.0
Kakheti	35	11.0	20.1	34	10.8	17.0
Imereti	67	12.6	21.5	38	7.4	12.9
Samegrelo and Zemo Svaneti	60	18.2	17.8	54	16.7	13.8
Shida Kartli	22	8.3	13.0	17	6.5	11.3
Kvemo Kartli	66	15.5	25.4	44	10.2	15.2
Guria	7	6.2	10.9	6	5.4	11.3
Samtskhe-Javakheti	13	8.1	27.7	20	12.8	25.0
Mtskheta-Mtianeti	14	14.9	24.1	9	9.6	13.6
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	0.0	0	0.0	0.0
Other departments	6	--	9.2	9	--	13.2
Georgia	**562**	**15.1**	**20.2**	**479**	**12.8**	**16.1**

Table 4.10 Number of registered cases of extra pulmonary tuberculosis by localization, Georgia

	2015		2016		2017	
	Number of cases	Rate per 100000 population	Number of cases	Rate per 100000 population	Number of cases	Rate per 100000 population
Cases of extra pulmonary tuberculosis	**694**	**18.7**	**620**	**16.7**	**551**	**14.7**
Including:						
Tuberculosis meningitis	50	1.3	61	1.6	49	1.3
Bone and joint tuberculosis	118	3.2	105	2.8	99	2.7
Urogenital tuberculosis	102	2.7	75	2.0	49	1.3
Tuberculosis pleurisy	233	6.3	182	4.9	169	4.5
Tuberculosis of lymph nodes	191	5.1	197	5.3	185	4.9

Table 4.11 Tuberculosis meningitis, Georgia

	2015		2016		2017	
	Number of cases	Rate per 100000 population	Number of cases	Rate per 100000 population	Number of cases	Rate per 100000 population
All registered cases	**51**	**1.4**	**61**	**1.6**	**49**	**1.3**
Including children	2	0.3	4	0.6	2	0.3

HIV/AIDS

Georgia is considered as a country with low prevalence of HIV/AIDS. However, in recent years incidence of HIV/AIDS is charactirized by the growing trend. In 2017, in Georgia, 613 new cases of HIV were registered (incidence per 100000 population – 16.9).

After national consultancies implementing, SPECTRUM program (designed for modeling of HIV epidemic) a potential number of HIV cases in the country was determined (10500 cases).

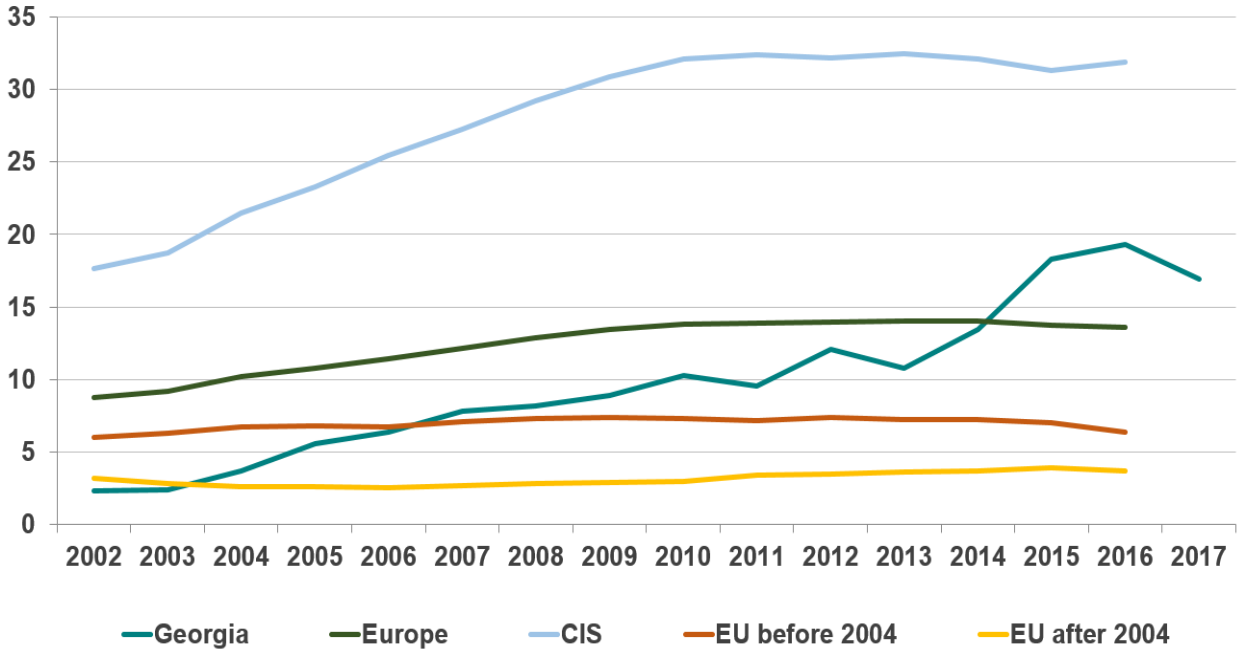
The decrease of the number of registered cases indicates a true reduction of morbidity, because in 2017, within the framework of the Global Fund HIV / AIDS State Program more tests were performed than in 2016.

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

Behavioral high-risk groups (IDUs, CSWs, MSM) received services, defined by the HIV prevention package, including HIV voluntary counseling and testing, within the framework of the Global Fund Program. The total number of conducted tests is 77800.

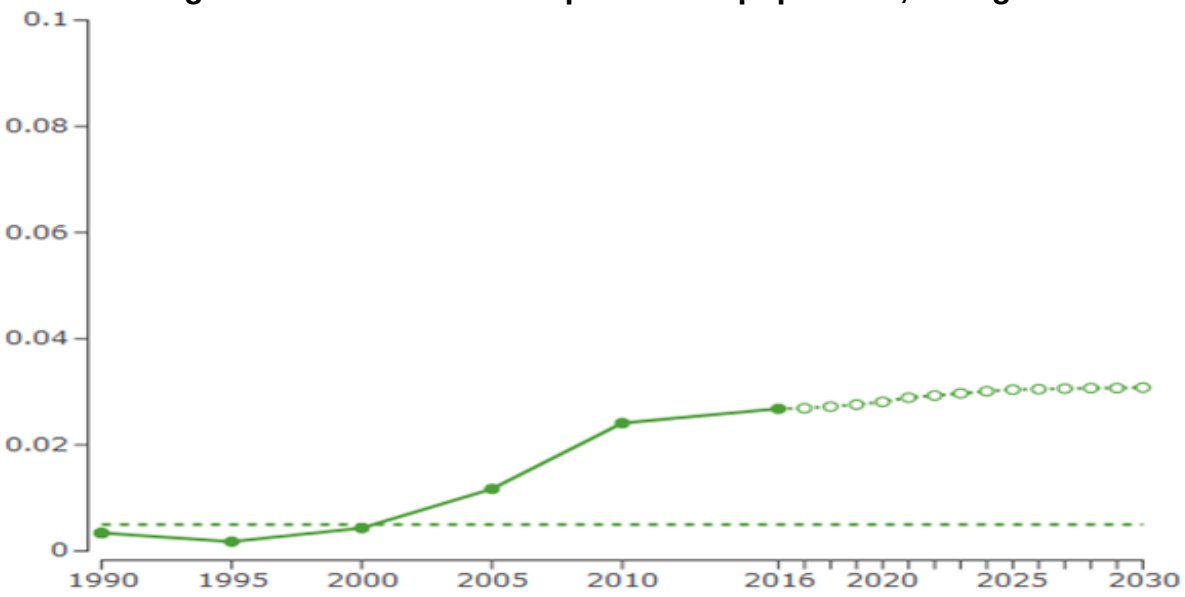
Despite of the the testing of various high-risk groups, a challenge to detect HIV cases at an early stage remains in the country. In general, by the end of 2017, about 48% of the estimated number of HIV infections were reported.

Figure 4.7 HIV incidence per 100000 population



Source: WHO HFA DB

Figure 4.8 HIV incidence per 100000 population, Georgia



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

Universal access of the HIV / AIDS patients to antiretroviral drugs, is funded by the State and the Global Fund. Georgia is the first country in the region, to implement a "treatment for all" strategy, which is aimed on the treatment of HIV / AIDS patients independently of the number of CD4 cells and significantly improves the treatment outcomes and promotes HIV / AIDS proliferation in the country. In 2017, 81% of HIV-infected patients received an antiretroviral therapy.

HIV, new cases by mode of transmission in %, Georgia, 2017

Mode of transmission	%
Injecting drug use	23.5
Heterosexual contacts	54.0
Homosexual contacts	20.6
Vertical transmission	0.5
Blood or blood products transfusion	0.8
Unidentified	0.6

Source: Center for infectious pathology, AIDS and clinical immunology

In 2017, in Georgia (first among countries of the South Caucasus), pilot program of preventive antiviral treatment (PrEP) for MSM population, allowing to avoid HIV infection of people with high risk , implementing the antiviral preventive treatment. It is planned to enlarge a geographical access to the program and to involve other high-risk populations.

Table 4.12 New cases of HIV infection, Georgia

	1990	2000	2010	2011	2012	2013	2014	2015	2016	2017
All ages	**0**	**2.0**	**6.7**	**11.8**	**11.4**	**14.1**	**10.9**	**15.1**	**19.3**	**16.9**
In population aged 15-24	0	1.6	2.8	5.3	6.1	4.9	8.8	9.1	14.5	14.1

Table 4.13 New cases of HIV infection, incidence by sex, Georgia

	2015		2016		2017	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Male	547	30.8	558	31.3	499	27.9
Female	170	8.8	161	8.3	132	6.8
Both sexes	**717**	**19.2**	**719**	**19.3**	**631**	**16.9**

Table 4.14 New cases of HIV infection by modes of transmission, Georgia

	2015		2016		2017	
	Number	%	Number	%	Number	%
Injecting drug use	201	28.0	218	30.3	148	23.5
Heterosexual contacts	360	50.2	370	51.5	341	54.0
Homosexual contacts	142	19.8	121	16.8	130	20.6
Blood or blood products transfusion	4	0.6	2	0.3	5	0.8
Vertical transmission	6	0.8	4	0.6	3	0.5
Unidentified	4	0.6	4	0.6	4	0.6
Total	**717**	**100.0**	**719**	**100.0**	**631**	**100.0**

Table 4.15 New cases of HIV infection, incidence by regions, Georgia

	2015		2016		2017	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Abkhazia	29	-	35	-	35	--
Ajara	83	24.5	63	18.4	76	22.0
Tbilisi	263	23.4	289	25.4	252	21.9
Kakheti	44	13.8	40	12.6	33	10.5
Imereti	90	17.1	80	15.4	70	13.7
Samegrelo and Zemo Svaneti	95	28.8	87	26.7	59	18.3
Shida Kartli	27	10.3	35	13.4	33	12.7
Kvemo Kartli	42	9.8	50	11.7	37	8.6
Guria	14	12.4	18	16.1	9	8.1
Samtskhe-Javakheti	13	8.2	11	7.0	13	8.3
Mtskheta-Mtianeti	13	13.8	10	10.6	11	11.7
Racha-Lechkhumi and Kvemo Svaneti	4	12.6	1	3.2	3	9.8
Georgia	**717**	**19.2**	**719**	**19.3**	**631**	**16.9**

Table 4.16 Fatality of HIV-infected patients by causes of death, Georgia

	2015		2016		2017	
	Number of deaths	Case fatality rate (%)	Number of deaths	Case fatality rate (%)	Number of deaths	Case fatality rate (%)
HIV-related	57	60.6	81	63.3	77	55.4
HIV-unrelated	27	28.7	37	28.9	25	18.0
Unknown	10	10.6	10	7.8	37	26.6
Total	**94**	**100.0**	**128**	**100.0**	**139**	**100.0**

Hepatitis C

Based on available data, Georgia is among the countries with high hepatitis C (HCV) prevalence. However, the reasons of the high burden of the disease have not been studied sufficiently.

According to the latest population-based seroprevalence survey, conducted by the National Center for Disease Control and Public Health (NCDC) and US Centers for Disease Control and Prevention (CDC) in 2015, estimated national seroprevalence of hepatitis C is 7.7% and the prevalence of active disease is 5.4%.

Progress of the Hepatitis C elimination program

- The Government of Georgia, with support of CDC and other international partners showed a strong political will to fight against Hepatitis C. In 2015, State Program for Hepatitis C Elimination was launched.
- Last few years, the Government of Georgia substantially strengthened efforts to fight against C hepatitis, by implementing national programs, such as free hepatitis C treatment for patients with HIV / HCV co-infections (since 2011 in the framework of the Global Fund program for HIV / AIDS); free treatment of hepatitis C in the penitential system; 60% discount on combined interferon and ribavirin for general population.
- On February 2014, the Ministry of Labor, Health and Social Affairs of Georgia (Minister David Sergeenko), with American partners, laid the foundation for initiation of strengthened reaction to Hepatitis C in Georgia.
- In 2014, the Government of Georgia initiated negotiations with a pharmaceutical company "Gilead", a global leader in research and production of antiviral drugs (including sophosbuvir and combination of ledipasvir-sofosbuvir with fixed doses.
- The Ministry of Labor, Health and Social Affairs of Georgia appointed a special commission to coordinate the progress of hepatitis C elimination. In addition, the National Program for Short-term / Emergency Measures for Hepatitis elimination was developed. A working group of experts was created to monitor a progress of the Hepatitis C Eligination National Strategy and Action Plan.
- On 21 April 2015, a Memorandum of Understanding was signed between the Government of Georgia and the pharmaceutical company "Gilead".
- Together with the CDC/Atlanta, a Strategic Plan for Elimination, based on World Health Organization guidelines 2016-2020, was developed,. The Plan was approved by the Government of Georgia on 18 August 2016. Strategy includes the following targets set for 2020:
    - Revealing of 90% of HCV infected population;
    - Involvement of 95% revealed cases in the treatment; cure of 95% of treated patients.
- In 2016, a Clinical and Scientific Commissions for Hepatitis C were created. National Guidelines for Clinical Management of Hepatitis C were developed. On July 2018, a Scientific Committee reviewed 46 researches and approved 38. \Clinical Commission, based on WHO, EASL and AASLD guidelines, developed Georgian protocols and

guidelines for HCV. At Georgian portal of British Medical Journal (BMJ) the World best experience for HCV diagnosis and treatment is available.

- The Progress of Elimination of Hepatitis C in Georgia is an annual reviewed by international scientists at the Congress of the European Liver Association (EASL). The same topic is discussed at the Hepatitis C workshop, which takes place every spring in Georgia. Since 2016, by the end of each year, a group of technical advisers group meet international experts. The aim of the meeting is summarizing the current achievements and challenges and developing future recommendations.
- On November 1, 2017, at the World Summit of Hepatitis, Georgia was granted a status of " NOhep Visionary" for contribution to hepatitis C elimination. hepatitis C,. The meeting once more emphasized the achievements of the Elimination Program and Georgia was named as a model and exemple for other countries.
- National Center for Disease Control and Public Health established an "Association of Patients Cured from Hepatitis C", which aims at promoting of successes of Hepatitis C elimination program, raising awareness about viral hepatitis among the population, reduction of stigma and discrimination, associated with hepatitis.
- An electronic module was created to collect data on hepatitis C screening, which register information, supplied by any institution providing hepatitis C screening. A citizen's personal number is used as identifier, which allows an establishment of inter-connectivity with other databases, such as HCV treatment database, blood donors electronic module, hospitalization module, and birth register.

By July 2018, there are more than 1.8 million screened cases registered in the module, a number of tested individuals reach 1.2 million, the positive results share is 9.5%.

Figure 4.9 Number of population covered by screening, by sex and result of testing

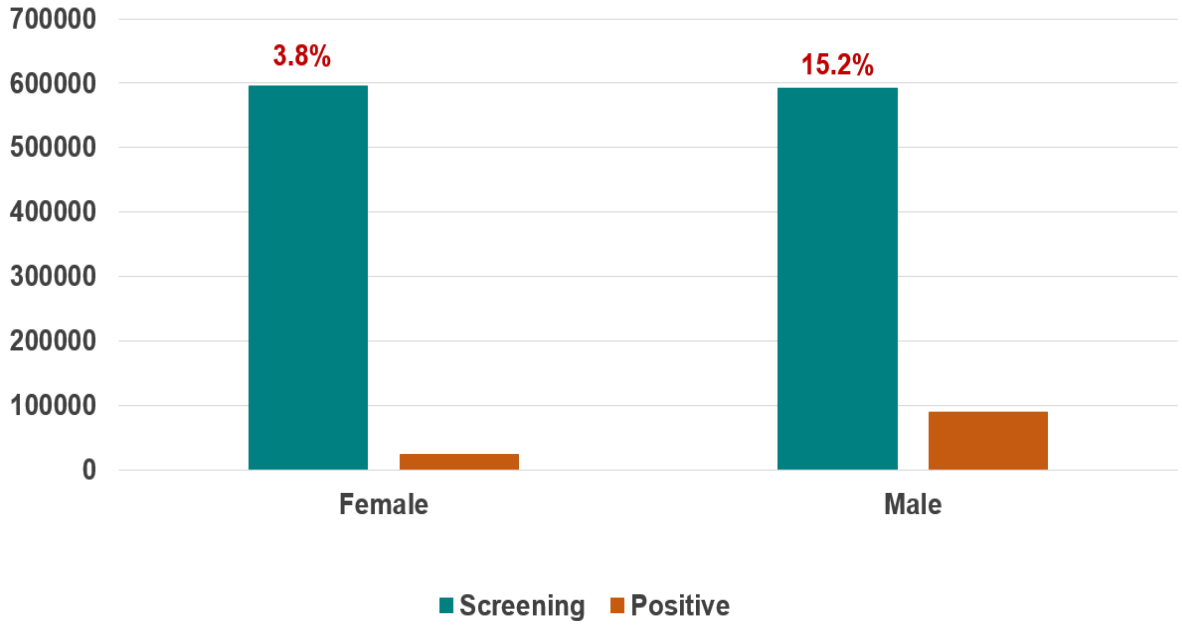
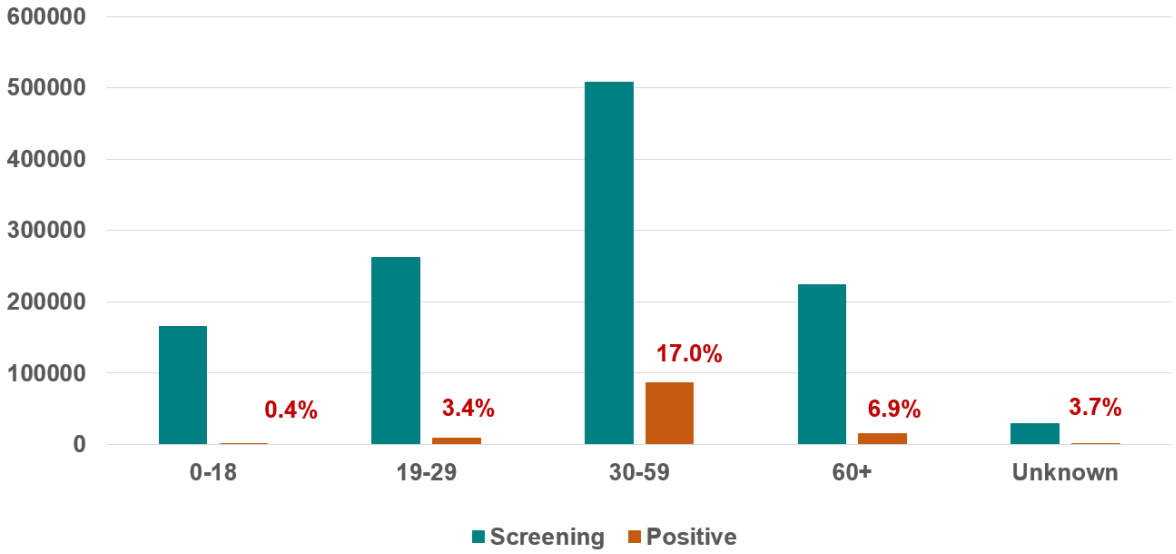
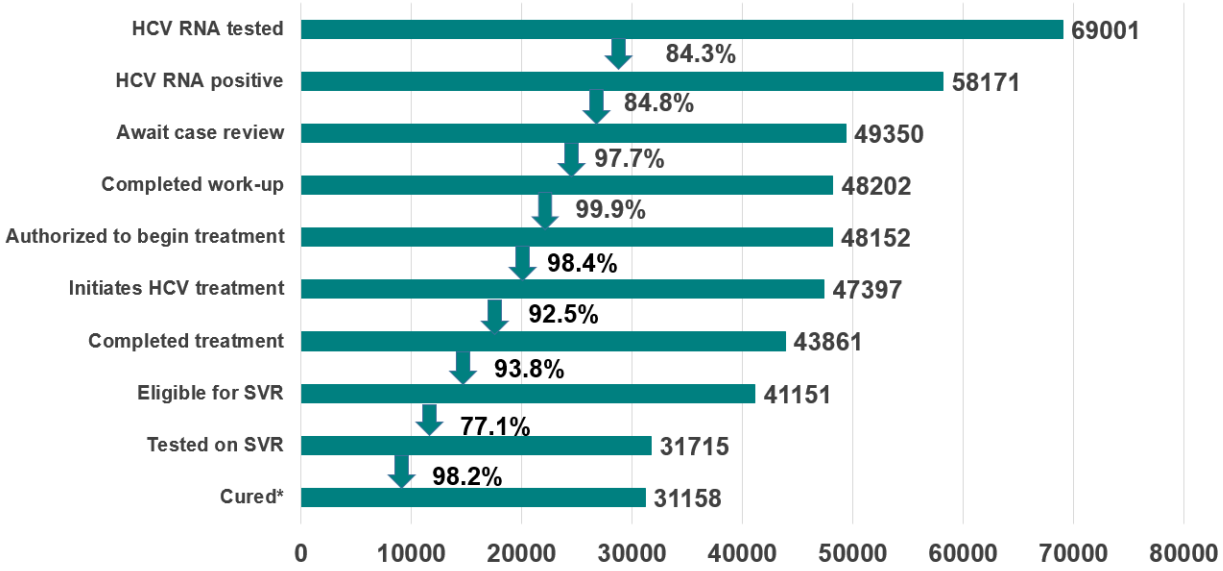


Figure 4.10 Number of population covered by screening, by age and result of testing



32 centers across the country (including one in the penitential system) offer beneficiaries diagnostics and treatment services provided by the HCV Elimination program. Since the start of the program (April 2015), until June 30, 2018, total of 43861 patients completed treatment. The cure rate is 98%.

Figure 4.11 Cascade of the elimination program April 28, 2015 - June 30, 2018



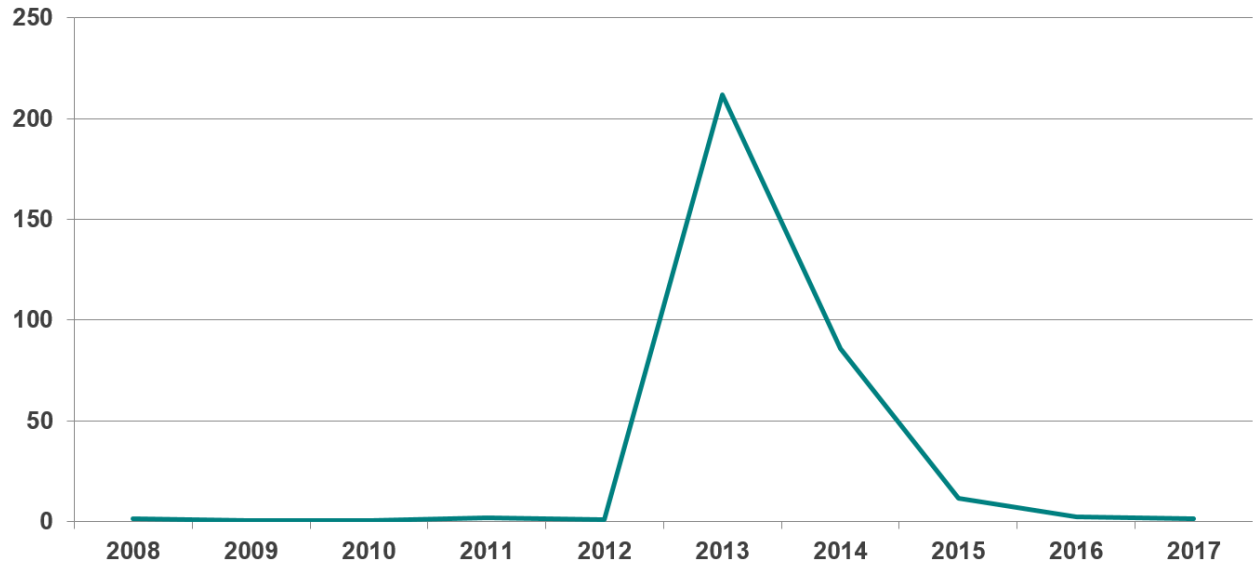
Measles

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

Since 2013, additional campaigns have been implemented to seize the epidemic: the completion of the anti-measles vaccination course for children aged 14; provision of additional vaccination to population aged 15-30, health professionals and some other specific groups. In 2013-2016, about 170,000 people were vaccinated. As a result, the

number of cases of measles in the country significantly decreased: in 2015 there were registered 431 cases of measles; in 2016 - 14 cases. In 2017, the number of measles cases increased and reached 94 cases (Figure 4.12).

Figure 4.12 Measles, incidence per 100000 population

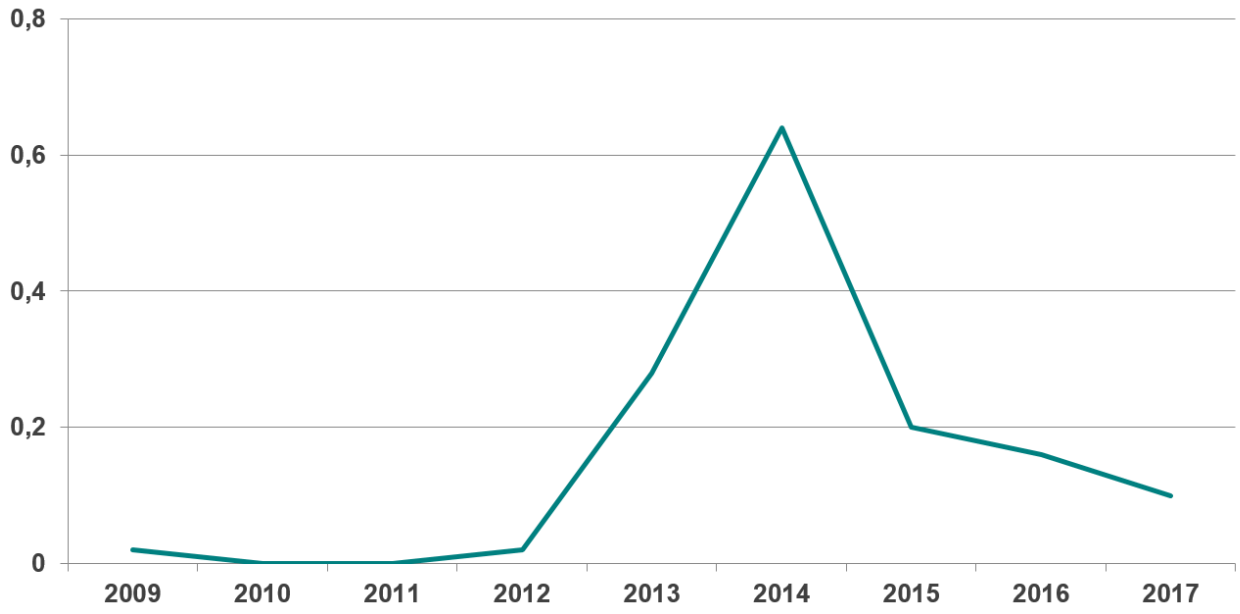


Source: NCDC

Crimean-Congo fever

In 2014, in the East part of Georgia there was an outbreak of Crimean-Congo fever. Total number of registered cases was 24 (incidence per 100000 population – 0.6); 4 cases were fatal (case fatality rate – 16.6). In 2016, a surveillance system revealed 41 suspicious cases of hemorrhagic fever, in 6 cases the diagnosis of the Crimean-Congo hemorrhagic fever was confirmed, 2 of which were fatal (both in foci - Ambrolauri and Terjola). Compared to the previous year, the number of cases has decreased (in 2015, 9 cases of Crimean-Congo hemorrhagic fever were registered, including 1 fatal), although the spread area increased. In 2017, the number of cases decreased, compared to the previous year (the total number of registered cases is 5) (Figure 4.13).

Figure 4.13 Crimean-Congo fever, incidence per 100000 population, Georgia



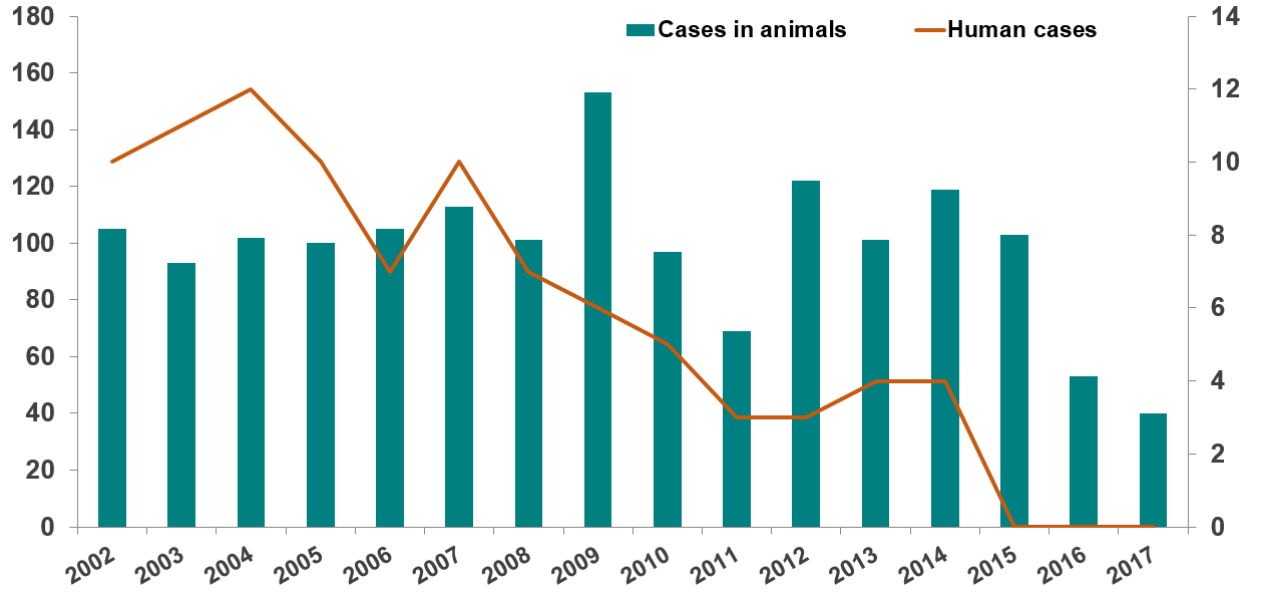
Source: NCDC

Rabies

Continious provision of the anti-rabies serum (immunoglobulin) and vaccines provided good background to reach the zero incidence of rabies rate in humans. In 2015, this happened the first time starting from 1990. In 2016-2017, this sustained (Figure 4.14).

In 2017, a preventive vaccination against rabies was provided to 45794 injured population, including combined (vaccine + immunoglobulin) vaccination 21.6%. Services were provided within the State program.

Figure 4.14 Number of cases of rabies, Georgia

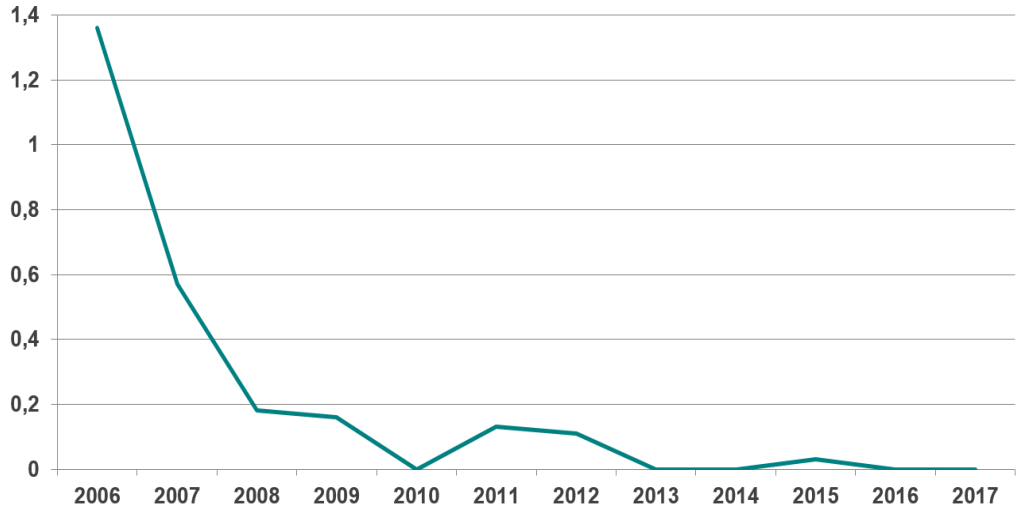


Source: NCDC

Malaria

Since 2002, malaria incidence has been substantially reduced, reaching zero point in 2013 – 2014. In 2016, there were no local cases of malaria registered (Figure 4.12). Although, surveillance system revealed 18 suspected cases, out of which 7 cases were confirmed (all of them – imported). In 2017, the Ministry of Environment Protection and Agriculture of Georgia and the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia organized a vector control of 9000000 m^2 of external and internal territories (in 2015 – 7000000 m^2, in 2016 – 7500000 m^2).

Figure 4.15 Malaria incidence per 100000 population, Georgia

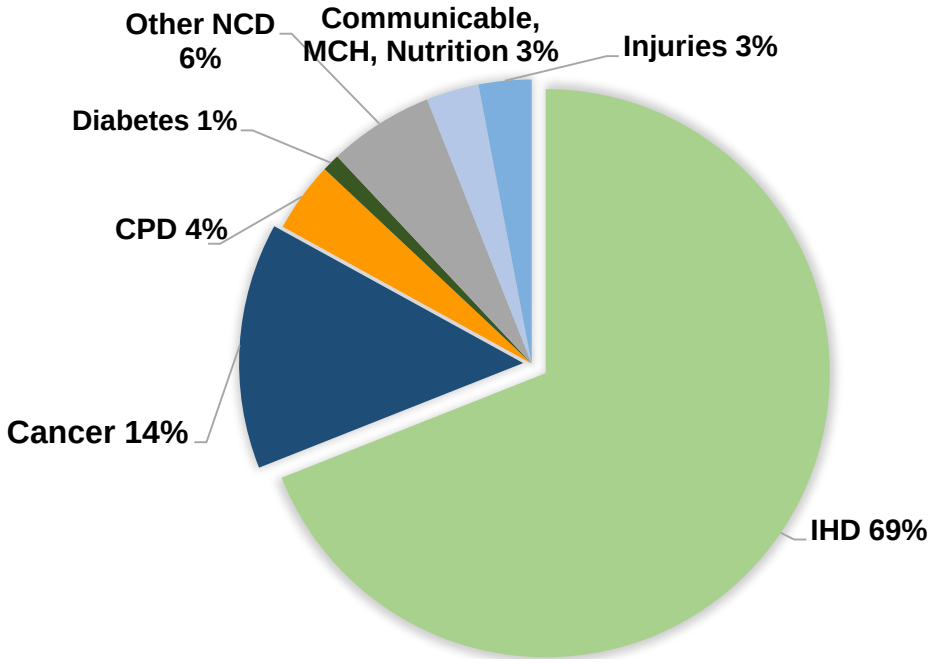


Source: NCDC

Noncommunicable Diseases

Non-communicable diseases constitute the main burden of the world's population mortality and morbidity. Non-fatal outcomes of disease and injury increasingly detract from the ability of the world's population to live in full health. According to the WHO report (2014), 97% of mortality in Georgia is caused by noncommunicable diseases and injuries. In addition, diseases of the circulatory system constitutes 69% of mortality, cancers – 14%, diabetes – 1%, cronic respiratory diseases – 4%, other noncommunicable diseases – 6%, and injuries – 3%.

Figure 4.16 Mortality structure, noncommunicable diseases



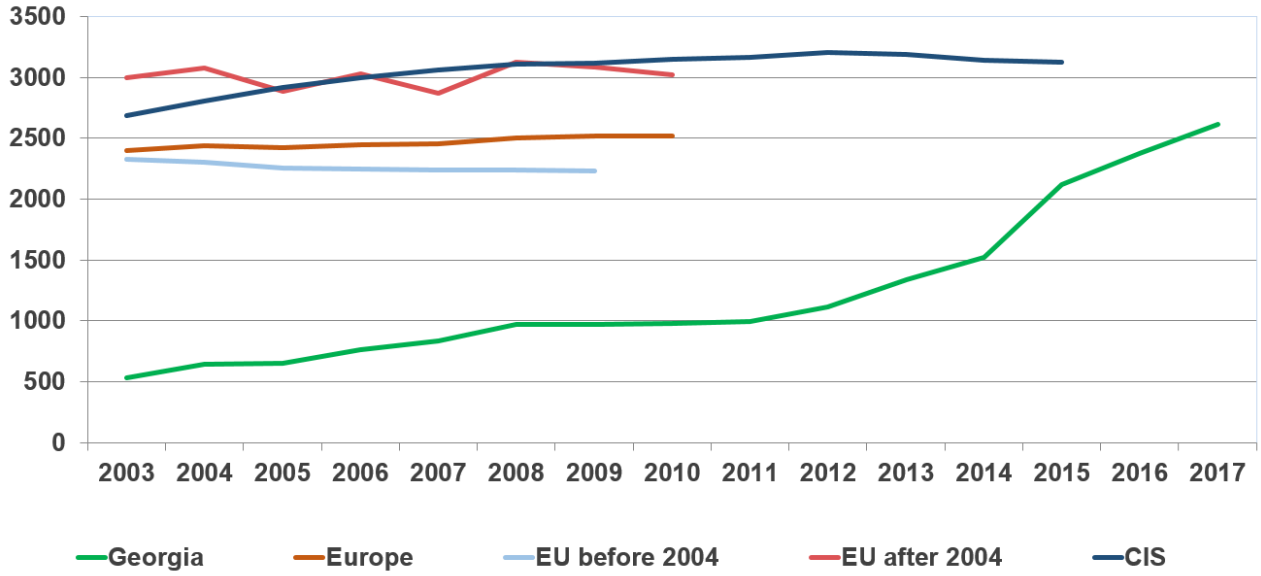
For the effective prevention and control of NCDs, it is essential to have timely access to precise and reliable information, to monitor and interpret health indicators, to monitor and evaluate the impact of interventions. For the effective NCD surveillance Georgia implemented the WHO STEP-wise approach. In 2010 and 2016, two rounds of STEPS surveys were conducted with technical and financial assistance of the WHO-Euro and the WHO-HQ. The surveys provided a unique opportunity of data comparison, not only with other countries, but also to monitor and evaluate patterns and trends of NCDs and risk-factors in Georgia. These are only first steps contributing the building of sustainable surveillance system, which would improve national capacity and provide a better health information, necessary for effective NCDs prevention and control aimed on the improvement of the health of population.

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

Diseases of the circulatory system

Diseases of the circulatory system constitute 17.2% of all registered and 9.4% of all new cases of diseases in the country. Hypertension, ischaemic heart diseases, and cerebrovascular diseases are characterised with high morbidity and mortality. In 2000 – 2017, in Georgia, the prevalence of diseases of circulatory system had an increasing trend (Figure 4.17).

Figure 4.17 The circulatory system diseases, hospital discharges 100000 population



Source: WHO HFA DB; NCDC

Hypertension

The share of hypertension constitutes about 53% of all cardiovascular diseases in Georgia (2017). According to the noncommunicable diseases risk-factors survey (STEPS-2016), 37.7% of the population suffers from hypertension. While, according to the previous similar survey data (2010), this share was 33.4%.

Ischaemic heart diseases

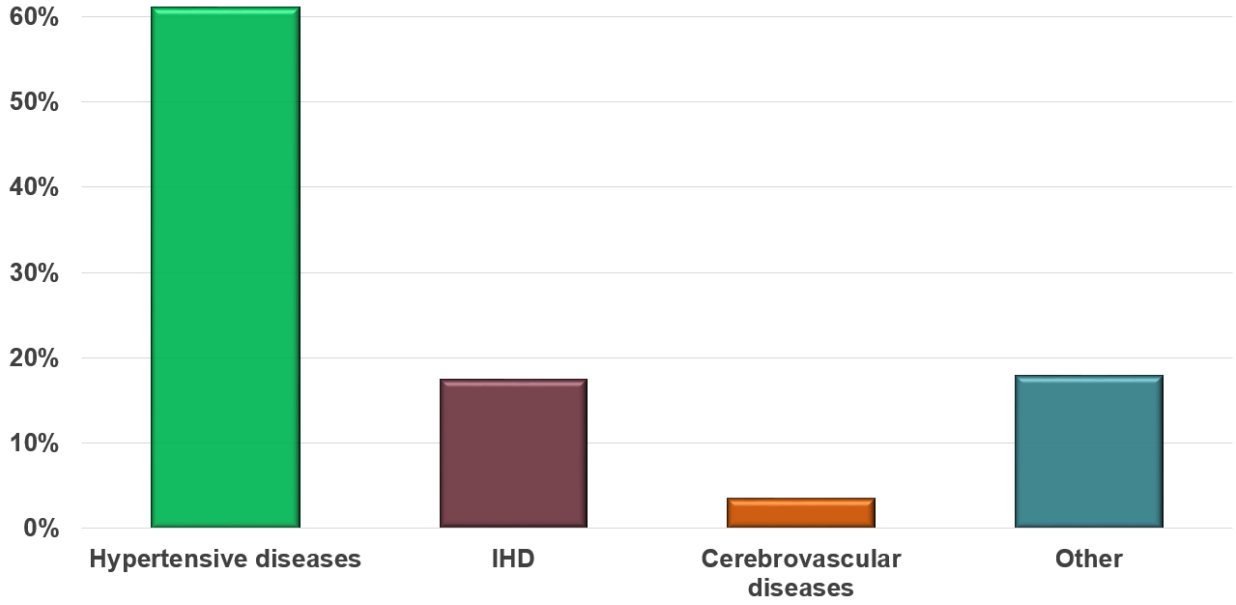
Ischaemic heart diseases constitute about 15.9% of all new cases of diseases of the circulatory system: angina pectoris – 6.3%; acute myocardial infarction – 1.6%, other acute ischaemic diseases – 1.3%.

In 2017, 48% of patients with acute myocardial infarction were admitted to hospital timely (within the first 24 hours from the onset of symptoms).

Cerebrovascular diseases

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

Figure 4.18 Diseases of the circulatory system, structure (%), Georgia, 2017



Source: NCDC

Table 4.17 Diseases of the circulatory system, morbidity rates, Georgia

	All ages				Children Under-15			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2008	306573	7966.1	74379	1932.7	5102	742.6	1250	181.9
2009	326421	8557.6	96038	2517.8	4775	697.9	1359	198.6
2010	337651	8916.8	98193	2593.1	4672	681.8	1103	161.0
2011	363488	9676.4	103466	2754.4	4176	610.8	749	109.5
2012	355657	9537.9	133411	3577.8	4044	593.2	823	120.7
2013	425232	11438.1	196348	5281.5	2347	343.4	1739	254.5
2014	409817	11018.3	165398	4446.9	1789	257.8	2069	298.1
2015	425105	11411.4	174735	4690.5	2793	392.8	3581	503.6
2016	447713	12011.1	190994	5123.9	1815	250.0	1731	238.4
2017	**615732**	**16516.4**	**184729**	**4955.2**	**2819**	**381.5**	**1555**	**210.4**

Table 4.18 Circulatory system diseases according to certain groups of diseases, Georgia, 2017

	Registered cases				New cases			
	All ages		In children		All ages		In children	
	Number	%	Number	%	Number	%	Number	%
Diseases of the circulatory system	**429932**	**100**	**879**	**100**	**184729**	**100**	**1555**	**100**
Including:								
Acute rheumatic fever	1789	0.4	71	8.1	1840	1.0	686	44.1
Chronic rheumatic heart diseases	6857	1.6	194	22.1	2696	1.5	51	3.3
Hypertensive diseases	281066	65.4	7	0.8	98400	53.3	76	4.9
Ischaemic heart diseases	76715	17.8	0	0.0	29412	15.9	0	0.0
Pulmonary heart disease and diseases of pulmonary circulation	1687	0.4	3	0.3	1074	0.6	0	0.0
Cerebrovascular diseases	13231	3.1	3	0.3	7825	4.2	27	1.7
Diseases of arteries, arterioles and capillaries	5585	1.3	0	0.0	3275	1.8	0	0.0
Other diseases of the circulatory system	26790	6.2	205	23.3	40207	21.7	715	46.0

Table 4.19 Ischaemic heart diseases, distribution by certain groups of diseases, Georgia, 2017

	Registered cases		New cases	
	Number	%	Number	%
Ischaemic heart diseases	**76715**	**100**	**29412**	**100**
Including:				
Angina pectoris	26503	34.5	11620	39.5
Acute myocardial infarction	1820	2.4	2983	10.1
Other acute Ischaemic heart diseases	5422	7.1	2404	8.2

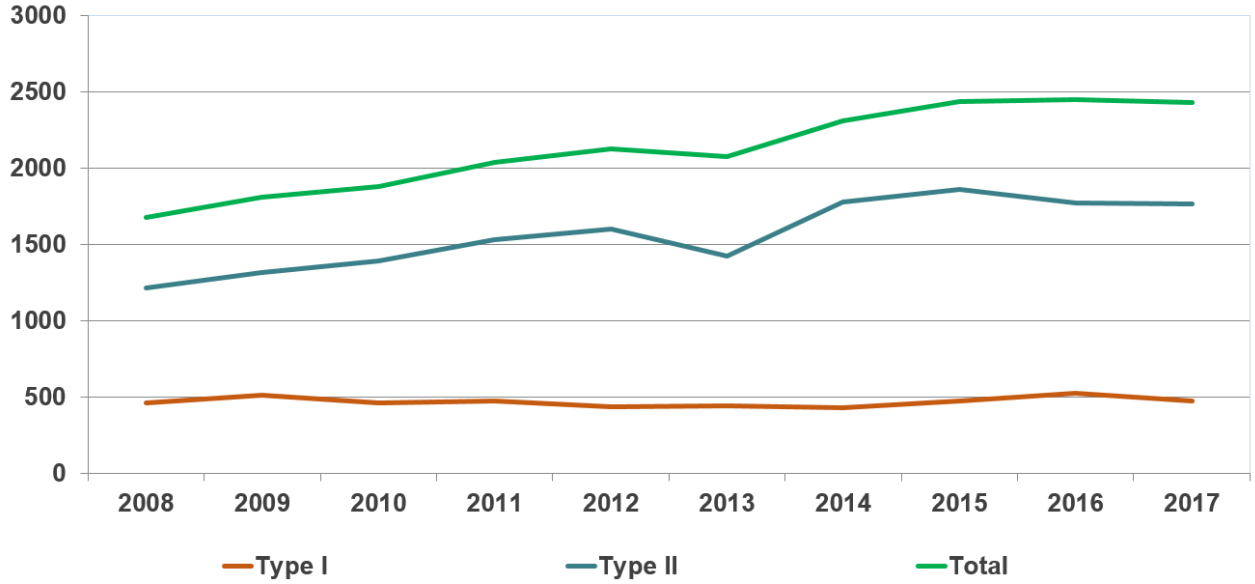
Table 4.20 Rheumatic diseases, morbidity rates, Georgia, 2017

	Registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Rheumatic heart diseases	**8646**	**231.9**	**4536**	**121.7**
Acute rheumatic fever	1789	48.0	1840	49.4
Including rheumatic fever with heart involvement	651	17.5	431	11.6
Chronic rheumatic heart diseases	6857	183.9	2696	72.3

Diabetes Mellitus

An upward trend of diabetes mellitus has been registered in recent years in Georgia, mainly caused by increasing of the diabetes type 2 cases. In 2017, 0.8% of new cases of diabetes type 1 were registered in children Under-15. There were only 33 cases of diabetes type 2 registered in children. According to the STEPS-2016 data, 2% of 18-69 years old population had impaired fasting glycaemia (6.1 – 7.0 mmol/l), and 4.5% - raised fasting blood glucose (>7.0 mmol/l).

Figure 4.19 Diabetes Mellitus, prevalence by type, Georgia



Source: NCDC

Table 4.21 Diabetes mellitus, all ages, Georgia

New cases	2016		2017	
	Total number	Incidence per 100000 population	Total number	Incidence per 100000 population
Diabetes mellitus	**20740**	**556.4**	**21822**	**585.4**
Diabetes mellitus type I	2933	78.7	*2776*	74.5
Diabetes mellitus type II	15150	406.4	12931	346.9
Number of patients enrolled by the end of the year	**Total number**	**Prevalence per 100000 population**	**Total number**	**Prevalence per 100000 population**
Diabetes mellitus	**91319**	**2449.9**	**90599**	**2449.9**
Diabetes mellitus type I	19497	523.1	17567	523.1
Diabetes mellitus type II	66112	1773.6	65721	1773.6

Table 4.22 Diabetes mellitus, children aged Under-15, Georgia

	2016		2017	
New cases	Total number	Incidence per 100000 children	Total number	Incidence per 100000 children
Diabetes mellitus	**138**	**19.0**	**171**	**23.1**
Diabetes mellitus type I	95	13.1	126	17.1
Diabetes mellitus type II	17	2.3	33	4.5
Number of patients enrolled by the end of the year	Total number	Prevalence per 100000 population	Total number	Prevalence per 100000 population
Diabetes mellitus	**377**	**51.9**	**410**	**55.5**
Diabetes mellitus type I	250	34.4	267	36.1
Diabetes mellitus type II	51	7.0	65	8.8

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 2017, chronic obstructive pulmonary diseases (COPD) contributed 75% of all registered cases of lower respiratory diseases.

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

Table 4.23 Diseases of the respiratory system, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
2008	362824	9427.8	299800	7790.2	184384	26836.9	169762	24708.7
2009	505340	13248.2	447518	11732.3	259136	37877.3	246604	36045.5
2010	494194	13050.8	439289	11600.9	256897	37490.2	244385	35664.3
2011	558241	14860.9	470741	12531.6	283497	41463.7	259815	38000.0
2012	605179	16229.5	521947	13997.4	299733	43964.7	273598	40131.2
2013	652700	17556.7	557495	14995.8	307330	44971.5	280157	40995.2
2014	701367	18856.9	601832	16180.8	347782	50108.2	317731	45778.5
2015	762210	20460.5	703727	18890.6	351131	49384.3	340217	47849.3
2016	796890	21378.6	744673	19977.8	345386	47570.5	337757	46519.8
2017	**704981**	**18910.4**	**647066**	**17356.9**	**313244**	**42392.5**	**305746**	**41377.8**

Table 4.24 Diseases of the respiratory system by certain groups of diseases, Georgia, 2017

	All ages		Children Under-15	
	Prevalence per 100000 population	Incidence per 100000 population	Prevalence per 100000 children	Incidence per 100000 children
Total number of diseases of the respiratory system	**18910.4**	**17356.9**	**42393.3**	**41378.5**
Including:				
Acute upper respiratory infections	10857.0	10857.0	30591.3	30591.3
Pneumonia	893.0	893.0	1077.3	1077.3
Other lower respiratory infections	2374.1	2325.7	4556.3	4502.5
Other diseases of upper respiratory tract	2485.8	1857.4	3882.7	3104.3
Including allergic rhinitis	542.2	309.5	686.1	489.8
Chronic lower respiratory diseases	1266.8	463.9	454.3	279.7
Including: chronic and not specified bronchitis	703.8	308.9	315.2	218.6
emphysema	25.5	5.4	0.5	0.3
asthma and status asthmaticus	314.5	69.5	122.5	48.8
other chronic obstructive pulmonary disease	212.9	77.4	15.6	11.6
bronchiectasis	9.9	2.5	0.5	0.4
Lung diseases due to external agents	16.0	5.1	0.4	0.3
Other respiratory diseases principally affecting the interstitium	22.1	7.9	1.6	1.1
Suppurative and necrotic conditions of the lower respiratory tract	4.3	2.1	0.9	0.9
Other diseases of the respiratory system	112.6	81.3	28.3	24.1

Table 4.25 Asthma and status asthmaticus, prevalence by regions, Georgia

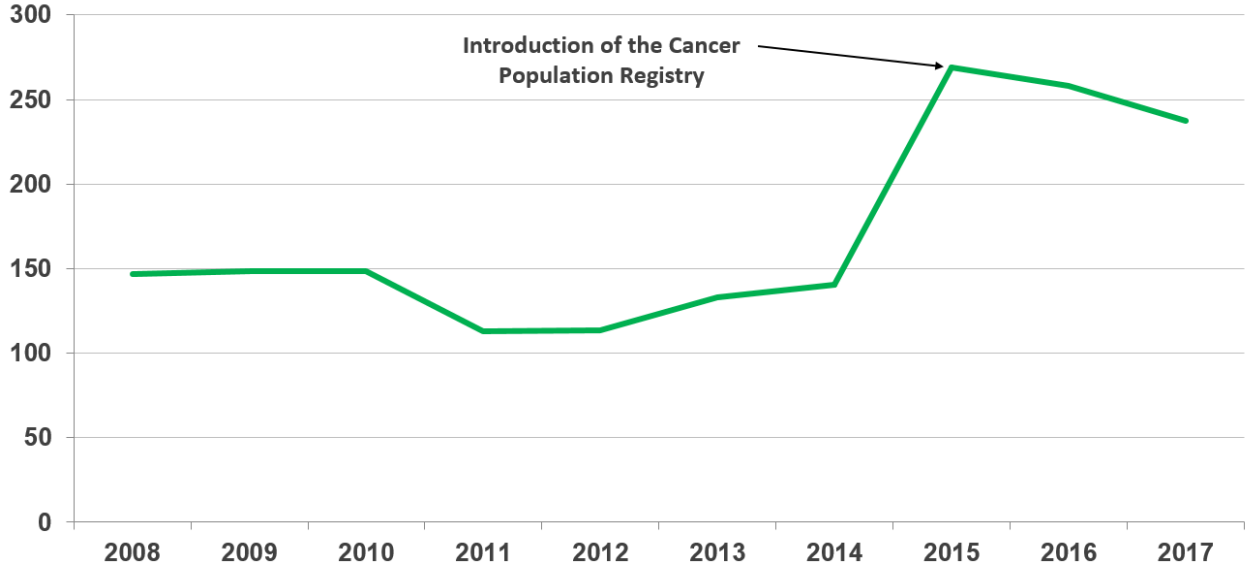
	2016				2017			
	All ages		Children aged 0-15		All ages		Children aged 0-15	
	Registered cases by the end of the year	Prevalence per 100000 population	Registered cases by the end of the year	Incidence per 100000 children	Registered cases by the end of the year	Prevalence per 100000 population	Registered cases by the end of the year	Incidence per 100000 children
Abkhazia	140	--	9	--	80	--	4	--
Ajara	953	279.0	52	78.2	864	250.7	36	52.7
Tbilisi	1484	130.3	147	66.3	1689	146.6	246	107.7
Kakheti	965	304.6	40	64.8	1002	317.8	36	57.6
Imereti	2172	418.5	216	213.7	2006	392.8	153	151.2
Samegrelo and Zemo Svaneti	1081	331.3	106	166.8	1145	355.0	110	172.1
Shida Kartli	901	345.0	20	39.3	879	338.3	18	35.0
Kvemo Kartli	654	152.5	23	27.5	586	136.0	38	46.1
Guria	524	468.1	43	197.2	529	476.6	43	195.5
Samtskhe–Javakheti	364	230.5	11	35.8	368	235.1	7	22.6
Mtskheta–Mtianeti	305	324.5	11	60.1	307	326.9	11	59.1
Racha–Lechkhumi and Kvemo Svaneti	107	343.5	0	0.0	133	436.1	0	0.0
Other departments	77	--	5	--	82	--	2	--
Georgia	**9727**	**261.0**	**683**	**94.1**	**9670**	**259.4**	**702**	**95.0**

Malignant neoplasms

In order to improve cancer registration and surveillance population-based cancer registry (PCR) was established in 2015.

In order to improve cancer registration and surveillance population-based cancer registry (PCR) was established in 2015. According to the PCR data, 10931 new cases of malignant neoplasms, including non-melanoma skin cancers and cancers in situ were registered in 2015 (incidence rate per 100 000 population – 293.4). In 2016, there were 10444 registered cases (incidence rate per 100000 population – 280.2); in 2017 – 9485 (incidence – 254.4). According to recommendations of the International Agency for Cancer Research (IARC), only number of malignant neoplasms, excluding non-melanoma skin cancers, are used for international comparisons (in 2016 – 9623 cases, in 2017 – 8857 cases) (Figure 4.20).

Figure 4.20 Malignant neoplasms, incidence per 100000 population, Georgia



Source: NCDC

In 2015-2017, 56% of all new cases were registered in women and 44% - in men.

In 2017, 4170 new cases were registered in men (incidence rate per 100000 male – 233.1); in females there were registered 5315 cases (incidence rate per 100000 female – 274.1).

Table 4.26 Five most common sites of cancer in women, Georgia, 2017

Site	Number of new cases	Share of all new cases registered in women (%)
Breast	1652	31.1
Thyroid gland	763	14.4
Corpus uteri	319	6.0
Colorectal	313	5.9
Cervix uteri	289	5.4

Source: NCDC

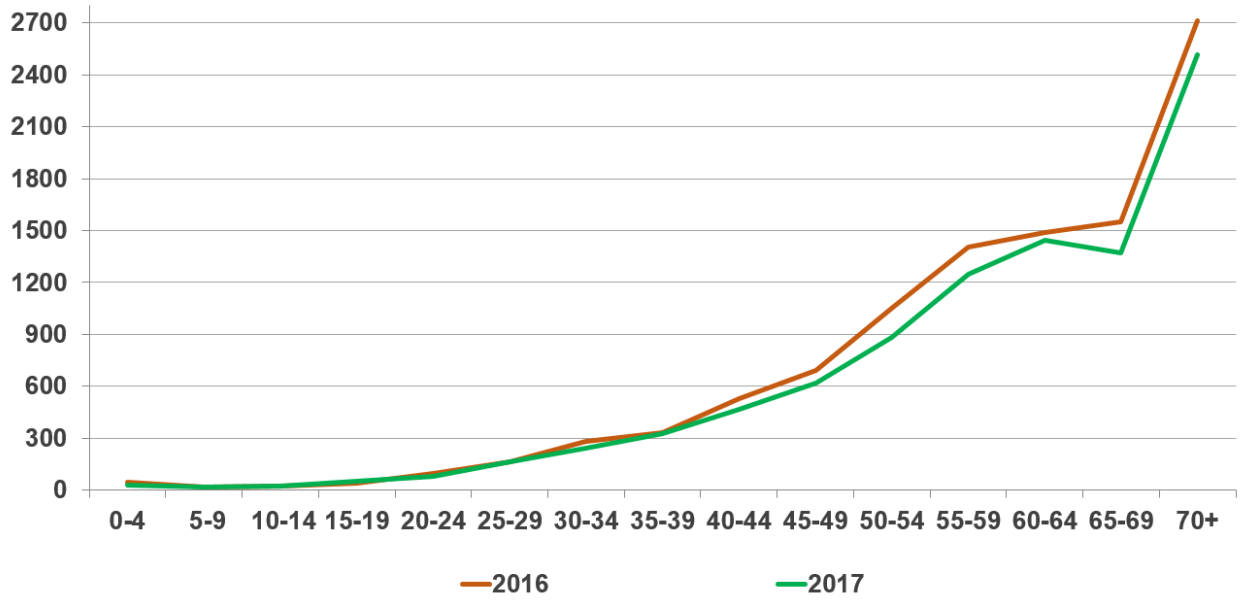
Table 4.27 Five most common sites of cancer in men, Georgia, 2017

Site	Number of new cases	Percent of new cases registered in men (%)
Trachea, bronchus, lung	903	21.7
Bladder	437	10.5
Colorectal	398	9.5
Prostate	378	9.1
Stomach	234	5.6

Source: NCDC

In 2017, 69.6% of all cancers are registered in the most active age group (30 - 70 years), about 26.5% of cases at the age of 70 years and more; 0.5% of all cancer are registered in children Under-15; 0.8% of cases, in adolescents (15 – 20 years of age).

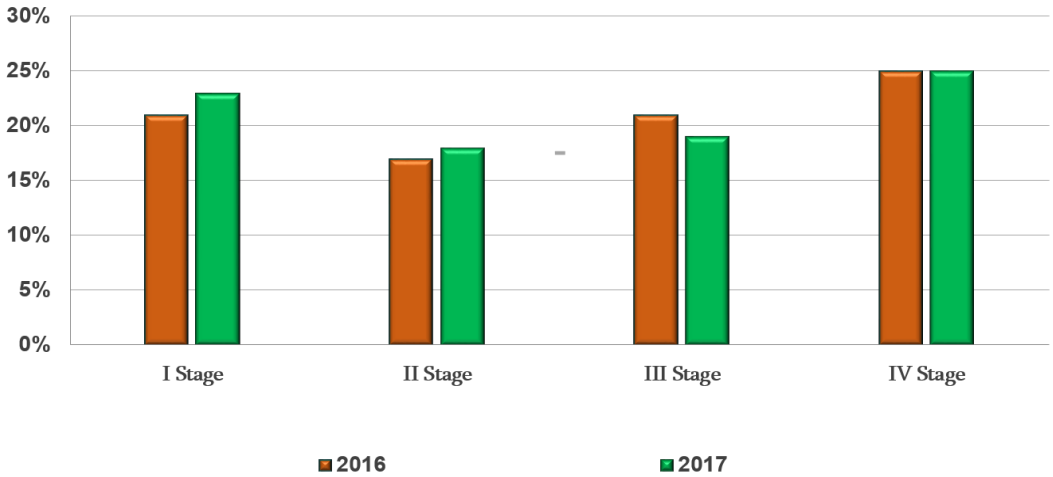
Figure 4.21 Cancer, age-specific incidence rate, all sites, both sexes, Georgia



Source: NCDC

In 2017, according to the data of the Cancer registry, 41% of all cancers are revealed at the I and II stages. The share of new cases revealed at the III and IV stages is still high (19% and 25% respectively of the total of new cases for the period 2015-2017).

Figure 4.22 Cancer, new cases by stages (%), both sexes, Georgia



Source: NCDC

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

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

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

Table 4.28 Malignant neoplasms, incidence rates, Georgia*

	Number of new cases	Incidence per 100000 population
2015	10906	292.8
2016	10097	270.9
2017	**9485**	**254.4**

Table 4.29 Malignant neoplasms, new cases according to the site, Georgia

Site of cancer	2015	2016	2017
Lip, oral cavity organs and pharynx	244	241	214
Digestive system	1802	1669	1538
Respiratory system and chest cavity organs	1219	1134	1042
Bone and articular cartilage	61	49	42
Malignant melanoma of skin	112	118	92
Other malignant neoplasms of skin	818	686	584
Mesothelium and soft tissue	172	126	124
Breast	1947	1834	1693
Female genital organs	1101	1056	928
Male genital organs	693	530	475
Urinary System	817	816	830
Eye, brain and other parts of the central nervous system	256	265	226
Thyroid and other endocrine glands	729	905	915
Uncertain, secondary and unspecified sites	299	293	214
Lymphoid, hematopoietic and related tissues	558	587	524
In situ	103	135	44
Total	**10931**	**10444**	**9485**

** Download of the dataset of the Cancer population registry from 06.08.2018*

Table 4.30 Malignant neoplasms, new cases in children by site, Georgia

Site	2015		2016		2017	
	Number of new cases	% of total	Number of new cases	% of total	Number of new cases	% of total
Digestive organs	0	0	1	11	37	50.0
Malignant melanoma of skin	0	0	0	0	13	17.6
Lymphoid, hematopoietic and related tissues	48	516	47	516	5	6.8
Eye, brain and other parts of the central nervous system	20	215	18	198	4	5.4
Bone and articular cartilage	6	65	4	44	0	0.0
Mesothelium and soft tissue	5	54	4	44	4	5.4
Female genital organs	0	00	1	11	7	9.5
Urinary System	3	32	7	77		0.0
Including Kidney	3	32	5	55	0	0.0
Thyroid and other endocrine glands	5	54	6	66	1	1.4
Uncertain, secondary and unspecified sites	5	54	2	22	2	2.7
Salivary gland	1	11	0	00	1	1.4
Total	**93**	**100**	**90**	**100**	**74**	**100**

Table 4.31 Malignant neoplasms, new cases by stages in %, Georgia

Stage	2015	2016	2017
I	20%	21%	23%
II	20%	17%	18%
III	23%	21%	19%
IV	28%	25%	25%
Unknown/ NA	9%	15%	15%

Table 4.32 Malignant neoplasms in children, new cases by the stages in %), Georgia, 2017

Stage	Number of new cases	Percent of total of all new cases in children Under-15
I	4	5.4%
II	8	6.8%
III	6	12.2%
IV	17	20.3%
Unknown/ NA	55	55.4%

Table 4.33 Five most common sites of cancer in women, Georgia, 2017

Site of cancer	Number of new cases	Percent of total of all new cases in women
Total number of cases	**5315**	**100%**
Breast	1652	31.1**%**
Thyroid	763	14.4**%**
Corpus uteri	319	6.0**%**
Colorectal	313	5.9**%**
Cervix uteri	289	5.4**%**

Table 4.34 Five most common sites of cancer in men, Georgia, 2017

Stage	Number of new cases	Percent of total of all new cases in men
Total number of cases	**4170**	**100%**
Trachea, bronchus, lung	903	21.7**%**
Prostate cancer	437	10.5**%**
Urinary bladder	398	9.5**%**
Colorectal	378	9.1**%**
Stomach	234	5.6**%**

Chapter 5

MATERNAL AND CHILD HEALTH

MATERNAL AND CHILD HEALTH*

Births according to the GeoStat, maternal and child mortality (the MoLHSA and the NCDC reconciled data), Georgia**

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of live births	63377	62585	58014	57031	57878	60635	59249	56569	53293
Total number of stillbirths	665	682	554	647	549	637	589	558	506
Total number of infant deaths (at the age Under-1)*	872	741	634	617	608	493	507	507	512
Total number of early neonatal deaths (at the age 0-6 days)	558	410	349	373	387	205	211	231	238
Total number of late neonatal deaths (at the age 7-28 days)	214	186	139	151	97	139	152	125	124
Total number of post neonatal deaths (at the age 29-365 days)	100	145	146	93	124	137	162	151	150
Total number of under five deaths	949	830	691	705	692	559	605	604	594
Total number of maternal deaths	33	12	16	13	16	19	19	13	7
Stillbirth rate per 1000 births	10.7	10.9	9.5	11.2	9.4	10.5	9.8	9.8	9.4
Early neonatal mortality rate per 1000 live births	9.0	6.6	6.1	6.6	6.7	3.4	3.6	4.1	4.5
Late neonatal mortality rate per 1000 live births	3.5	3.0	2.4	2.7	1.7	2.3	2.5	2.2	2.3
Perinatal mortality rate per 1000 births	19.7	17.4	15.6	17.7	16.1	13.8	13.4	13.8	13.8
Infant mortality rate per 1000 live births	14.1	12.0	11.0	10.8	10.5	8.2	8.6	9.0	9.6
Under five mortality rate per 1000 live births	15.4	13.4	12.0	12.4	12.0	9.3	10.2	10.7	11.1
Maternal mortality rate per 100000 live births	52.1	21.7	27.6	22.8	32.2	31.5	32.2	23.0	13.1

* *According to the „Electronic Module for Pregnant and Newborn Health Surveillance"*
** *Since 2014, conciled data of the MOLHSA and GEOSTAT*

According to the UNFPA 2018 report named “The power of choice, reproductive rights and the demographic transition”, some reproductive health indicators for Georgia look as follows:

Reproductive Health (live births)	Maternal mortality (death ratio per 100 000 live births), 2015		36
	Range of MMR uncertainty (UI 80%), 2015 estimate	Lower	28
		Upper	47
	Birth attended by skilled health personnel, %, 2006-2017		100
	Adolescent birth rate per 1000 girls aged 15-19, 2006-2017		44
	Contraceptive prevalence rate, women aged 15 – 19, 2018	Any method	55
		Modern method	40
	Unmet need for family planning, women aged 15 – 49, 2018		15
	Proportion of demand satisfied with modern methods,, 2018		58
Harmful	Child marriage by age 18, %, 2006-2017		14
Education	Adjusted net enrolment rate, primary education, %, 2007-2017	Male	98
		Female	98
	Gender parity index, primary education, 2007-2017		0.99
	Net enrolment rate, secondary education, %, 2007-2017	Male	94
		Female	97
	Gender parity index, secondary education, 2007-2017		1.03

Source: https://www.unfpa.org/sites/default/files/pub-pdf/UNFPA_PUB_2018_EN_SWP.pdf

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

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

Pregnancy and Delivery

SDG 3.7 has been defined as universal access to sexual and reproductive healthcare services including to antenatal services.

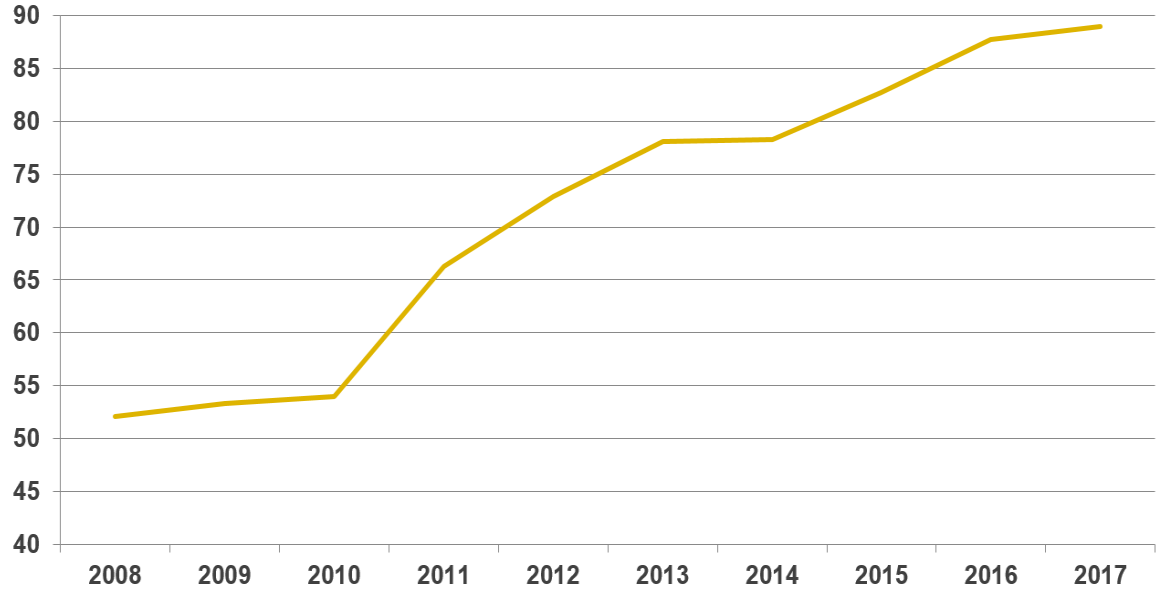
Indicators of Reproductive Health, Georgia

	2016	2017
Timely initiation of antenatal care	84.7%	85.0%
Coverage with at least 4 antenatal care visits	81.2%	89.1%
Number of deliveries	55940	52660
Term deliveries	81.9%	86.8%
Normal vaginal deliveries	52.7%	52.4%
Pathological deliveries	47.3%	47.6%
Adolescents pregnancy rate	43.4	36.2
Proportion of births attended by skilled health personnel	99.9%	99.9%

Source: NCDC

In 2017, according to the data collected from women consultancy centers, 58513 pregnant women were registered in Georgia. Last years, there was a growth of timely initiation of antenatal care (during the 1st trimester), this could be based on the improved financial accessibility of antenatal services (Figure 5.1).

Figure 5.1 Share of pregnant women (%) initiating antenatal care during the 1st trimester, Georgia

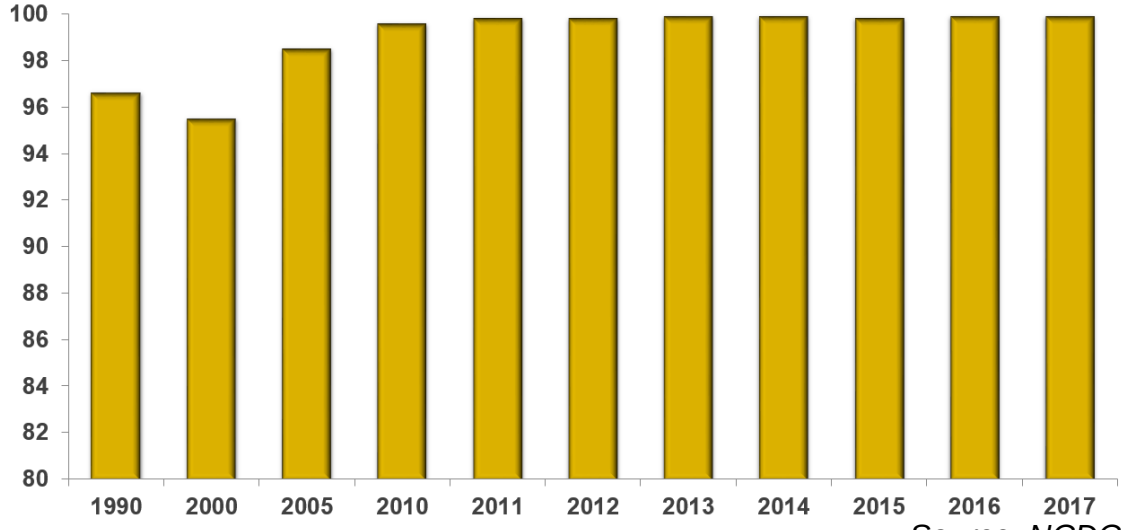


Source: NCDC

88.4% of pregnant women were tested for hepatitis C, 98.6% - for syphilis, 88.8% - for HIV, and 89.5% - for hepatitis B.

Last years, the share of deliveries in health institutions, reached the maximum value and stayed unchanged (Figure 5.2).

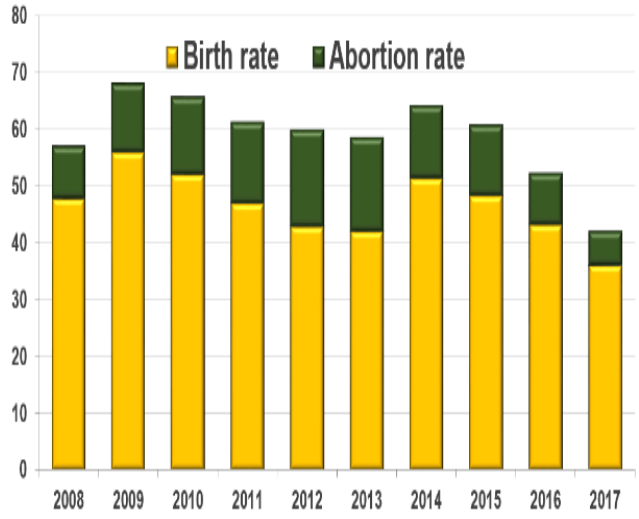
Figure 5.2 Rate of childbirth in health centers, assisted by qualified medical personnel (%), Georgia



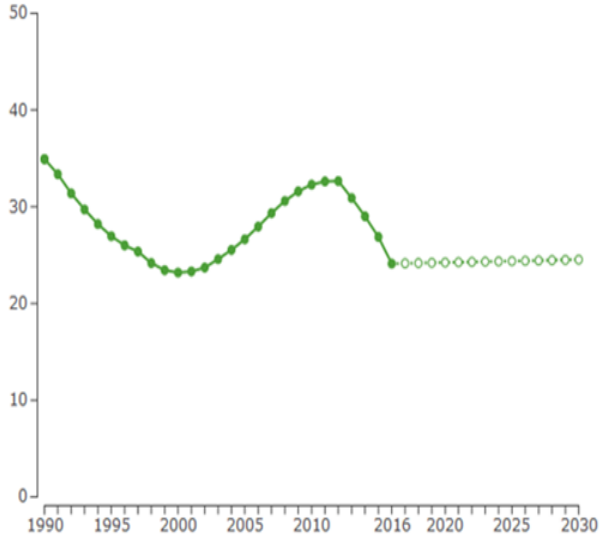
Source: NCDC

In 2017, according to the National Statistics Office of Georgia, birth rate of women aged under 20 reduced and reached 36.2 (Figure 5.3).

Figure 5.3 Adolescent pregnancy rate (rate per 1000 women aged 15-19)



Source: NCDC



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

Adolescent pregnancy rate, Georgia

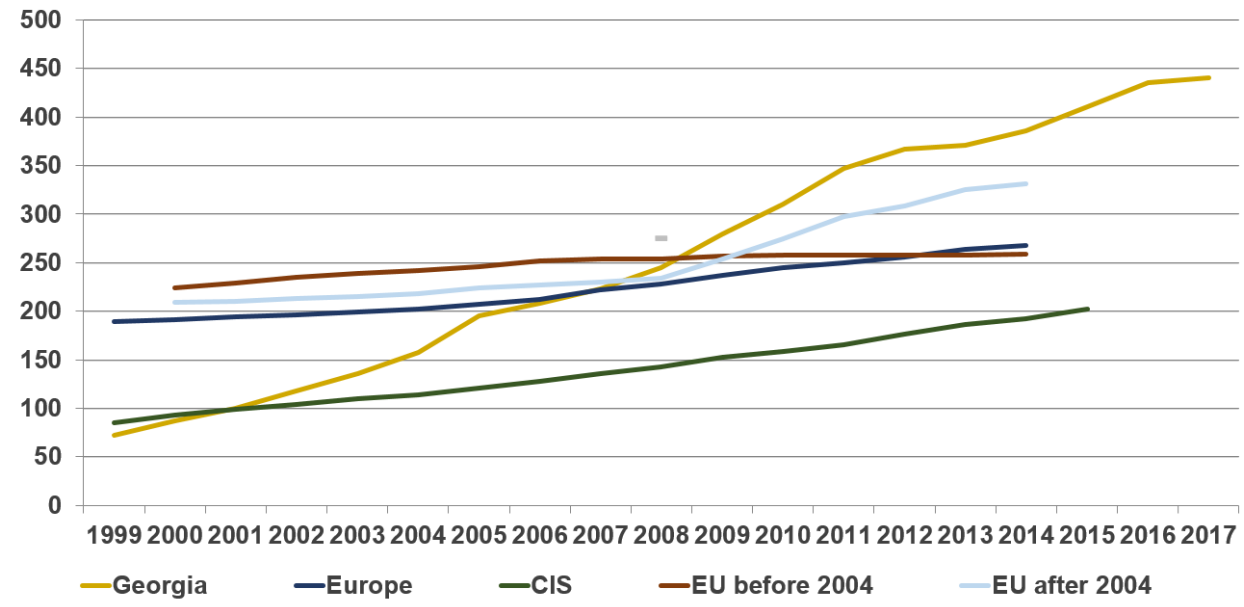
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adolescent pregnancy rate	48.0	56.1	52.2	47.1	43.0	42.2	51.5	48.4	43.4	36.2

In 2017, 5.7% of deliveries were complicated by premature rupture of membranes (39.6%), perineal laceration (5.4%, this constitutes 18.8% of all complications of childbirth and the puerperium), abnormalities of forces of labour (6.3%). The share of intrapartum and postpartum infections was 0.01%. There were no cases of the post-caesarean section peritonitis registered.

Caesarean sections

Since 2000, the share of caesarean section deliveries has increased 4.3-fold. In 2017, this share reached 44.6%, althought, in some facilities this share is much higher.

Figure 5.4 Caesarean sections (ratio per 1000 live births)



Source: WHO HFA DB

Live births

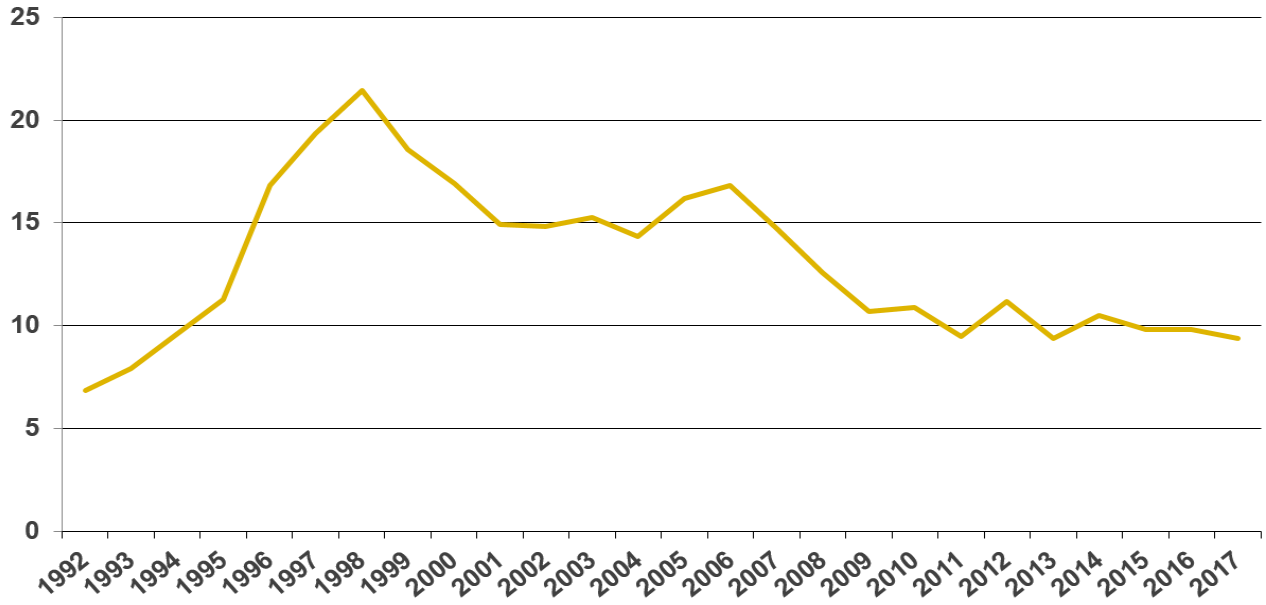
In 2017, according to medical facilities information, in Georgia, 53414 live births were registered. According to National Statistics Office data, 53293 live babies were delivered in the country. The difference between the numbers of babies is caused by registration of foreigners deliveries in Georgian health facilities.

According to healthcare providers' data, 6.7% of live born babies were underweighted, and 1% of babies weighted more than 4000 gr.

Stillbirths

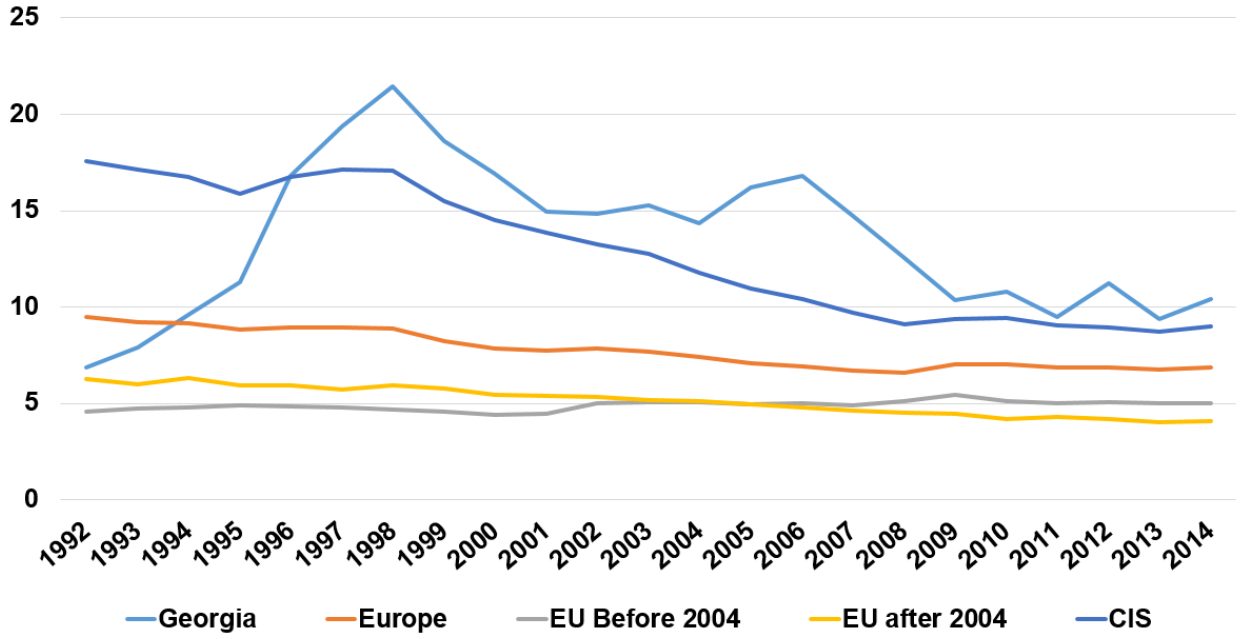
In Georgia, during last decade, stillbirth rate it significantly decreased, although, it stays high, compared to developed countries, and studying causes of stillbirths remains a challenge. In 2017, stillbirths number accounted to 506 cases, stillbirth rate was 9.4 per 1000 births (according to the last available data, stillbirth rate was 9.3 in the CIS countries; and 5.3 in the EU).

Figure 5.5 Stillbirth rate per 1000 births, Georgia



Source: Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, NCDC

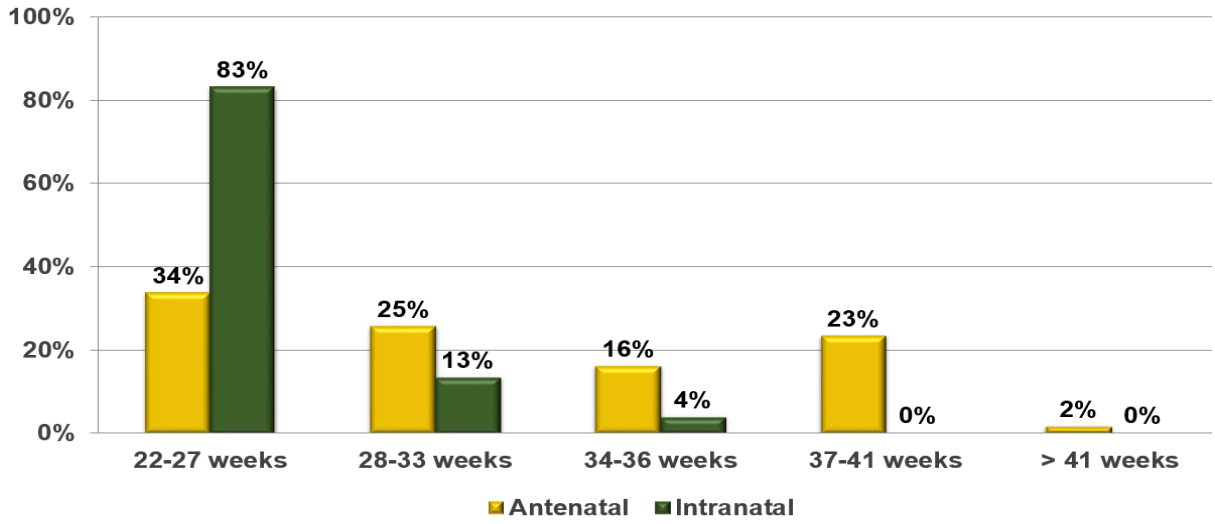
Figure 5.6 Stillbirth rate per 1000 births



Source: WHO HFA DB

Medical records of stillbirths were revised by the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs and the NCDC joint group. According to the results, 89% of stillbirths was in the antenatal period, 10% - in the intra-natal period, and in 1% of all cases, it was impossible to determine the time of death using the available medical records.

Figure 5.7 Stillbirths by gestational age, Georgia, 2017



Source: Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs, NCDC

33.6% of antenatal stillbirths, happened on 22-27 week of gestation, 25.4% - on 28-33 week, 15.9% and 23.2% - on 34-36 and 37-41 weeks respectively.

83% of intra-natal stillbirths (10% of total) occurred on 22-27 week of gestation, 13.2% - on 28-33 week, and 3.8% - on 34-36**.**

Abortions

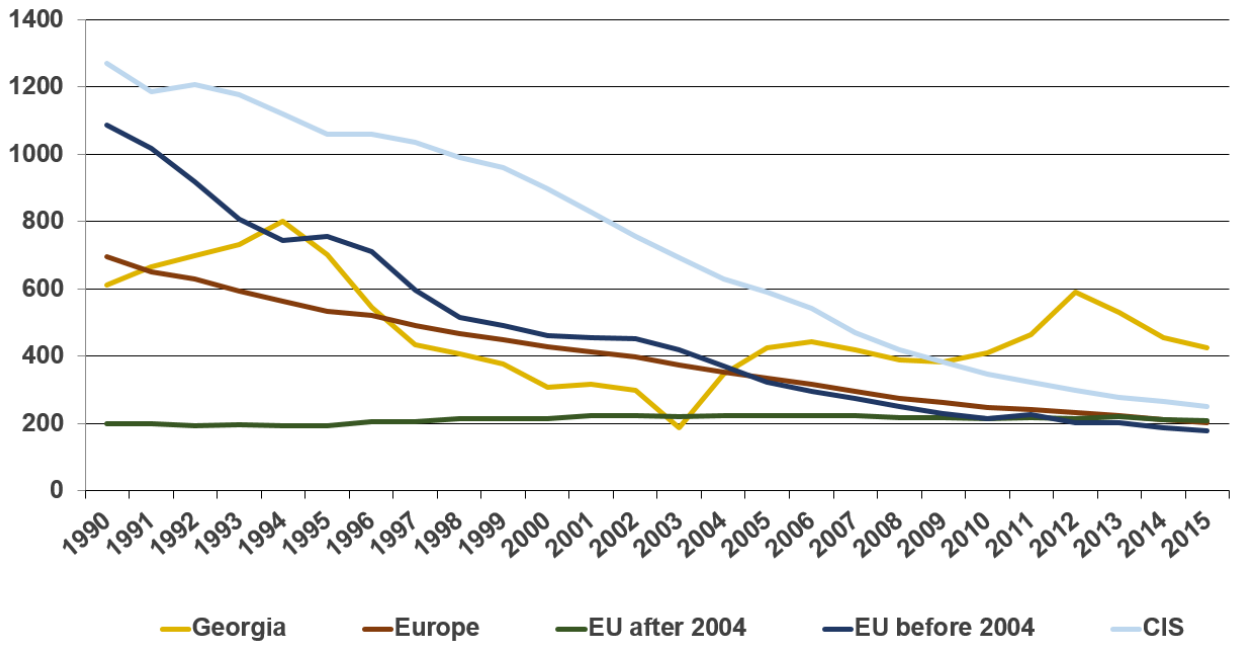
In 2017, 24937 abortions were registered (467.9 per 1000 live births, in 2016 abortion rate per 1000 LB – 507.7), of which, induced abortions constituted 63.8%. Compared with the previous year, the total number of abortions decreased by 13%.

Abortions, Georgia

	Number of LB	Abortions		Abortion ratio per 1000 LB
		Total number	Including mini	
2008	52 442	22062	7662	420.7
2009	56 568	24310	8361	429.7
2010	55 230	25585	10621	463.2
2011	51 565	31185	13208	604.8
2012	49 969	39225	15941	785.0
2013	49 657	37018	15291	745.5
2014	60 635	33464	13071	551.9
2015	59 249	32428	9194	547.3
2016	56 569	28720	8881	507.7
2017	**53 293**	**24937**	**6679**	**467.9**

It is important that the share of abortions in women aged under 20 has decreased and equales 2.4% of the total number of abortions (Figure 5.8).

Figure 5.8 Induced abortion ratio per 1000 live births



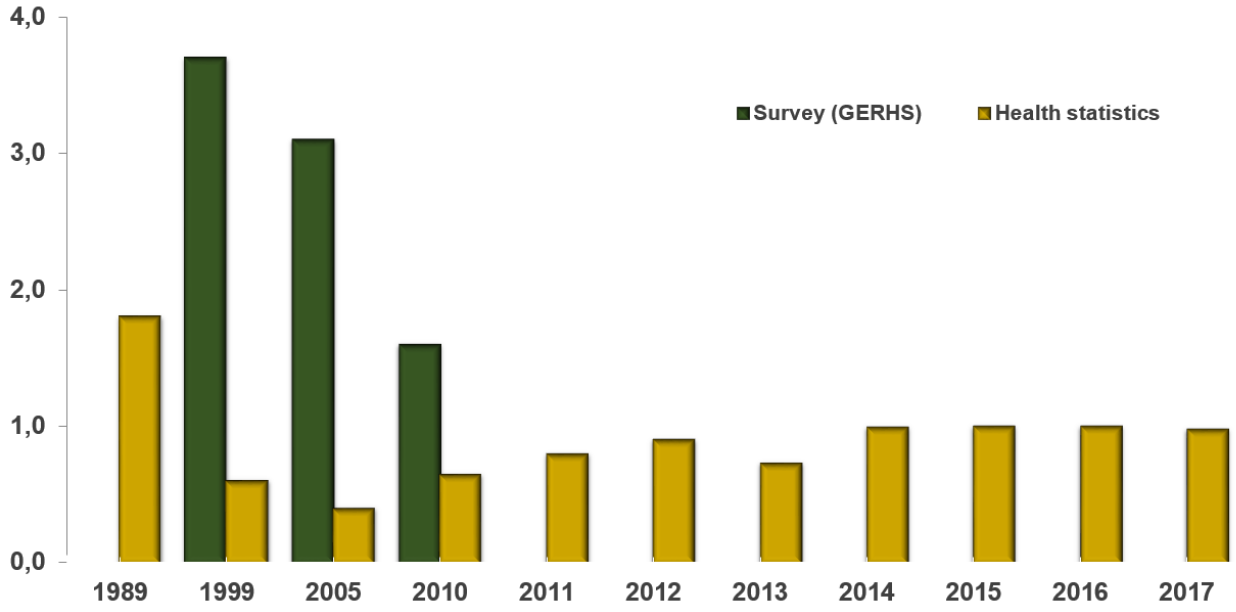
Source: WHO HFA DB

The total induced abortion rate (TIAR) is stable (fluctuates around 1) (Figure 5.6). The most high Induced abortion age-specific rates were registered in 25-29 and 30-34 age groups.

Abortions by age groups, Georgia, 2017

	All ages	Age groups						
		< 15	15-19	20-29	30-34	35-39	40-44	≥ 45
Total number	24937	1	596	4064	6993	6625	4637	1826
Total number per 1000 women	26.2	0.01	6.0	37.0	51.1	48.7	36.6	14.9
Including (numbers):								
Miscarrages	8861	1	299	1545	2419	2232	1568	711
Induced:	15903	0	294	2484	4531	4349	3040	1097
Under-12 week of gestation	15378	0	273	2395	4366	4228	2940	1071
Including mini (Under-5 weeks)	6679	0	103	964	1903	1860	1352	445
During 12-22 weeks of gestation (according medical or social reason)	515	0	21	88	160	118	99	26
First pregnancy aborted	4619	1	343	1295	1336	871	519	219

Figure 5.9 Total induced abortion rate (TIAR), Georgia



In 2017, the most common method of performing induced abortions was medication.

Methods of induced abortions, Georgia

	2012	2013	2014	2015	2016	2017
Total number of induced abortions	39225	37018	33464	32428	28720	24937
Methods of abortion (%):						
D&C	49.2	41.3	37.9	41.2	41.6	22.8
Vacuum aspiration	40.6	41.3	39.1	28.3	30.9	40.4
Medication induced	10.2	17.4	23.0	30.5	27.5	36.8

Maternal and Child mortality

Maternal mortality

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

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

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

In 2017, data on maternal mortality represent a result of compilation of information collected by the National Center for Disease Control, the Ministry of Internally Displaced Persons from the Occupied Territories of Georgia, and the National Statistics Office of Georgia.

According to the above sources, in 2017, there were 11 maternal deaths registered (due to direct and indirect causes), including 7 early deaths (during pregnancy or within 42 days from pregnancy termination). Maternal mortality ratio is 13.1 per 100000 live births.

It is essential, that more that a half of maternal deaths were due to direct causes (7 cases): 2 cases (28.6%) caused by intrapartum and postpartum haemorrhage, 1 case (14.3%) – by amniotic fluid embolism, 2 cases (28.6%) – by thromboembolism. Among indirect causes the following causes are presented: 1 case (25%) of cardiovascular diseases, 2 cases (50%) of breast cancer, and 1 case (25%) of pneumonia.

Two cases (28.6%) of early maternal deaths were after vaginal delivery, 5 cases (71.4%) were post caesarean section. In the late maternal mortality structure post vaginal delivery – 2 cases (50%), post caesarean section 1 case (25%), and 1 case (25%) was post-abortive.

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

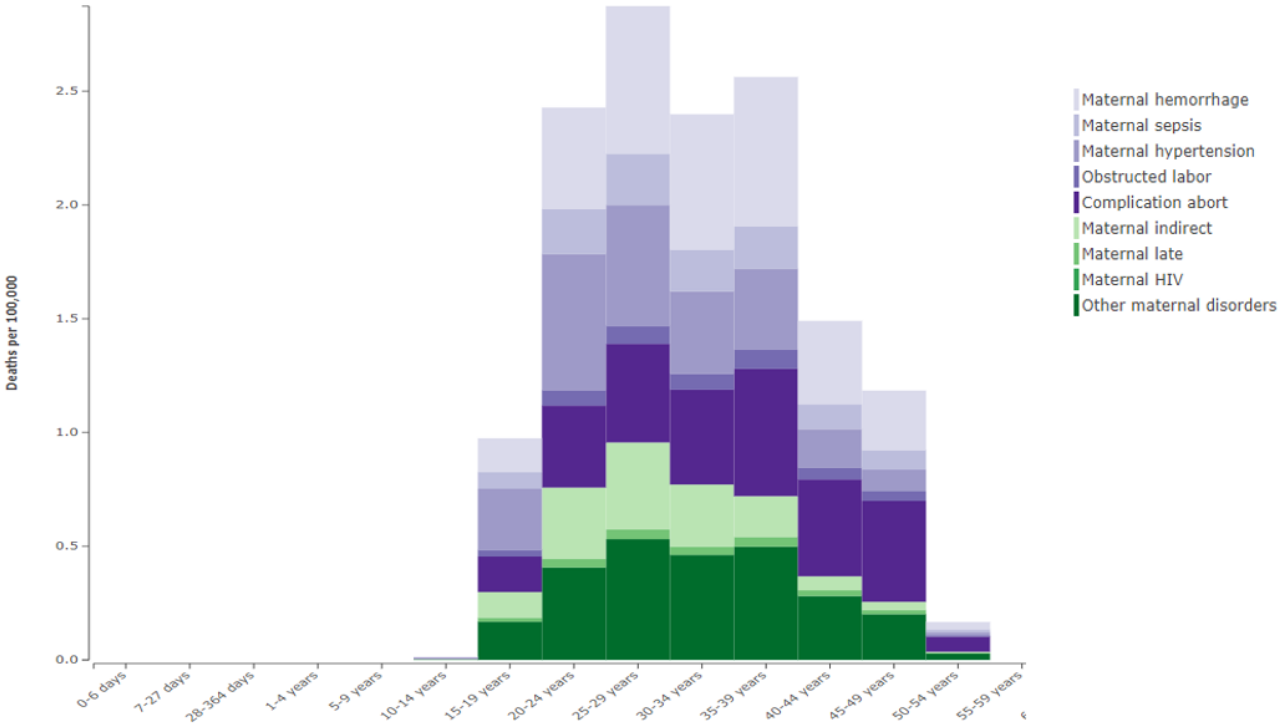
Maternal mortality ratio per 100 000 live births, Georgia

Source	1990	1995	2000	2005	2006	2010	2012	2014	2015	2016	2017
Official statistics	41.5	53.1	47.8	23.9	23.0	21.7	32.2	31.5	32.2	23.0	13.1
MMEIG_2015	34	35	37	37	-	40	-	-	36	-	-
GBD	41.5	-	30.7	-	-	-	-	-	42.3	-	-
RAMOS	-	-	-	-	44	-	26	-	-	-	-

Figure 5.9 Maternal mortality prognosis, age-specific rate per 100000 women of reproductive age, Georgia

Source: https://vizhub.healthdata.org/gbd-foresight/

Figure 5.10 Maternal mortality by cause of death and age at death, Georgia, 2017



Source: https://vizhub.healthdata.org/gbd-foresight/

Child mortality

Neonatal Death

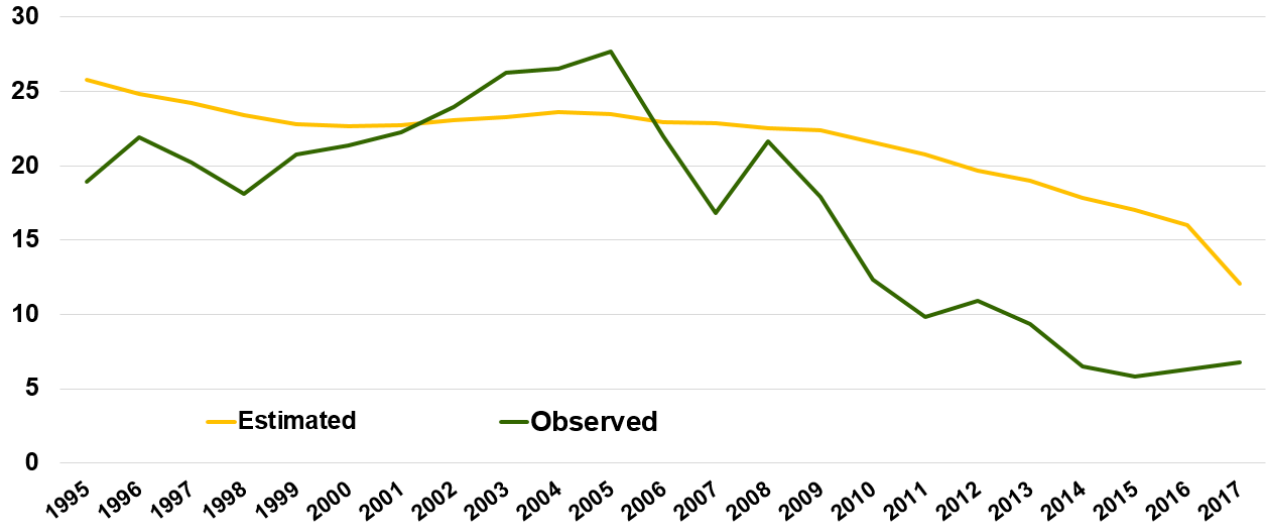
According to World Health Organisation global data, the share of neonatal death in Under-5 mortality equalled 45%. In Georgia, in 2017, a share of neonatal death in Under-5 mortality was 58.9% (Figure 5.11)

Neonatal and perinatal deaths, Georgia

	0-28 days per 1000 live birth	0-6 days per 1000 live birth	7-28 days per 1000 live birth	Perinatal mortality per 1000 birth
2010	9.6	6.6	3.0	17.4
2011	8.5	6.1	2.4	15.6
2012	9.2	6.6	2.7	17.7
2013	8.4	6.7	1.7	16.1
2014	7.2	5.1	2.1	15.5
2015	5.8	3.8	2.1	13.6
2016	6.3	4.1	2.2	13.8
2017	6.8	4.5	2.3	13.8

Source: National Statistics Office

Figure 5.11 Neonatal mortality rate per 1000 live births, Georgia



Source: https://vizhub.healthdata.org/gbd-foresight/; National Statistics Office

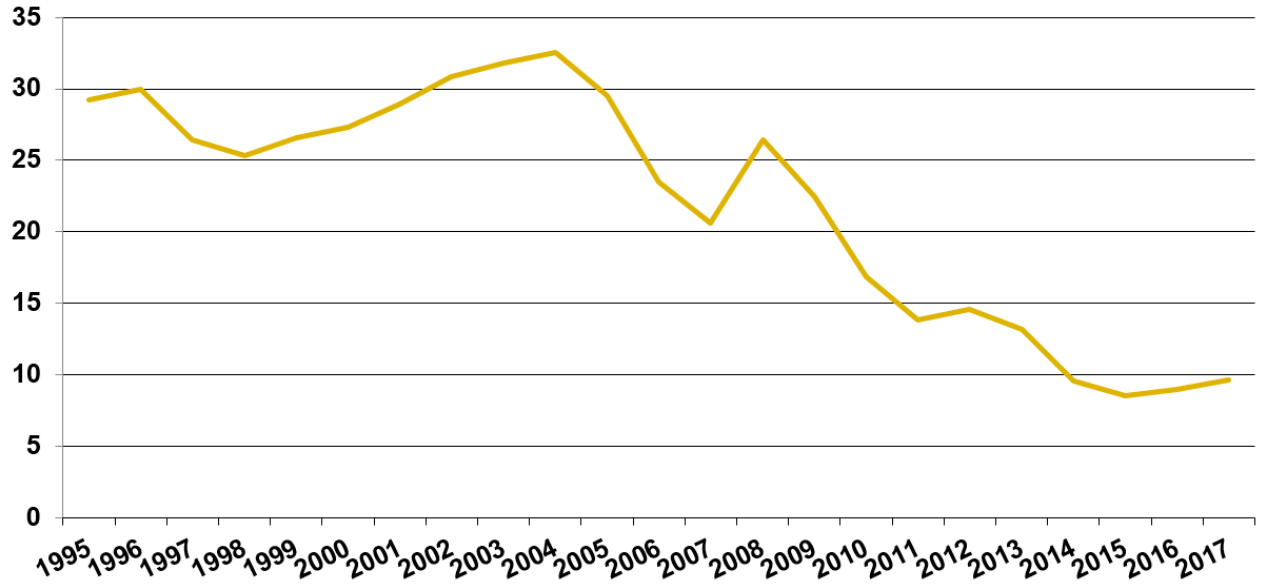
Infant morbidity and mortality

In 2017, in Georgia, 81158 new cases of diseases were registered in infants (in 2016 – 81771), incidence rate per 1000 infants – 1481.0 (in 2016 – 1419.6). A share of respiratory system diseases in infant morbidity was 61.9%, a share of infectious and parasitic diseases – 3.8%.

In 2017, hospital services were provided to 24563 infants (in 2016 – to 25229), among the causes of hospitalization a share of respiratory system diseases was 45.1%, share of conditions originating in the perinatal period – 28.1%, share of infectious and parasitic diseases – 12.4%.

According to the WHO global data, almost 75% of Under-5 deaths occurred in infants. In 2017, in Georgia, this share, according to the NCDC and the NSO, was 83.9%. According to all sources, the infant mortality is declining (Figure 5.12).

Figure 5.12 Infant mortality rate per 1000 live births, Georgia



Source: National Statistics Office

Infant mortality rate per 1000 live births, Georgia

Source	2000	2005	2008	2009	2010	2012	2013	2014	2015	2016	2017
NSO	27.3	29.5	26.4	22.5	16.9	14.6	13.2	9.5	8.6	9.0	9.6
IGME	30.9	21.7	17.1	15.8	14.6	12.6	11.7	11.3	10.6	10.5	10
GERHS	41.6	21.1	-	-	14.1	-	-	-	-	-	-

A share of conditions originating in the perinatal period in the infant mortality structure was 70.1.%, although, a share of stillbirths in the perinatal mortality – 68.0%.

Morbidity and mortality of children under-5

In 2017, in Georgia, there were registered 258403 new cases of diseases in children under-5 (in 2016 – 290423), incidence per 1000 children – 935.2 (in 2016 –1101.3). In the structure of morbidity in children Under-5, a share of the respiratory system diseases was 64.7%, a share of infectious and parasitic diseases – 9.6%.

In 2017, hospital services were provided to children 59846 aged under-5 (in 2016 - 62938), among the causes of hospitalization a share of the respiratory system diseases was 52.1%, a share of infectious and parasitic diseases – 16.8%, and a share of conditions, originating in the perinatal period – 11.6%.

Morbidity of children under-5 (most common causes), 2017

	Incidence per 1000 Under-5 children
Diseases of the respiratory system	604.9
Infectious and parasitic diseases	89.5
Diseasesof the ear and mastoid process	55.4
Diseases of skin and subcutaneous tissue	33.6
Diseases of eye and adnexa	23.5
Diseases of the digestive system	17.0

According to 2017 data collected from out-patient facilities, 536512 new cases of all diseases were registered in children aged under-5 (in 2016 – 584735), incidence per 1000 children - 72609.5. The highest incidence rate was registered in the respiratory system diseases – 41378.5, including in acute upper respiratory infectious (rate – 30658.8), pneumonia (1079.7), and other acute low respiratory infectious (4512.4).

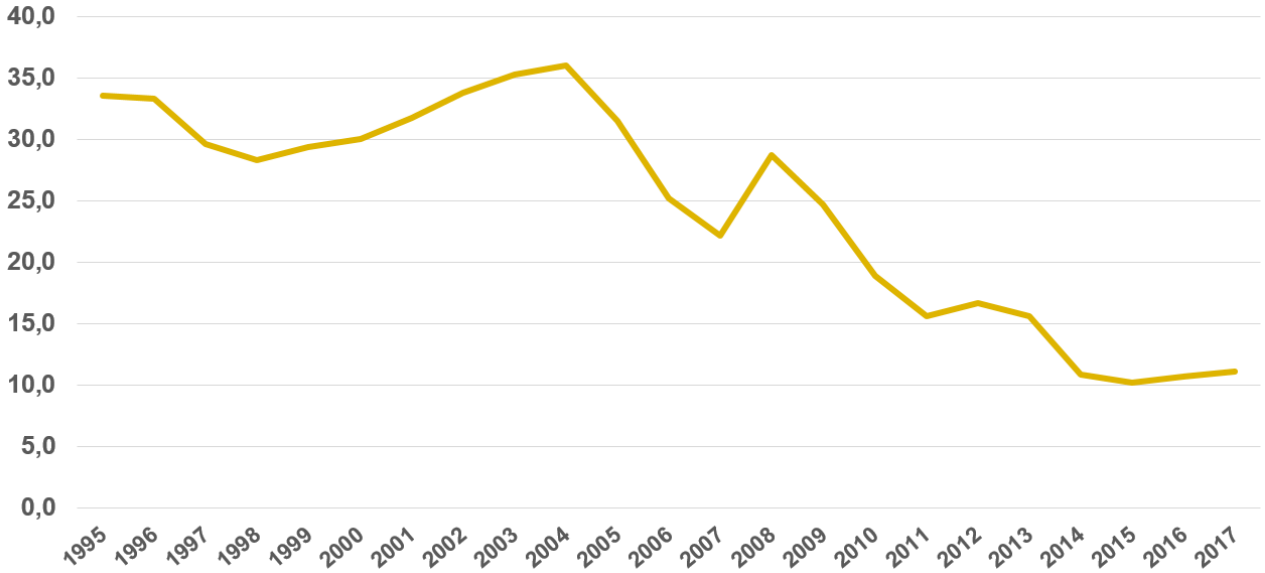
During the reporting period, hospital servisies were provided to 94629 children aged under-5 (in 2016 – 98101). Hospital discharge rate per 100000 children was high in the classes of respiratory system diseases, infectious and parasitic diseases, and conditions, originating in the perinatal period.

According all sources, such as official statistics, international experts estimates (the UN Inter-agency Group for Child Mortality Estimation - IGME), and large-scale studies (Georgian Reproductive Health Survey GERHS), Global Burden of Disease Study – GBD, Georgia, has reached the Millennium Development Goal in reducing the under five mortality rate. It is important that GBDs and IGME assessments for the global and regional levels almost matched, the matching level - 98%.

Under-5 mortality rate per 1000 live births, Georgia

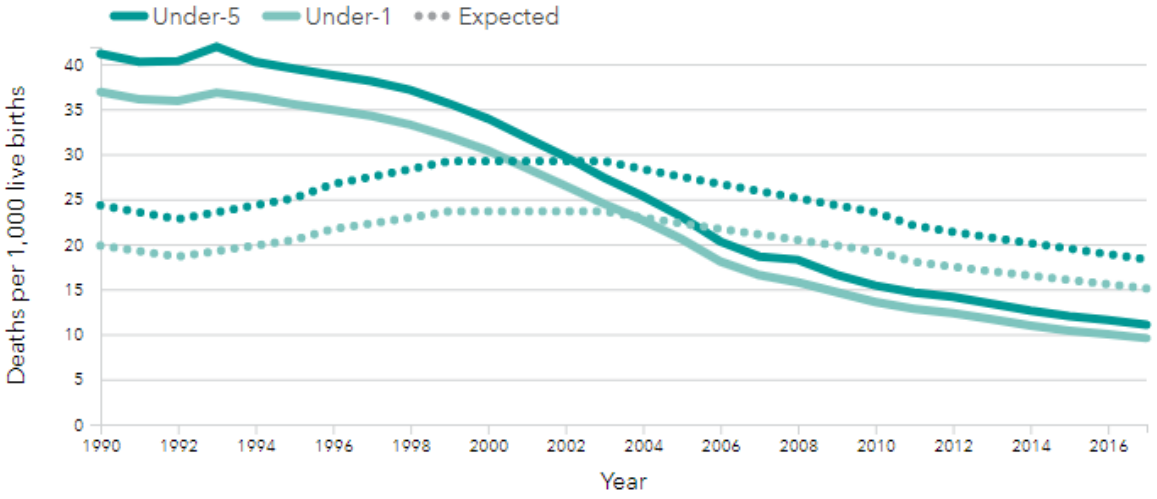
Source	2000	2005	2008	2009	2010	2012	2013	2014	2015	2016	2017
NSO	30.1	31.5	28.7	24.7	18.9	16.7	15.6	10.9	10.2	10.7	11.1
IGME	35.3	24.5	--	--	16.4	14.1	13.1	12.6	11.9	Female 10 Male - 12	--
GBD	36.2	28.0	--	--	21.8	-	-	-	17.4	11.7	--
RHS	45.2	25.1	--	--	16.4	-	-	-	-	-	--

Figure 5.13 Under-5 mortality rate per 1000 live births, Georgia



Source: https://vizhub.healthdata.org/gbd-foresight/

Figure 5.14 Under-5 mortality rate per 1000 live births, Georgia



	Expected		Observed	
	1990	2017	1990	2017
Under-5	24.3	18.3	41.2	11.1
Under-1	19.8	15.1	36.9	9.5

Source: http://www.healthdata.org/georgia

Table 5.1 Antenatal care, data collected from women consultancy facilities, Georgia, 2017

	Number of pregnant women enrolled during the year	Pregnant women with 4 antenatal care visits	%
Ajara	6387	4898	76.7
Tbilisi	27167	18494	68.1
Kakheti	2837	1984	69.9
Imereti	6350	5651	89.0
Samegrelo and Zemo Svaneti	3083	1985	64.4
Shida Kartli	3325	2380	71.6
Kvemo Kartli	6547	3514	53.7
Guria	805	675	83.9
Samtskhe-Javakheti	1655	1387	83.8
Mtskheta-Mtianeti	257	182	70.8
Racha-Lechkhumi and Kvemo Svaneti	100	48	48.0
Georgia	**58513**	**41198**	70.4

Table 5.2 Live births and stillbirths according to the birth weight (according to the „Electronic Module for Pregnant and Newborn Health Surveillance"), Georgia, 2017

	500 - 999	1000 - 1499	1500-2499	2500-3999	> 4000	Total
Number of live births	**84**	**762**	**3040**	**30974**	**17980**	**53414**
% from the total number of live births	0.2	1.4	5.7	58.0	33.7	100.0
Number of stillbirths	75	211	92	92	27	504
% from the total number of stillbirths	14.9	41.9	18.3	18.3	5.4	100.0

Table 5.3 Breastfeeding, data collected from maternity hospitals, Georgia

	2015		2016		2017	
	Total number of breastfed infants	% of total number of live births	Total number of breastfed infants	% of total number of live births	Total number of breastfed infants	% of total number of live births
Breastfeeding initiated during the first hour after birth	42697	72.5	39820	70.9	40692	76.2
Breastfeeding initiated in 1-24 hours after birth	9923	16.9	11141	19.8	9429	17.6
Total number of the breastfed newborns	55936	95.0	53442	95.2	50121	**93.8**

Table 5.4 Caesarean sections number, rate and structure, Georgia

	2016			2017		
	Total number of cases	Ratio per 1000 live births	% of total number	Total number of cases	Ratio per 1000 live births	% in the total number
Total	**24461**	**435.8**	**100**	**23471**	**440.4**	**100**
Elective	9450	167.1	38.6	6936	130.1	**29.6**
Urgent	15011	265.4	61.4	16535	310.3	**70.4**

Table 5.5 Caesarean sections, total number and indicators, Georgia, 2017

	Number of deliveries	Total number of caesarean sections	Ratio per 1000 live births	% of total number of deliveries
Ajara	6125	3240	526.4	**52.9**
Tbilisi	24469	10748	435.4	**43.9**
Kakheti	3020	1288	425.4	**42.6**
Imereti	7034	3448	488.2	**49.0**
Samegrelo and Zemo Svaneti	2825	1690	597.8	**59.8**
Shida Kartli	2409	977	406.7	**40.6**
Kvemo Kartli	4553	1670	368.9	**36.7**
Guria	574	163	287.0	**28.4**
Samtskhe-Javakheti	1541	226	146.1	**14.7**
Mtskheta-Mtianeti	71	9	128.6	**12.7**
Racha-Lechkhumi and Kvemo Svaneti	39	12	315.8	**30.8**
Georgia	**52660**	**23471**	**443.6**	**44.6**

Table 5.6 Incidence of diseases in newborns (data from maternity hospitals), Georgia, 2017

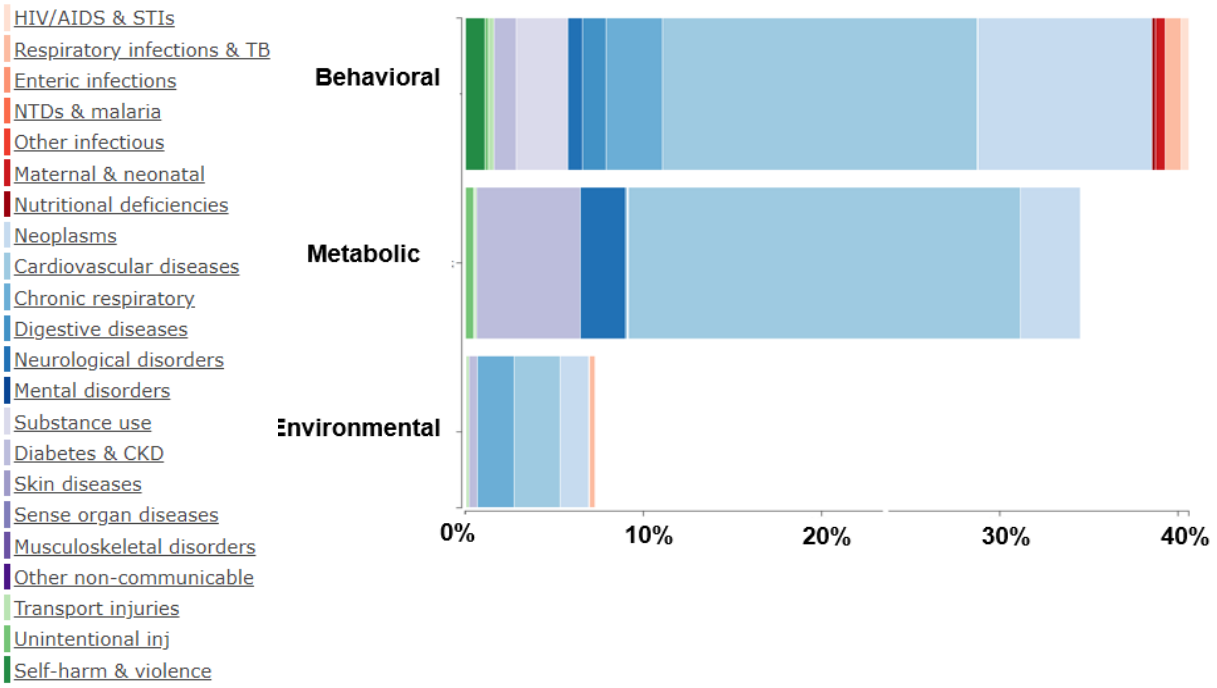
	Number of cases	Incidens per 1000 newborns
Total	**14639**	**274.1**
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	52	1.0
Disorders related to length of gestation and fetal growth	5419	101.5
Birth trauma	199	3.7
Respiratory and cardiovascular disorders specific to the perinatal period	3618	67.7
Infections specific to the perinatal period	1570	29.4
Haemorrhagic and haematological disorders of fetus and newborn	1417	26.5
Transitory endocrine and metabolic disorders specific to fetus and newborn	84	1.6
Digestive system disorders of fetus and newborn	19	0.4
Conditions involving the integument and temperature regulation of fetus and newborn	50	0.9
Other disorders originating in the perinatal period	1040	19.5
Congenital malformations of the nervous system	86	1.6
Congenital malformations of eye, ear, face and neck	21	0.4
Congenital malformations of the circulatory system	504	9.4
Congenital malformations of the respiratory system	12	0.2
Ckieft lip and cleft palate	35	0.7
Other congenital malformations of the digestive system	99	1.9
Congenital malformations of genital organs	148	2.8
Congenital malformations of the urinary system	40	0.7
Congenital malformations and deformations of the musculoskeletal system	181	3.4
Other congenital malformations	38	0.7
Other	7	0.1

Chapter 6.
Risk factors

Main risk factors of mortality and disability

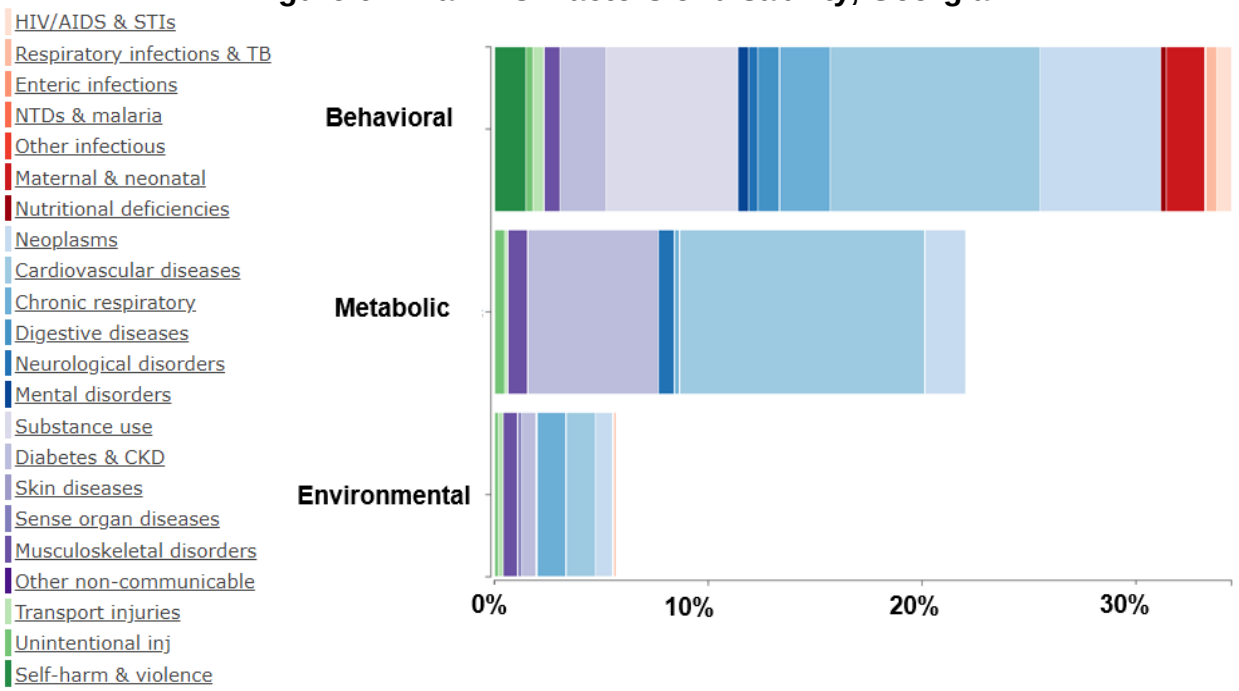
The Washington Institute for Health Measurement and Assessment - IHME, has conducted a number of credible studies on healthcare issues, corcerning mortality and disability due to major risk factors in Georgia (Figure 6.1 – 6.3).

Figure 6.1 Mortality main risk factors, Georgia



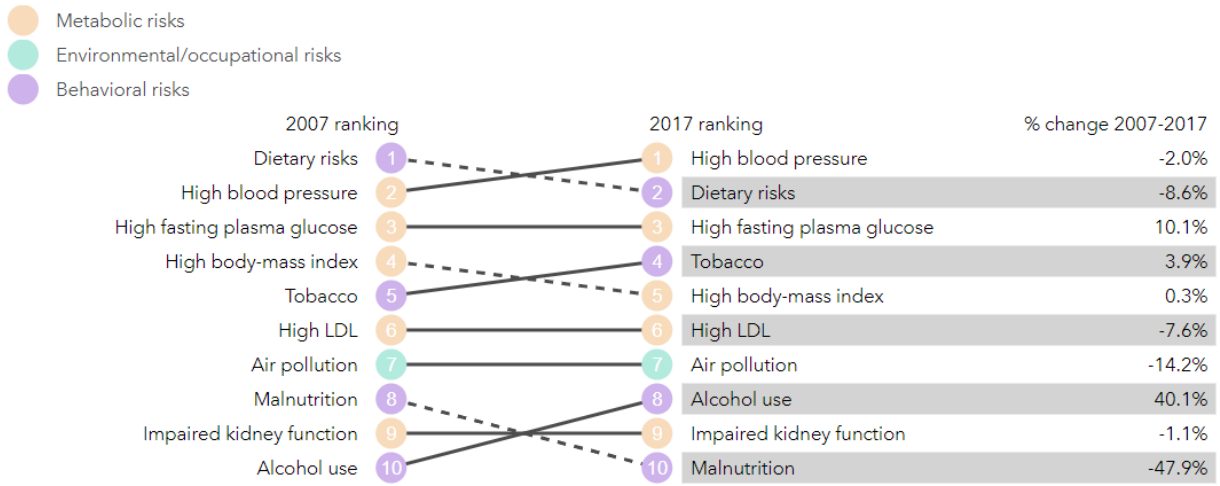
Source: https://vizhub.healthdata.org/gbd-compare/

Figure 6.2 Main risk factors of disability, Georgia



Source: https://vizhub.healthdata.org/gbd-compare/

Figure 6.3 Main risk factors of mortality and disability, Georgia



Source: http://www.healthdata.org/georgia

Strengthening tobacco control in Georgia

Tobacco represents one of the most important public health problems. Global epidemic of tobacco is killing about 7 million people annually, including 6 million smokers and about 1 million passive smokers. During the 20th century, tobacco killed about 100 million people. If the current tendency continues, during the 21st century, it will kill one billion people.

In Georgia, tobacco caused 11,400 deaths, including 2100 deaths of passive smokers and about 300 deaths of children. In Georgia, calculations of economic loss due to tobacco show that direct and indirect expenditures are 824.9 million GEL, this is 2.43% of the annual GDP. Execution of the tobacco control four priority points (tobacco products additional taxation, ban of smoking in public areas, ban of all forms of advertisement, sponsorship and promotion of tobacco, including ban of display at points of sales and restriction of demonstration of smoking in movies and massive performances, introducing of standardized cigarette packaging (plain packaging) and marking of tobacco products) will help to avoid 53100 deaths in the country during 15 years, will reduce the total tobacco related expenditures for 3.6 billion lari. Each 1 lari, invested in tobacco control, will bring 161 lari cash back to the country.

As a respond to tobacco epidemic, the WHO created a Framework Convention on Tobacco Control, ratified by Georgia in 2015.

Currently 31% of Georgia's adult population consumes tobacco (57% of men and 7% of women; although, 12.2% of women, according to laboratory testing, are smokers) (STEPS 2016). According to the results of survey, conducted in children aged 13-15 (GYTS 2017), 12.6% of students (16.9% boy and 7.6% girls) are current smokers; 13.2% (17.3% boy and 7.7% girls) consume electronic cigarettes. According to The European school survey project on alcohol and other drugs (ESPAD 2015), 43.1% of children aged 16 years ever smokers, 18% (26% of boys and 9% of girls) smoked cigarettes during the last 1 month; 12% of students (19% of boys and 4% of girls) are regular smokers.

In 2013 in order to address the devastating health and economic burden of the growing tobacco epidemic in the country and to bring tobacco control measures in line with international and national legislations, the Government of Georgia created the State

Tobacco Control Committee, tobacco control national strategy and 5-years working plan were approved.

In 2017, the amendments to the Tobacco Control bills have been adopted by the Parliament and signed by the President of Georgia. Amendments were made in the following laws of Georgia: "On Tobacco Control", "On Advertising", "On Organizing Lotteries, Games of Chance and Other Prize Games", "On Broadcasting" and in the Administrative Offenses Code of Georgia.

The major changes refer to the exclusion of tobacco producers' interests and transparency of the relations between tobacco producers and public organizations/persons during the process of preparation, adoptation and implementation of decisions in healthcare system; part of regulations enters into force from May 2018: ban of smoking in enclosed public places, an of all forms of advertisement, sponsorship and promotion of tobacco, its accessories and devices for its use, including ban of display at points of sales and restriction of demonstration of smoking in movies and massive performances, ban of direct or indirect participation of industry in decision making on health issues, although, ban of "drive tobacco" is in force since September, 2018.

The WHO Framework Convention committee, The WHO European Regional Office support National activities on NCD and tobacco issues; several international projects were implemented. Since 2015, Health Promotion State program has started, one of the main components of which is the strengthening of tobacco consumption control.

Georgia has been selected as a FCTC2030 project Partner Party among other 14 countries. This project is a new initiative of the WHO FCTC Secretariat to directly help countries to scale up tobacco control measures. Georgia is the only country being selected from the European region. One of the selection criteria was the motivation of the country to advance tobacco control and demonstration of some significant achievements in this regard

In 2018 Georgia was awarded a WHO Special Award for Contributions to the Global Tobacco Global Epidemic. This is the World Health Organization recognition of the results, achieved in the control of tobacco in Georgia and the successful implementation of the WHO Tobacco Framework Convention.

Nutritional Surveillance in Georgia

The micronutrients deficiency surveillance system has been established under the CDC/USA and NCDC/Georgia Collaborative Project with o*bjectives to i*mplement practical and effective surveillance system, which will be essential to control micronutrient deficiency successfully, using the *sentinel surveillance approach and to study existing situation on micronutrient deficiency*.

Data on selected indicators of micronutrient status of young children 12 – 23 months old, 1st trimester pregnant women, and 12-year-old school children were/are being collected across four sentinel regions in Georgia (Tbilisi, Kakheti, Ajara and Samegrelo). Those micronutrient status indicators include: haemoglobin (Hb) and serum ferritin (SFer), as indicators of iron status in young children 12 to 23 month old; Haemoglobin (Hb) and serum

ferritin (SFer), as indicators of iron status; serum folate (SFol) as indicator of folate status; and urinary iodine as indicator of iodine status in 1st trimester pregnant women. Urinary iodine as indicator or iodine status in 12 year old school children Cases of the neural tube defects (NTDs), spina bifida and anencephaly identified in fetuses that were medically terminated, and among newborns delivered in sentinel maternity facilities as indicators of folate insufficiency among women of childbearing age.

Children 12 – 23 months old

- **Anaemia and iron deficiency**

  About 35.6% of children were identified as anaemic. The prevalence of anaemia ranged about 20.8% to 47.8%, depending on the region. The prevalence of iron deficiency (based on serum ferritin < 12 µg/L) among those young children, ranged 74%. The indicator varied from 69.2% to 80%, depending on the region.

- **Vitamin D deficiency**

  Prevalence of the vitamin D deficiency (<12 ng / ml) is 4.4% (in regions varies from 2.7% to 9.2%); Vitamin D deficient (12-20 ng / ml) were 15.3% of children (in regions varies from 6.7% to 26.3%); hyper vitaminosis D (> 30 ng / ml) was registered in 53.6% (in regions varies from 42.1% to 58.6%); norm (20-30 ng / ml) was registered in 26.7% (22.4% -32%).

- **Calcium deficiency**

  Calcium deficiency (<2.2 mmol / L) was registered in 10.2% (in regions varies from 9.1% to 15.8%).

Pregnant women (1st trimester)

- Anemia, iron deficiency and folate deficiency and pregnancy with a nervous tube defect: Anemia prevalence is 15.8%. Anemia prevalence rate range from 13% to 22.6%, depending on the region. Iron deficiency was observed in more than 57% of women (serum ferritinin level <15 µg / dL); The rate by regions varies from 51.7% to 63.3%. About 30% of women are folate deficient (<3 ng/ml); the rate of region varies from 20% to 43.3%.
- The average rate of serum folate level is quite low and increases nervous tube defects (NTDs) prevalence, which is confirmed by high rates of NTD (in 2016 - 27.5 per 10000 newborns, and in 2017 - 34.2 per 10000 newborns). This indicator is 5 – 6 fold higher, compared to countries with wheat flour fortified with folic acid for 10 and more years.

Universal Salt Iodization in Georgia, Success Story

Iodine deficiency has been identified as a global public health problem and as the main cause of preventable mental retardation, with over a billion people at risk worldwide.

In 1996, in Georgia, a fight against iodine deficiency became a priority and a State program of prevention, aimed at effective management of diseases caused by the iodine deficiency, was approved the program had to reduce the number of such diseases and to minimize it in the future. In 1997-2006, as a result of this program, in children morbidity due to endemic goitre decreased from 54% and 32.9%. In 2007, the program ended its activities.

In 2005 the new law on “Prevention of Disorders Caused by Iodine, Micronutrients and Vitamins Deficiency” was adopted by the Georgian Parliament mandating universal salt

iodization (USI) - to ban the import and trade of non-iodized salt. The law is the result of joint efforts by the Government of Georgia and UNICEF. The salt standard of 40±15mg iodine/kg salt was set.

To provide information on coverage of population with iodized salt in Georgia nationwide, and on adequacy of iodine content in salt on the household level though quantitative measurement of iodine concentration in salt, to determine status of iodine nutrition of the population in Georgia nationwide by measuring UIC and total body weight in school aged children (SAC), to assess status of iodine nutrition in pregnant women (PW) by collecting urine samples on the 1st trimester of pregnancy in clinics nationwide and measuring UIC, to develop recommendations for revision of present normative values of iodine in salt, as well approaches to use of iodine nutritional supplements among SAC and PW the national survey of iodized salt use and status of iodine nutrition has been conducted by the NCDC in collaboration with the UNICEF-Georgia.

The results of the survey confirmed that Georgia has a sustained, effective USI program with more than 90% coverage of the population with quality iodized salt. Optimal iodine nutrition status has been achieved and sustained for the general population (based on assessments of SAC) and PW.
While median UIC in SAC countrywide is close to upper limit, there is no urgent need to alter or reduce current normative levels of salt iodization (40±15mg/kg). Analysis of iodine intakes in SAC showed no evidence of excess iodine consumption in any group (urban, rural, mountain). Iodine nutrition in PW is perfectly normal with median UIC (211µg/L) conveniently in the middle of recommended values. Thus, Georgia, has got a sustainable, effective program, and iodine deficiency is defeated!

It is recommended to continue monitoring of iodine nutrition of population, coverage and quality of iodized salt to eradicate morbidity caused by iodine deficiency and reach an optimal level of iodine in the nutrition. Health professionals (endocrinologists, OBG, paediatricians, general practitioner, etc.) should be discouraged to recommend iodine supplement to PW and SAC without strong suspicion of inadequate iodine intake (such as veganism or extremely low salt consumption for medical or behavioural reasons).

The results of the survey were published in the Iodine global network (IGN) (Volume 46, Number 1, February 2018).

Annex

Additional tables

Table 4.35 Certain infectious and parasitic deseases, hospital discharges, all ages, Georgia

	2016			2017		
	Number of hospital discharges	Including deaths	Case fatality rate (%)	Number of hospital discharges	Including deaths	Case fatality rate (%)
Certain infectious and parasitic diseases	**24211**	**273**	**1.1**	**24621**	**303**	**1.2**
Including:						
Intestinal infections	12907	6	0.0	11849	8	0.1
Respiratory tuberculosis	1977	19	1.0	1507	8	0.5
Meningococcal infection	9	1	11.1	19	2	10.5
Septicaemia	466	121	26.0	783	178	22.7
Viral hepatitis	1268	51	4.0	1302	46	3.5
Human immunodeficiency virus (HIV) disease	492	27	5.5	750	23	3.1

Table 4.36 Certain infectious and parasitic diseases, hospital discharges, children aged Under-15, Georgia

	2016				2017			
	Number of hospital discharges		Including infants Under-1		Number of hospital discharges		Including infants Under-1	
	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)	Total	Case fatality rate (%)
Certain infectious and parasitic diseases	**13639**	**0.1**	**3101**	**0.2**	**13725**	**0.4**	**3053**	**1.8**
Including:								
Intestinal infections	9499	0.0	2381	0.0	7759	0.0	1973	0.1
Respiratory tuberculosis	96	0.0	6	0.0	64	0.0	3	0.0
Meningococcal infection	8	12.5	3	33.3	19	10.5	4	25.0
Septicaemia	12	0.0	0	0.0	10	0.0	0	0.0
Viral hepatitis	5	0.0	0	0.0	8	0.0	0	0.0
Human immunodeficiency virus (HIV) disease	9499	0.0	2381	0.0	7759	0.0	1973	0.1

Table 4.37 Certain infectious and parasitic diseases, hospital discharges by regions, Georgia

	2016		2017	
	Number of hospital discharges	Case fatality rate (%)	Number of hospital discharges	Case fatality rate (%)
Ajara	2644	0.5	2935	0.6
Tbilisi	12626	1.7	13457	1.8
Kakheti	215	0.9	264	1.5
Imereti	5155	0.4	4961	0.4
Samegrelo and Zemo Svaneti	466	2.1	441	1.4
Shida Kartli	1649	0.1	1413	0.4
Kvemo Kartli	1004	0.0	674	0.0
Guria	101	0.0	168	0.6
Samtskhe-Javakheti	349	1.7	303	0.3
Mtskheta-Mtianeti	1	0.0	5	80.0
Racha-Lechkhumi and Kvemo Svaneti	1	0.0	0	0.0
Georgia	**24211**	**1.1**	**24621**	**1.2**

Table 4.38 Intestinal infections, structure of new cases (%), Georgia

	2016		2017	
	Number of cases	%	Number of cases	%
Total	**59607**	**100**	**51433**	**100**
Including:				
Other salmonella infections	74	0.1	158	0.3
Shigellosis	658	1.1	476	0.9
Enterohemorrhagic escherichiosis	3	0.0	4	0.0
Bacterial foodborne intoxications	31675	53.1	34026	66.2
Amoebiasis	13	0.0	2	0.0
Botulism	10	0.0	8	0.0
Diarrhoea of presumed infectious origin	27174	45.6	16759	32.6

Table 4.39 Diarrhoea of presumed infectious origin by regions, Georgia

	2015				2016			
	All ages		In children		All ages		In children	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Ajara	11737	3482.9	8146	1255.0	6107	1771.7	3893	5699.9
Tbilisi	3530	317.2	2007	309.2	2428	210.7	1412	618.2
Kakheti	661	204.1	537	82.7	701	222.3	552	883.2
Imereti	6864	1288.0	4426	681.9	4709	922.1	2781	2748.0
Samegrelo and Zemo Svaneti	1778	539.3	710	109.4	775	240.3	260	406.9
Shida Kartli	992	376.0	620	95.5	988	380.3	576	1118.4
Kvemo Kartli	899	210.8	786	121.1		0.0	696	814.0
Guria	323	285.8	100	15.4	118	106.3	30	136.4
Samtskhe-Javakheti	238	128.7	164	25.3	68	43.5	35	112.9
Mtskheta-Mtianeti	113	120.0	86	13.2	75	79.9	40	215.1
Racha-Lechkhumi and Kvemo Svaneti	39	123.8	14	2.2	17	55.7	9	150.0
Georgia	**27174**	**730.6**	**17596**	**2452.7**	**16759**	**449.5**	**10337**	**1399.0**

Table 4.40 Sexually transmitted diseases, incidence, Georgia, 2017

	Syphilis		Gonococcal infection	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Ajara	395	114.6	141	40.9
Tbilisi	580	50.3	387	33.6
Kakheti	38	12.1	58	18.4
Imereti	139	27.2	109	21.3
Samegrelo and Zemo Svaneti	26	8.1	31	9.6
Shida Kartli	19	7.3	6	2.3
Kvemo Kartli	43	10.0	62	14.4
Mtskheta-Mtianeti	4	4.3	--	--
Racha-Lechkhumi and Kvemo Svaneti	395	114.6	141	40.9
Georgia	**1244**	**33.4**	**798**	**21.4**

Table 4.41 Sexually transmitted diseases, incidence, Georgia

	2015		2016		2017	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Syphilis	1335	35.9	1349	36.3	1244	33.4
Gonococcal infection	717	19.3	923	24.8	798	21.4
Chlamydia infection	2304	62.0	2507	67.4	2446	65.6
Trichomoniasis	7644	205.6	6880	185.0	5933	159.1

Table 4.42 Sexually transmitted diseases, distribution of new cases according to age and sex, Georgia, 2017

	Sex	Age											
		Total		0 - 14		15 - 19		20 - 29		30 - 39		40 +	
		Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence	Number of cases	Incidence
Syphilis, all forms of the disease	M	766	42.8	5	1.3	28	24.9	288	112.1	186	71.6	259	33.5
	F	478	24.6	7	2.0	8	8.0	118	47.9	154	58.6	191	19.5
Gonococcal infection	M	614	34.3	0	0.0	48	42.7	367	142.9	151	58.1	48	6.2
	F	184	9.5	1	0.3	3	3.0	107	43.4	57	21.7	16	1.6
Chlamidiosis	M	795	44.4	0	0.0	46	41.0	441	171.7	234	90.0	74	9.6
	F	1651	85.1	1	0.3	156	156.2	730	296.3	496	188.7	268	27.4
Trichomoniasis	M	1496	83.6	4	1.0	52	46.3	793	308.8	468	180.1	179	23.2
	F	4437	228.8	31	8.8	312	312.3	2282	926.1	1210	460.4	602	61.6

Noncommunicable diseases

Table 4.43 Malignant neoplasms, morbidity according to the regions, Georgia, 2017

	According to the place of residence		According to the place of care delivery	
	Number of cases	Incidence per 10000 population	Number of cases	Incidence per 100000 population
Abkhazia	86	-	0	-
Ajara	898	260.5	854	247.8
Tbilisi	3605	312.9	7232	627.6
Kakheti	666	211.2	127	40.3
Imereti	1286	251.8	698	136.7
Samegrelo and Zemo Svaneti	749	232.2	229	71.0
Shida Kartli	541	208.2	127	48.5
Kvemo Kartli	792	183.8	90	20.9
Guria	296	266.7	28	25.2
Samtskhe-Javakheti	266	170.0	73	46.6
Mtskheta-Mtianeti	206	219.4	15	16.0
Racha-Lechkhumi and Kvemo Svaneti	90	295.1	12	39.3
Former South Osetia	4	-	0	-
Georgia	**9485**	**254.4**	**9485**	**254.4**

Table 4.44 Brest cancer in women, new cases by stages (%),Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	17.3	34.6	25.9	14.1	8.1
2016	20.6	31.7	23.9	14.1	9.6
2017	20.6	33.1	20.1	13.5	12.7

Table 4.45 Cervix uteri cancer, new cases by stages (%), Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	27.6	25.6	28.5	12.8	5.5
2016	34.8	20.5	21.6	10.0	13.2
2017	25.3	28.7	23.9	12.1	10.0

Table 4.46 Cancer of trachea, bronchus, lung new cases (both sexes) by stages (%), Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	3.0	3.7	25.1	58.6	9.6
2016	4.2	5.6	20.3	61.5	8.5
2017	5.9	10.0	22.7	52.8	8.6

Table 4.47 Prostate cancer, new cases by stages (%), Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	15.4	25.7	14.9	34.4	9.7
2016	14.8	19.7	19.0	30.3	16.3
2017	11.9	19.8	20.6	35.2	12.4

Table 4.48 Colorectal cancer, new cases (both sexes) by stages (%), Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	6.0	21.1	34.3	31.2	7.3
2016	4.5	20.7	30.9	34.6	9.3
2017	3.7	17.7	38.7	30.8	9.1

Table 4.49 Melanoma, new cases by stages (%), Georgia

	I Stage	II Stage	III Stage	IV Stage	Unknown
2015	13.3	30.5	21.9	24.8	9.5
2016	13.3	25.7	15.9	31.0	14.2
2017	20.7	35.9	15.2	21.7	6.5

Table 4.50 Breast cancer, incidence in women, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New cases	**1015**	**1023**	**1055**	**730**	**841**	**960**	**1012**	**1839**	**1780**	**1652**
Incidence per 100000 females	50.4	51.2	53.2	37.1	43.1	49.4	52.1	94.6	91.6	85.2

Table 4.51 Cervix uteri cancer, incidence rate, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New cases	**267**	**281**	**261**	**217**	**189**	**172**	**176**	**344**	**371**	**289**
Incidence per 100000 females	13.3	14.1	13.2	11.0	9.7	8.8	9.1	17.7	19.1	14.9

Table 4.52 Prostate cancer, incidence rate, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New cases	**205**	**222**	**254**	**169**	**187**	**208**	**224**	**518**	**406**	**378**
Incidence per 100000 males	11.2	12.2	14.1	9.4	10.5	11.7	12.6	29.1	22.7	21.1

Table 4.53 Colorectal cancer, incidence rate, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New cases	**385**	**386**	**387**	**303**	**290**	**270**	**432**	**796**	**731**	**711**
Incidence per 100000 population	10.0	10.1	10.2	8.1	7.8	7.3	11.6	21.4	19.6	19.1

Table 4.54 Trachea, bronchus, lung cancer new cases, incidence rate, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New cases	**747**	**784**	**796**	**662**	**501**	**483**	**501**	**1169**	**1097**	**1015**
Incidence per 100000 population	19.4	20.6	21.0	17.6	13.4	13.0	13.5	31.4	29.4	27.2

Table.4.55 Diseases of blood and blood-forming organs, morbidity rates, Georgia

	All ages				Children aged 0-15			
	Registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population	Registered cases	Prevalence per 100000 children	New cases	Incidence per 100000 children
2008	19546	507.9	11672	303.3	8501	1237.3	5686	827.6
2009	25064	657.1	17653	462.8	12414	1814.5	10285	1503.3
2010	23535	621.5	17378	458.9	11977	1747.9	10072	1469.9
2011	21878	582.4	15292	407.1	11290	1651.3	8996	1315.7
2012	25478	683.3	18546	497.4	11504	1687.4	8907	1306.5
2013	24022	646.2	17033	458.2	11284	1651.2	8804	1288.3
2014	28447	764.8	18510	497.7	12064	1738.2	9141	1317.0
2015	37057	994.7	25112	674.1	12792	1799.1	9755	1372.0
2016	33875	908.8	22986	616.7	10889	1499.8	8123	1118.8
2017	**33570**	**900.5**	**20167**	**541.0**	**10823**	**1464.7**	**7913**	**1070.9**

Table 4.56 Diseases of blood and blood-forming organs by regions, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1341	--	666	--	935	--	379	--
Ajara	2497	731.0	1725	5104	2427	704.1	1308	379.5
Tbilisi	6863	602.7	4331	3888	7420	644.0	3998	347.0
Kakheti	2608	823.2	1772	5574	2709	859.2	1801	571.2
Imereti	7322	1410.7	4604	8666	7105	1391.2	4000	783.2
Samegrelo and Zemo Svaneti	3497	1071.8	2424	7368	3400	1054.3	2234	692.7
Shida Kartli	2521	965.3	1824	6914	2590	996.9	1903	732.5
Kvemo Kartli	3587	836.4	2386	5589	3562	826.5	2145	497.7
Guria	1622	1448.9	1296	11489	1442	1299.1	1114	1003.6
Samtskhe-Javakheti	717	453.9	470	2928	677	432.6	448	286.3
Mtskheta-Mtianeti	749	796.9	576	6128	629	669.9	460	489.9
Racha-Lechkhumi and Kvemo Svaneti	165	529.6	102	3259	162	531.1	92	301.6
Other departments	386	--	191	--	512	--	285	--
Georgia	**33875**	**908.8**	**22986**	**7657**	**33570**	**900.5**	**20167**	**541.0**

Table 4.57 Diseases of blood and blood-forming organs in children by the regions, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	655	--	399	--	460	--	214	--
Ajara	1000	1502.9	705	1059.5	929	1360.2	633	926.8
Tbilisi	1194	538.3	1008	454.5	1417	620.4	1060	464.1
Kakheti	1016	1646.3	782	1267.2	1032	1651.2	811	1297.6
Imereti	2066	2043.6	1341	1326.4	2283	2255.9	1441	1423.9
Samegrelo and Zemo Svaneti	1340	2108.5	1046	1645.9	1261	1973.4	1010	1580.6
Shida Kartli	673	1323.0	543	1067.5	724	1405.8	606	1176.7
Kvemo Kartli	1661	1988.4	1265	1514.4	1584	1920.0	1201	1455.8
Guria	710	3256.2	598	2742.5	577	2622.7	472	2145.5
Samtskhe-Javakheti	205	666.3	137	445.3	175	564.5	126	406.5
Mtskheta-Mtianeti	279	1523.9	230	1256.3	313	1682.8	274	1473.1
Racha-Lechkhumi and Kvemo Svaneti	48	791.0	37	609.7	23	383.3	21	350.0
Other departments	42	--	32	--	45	--	44	--
Georgia	**10889**	**1499.8**	**8123**	**1118.8**	**10823**	**1464.7**	**7913**	**1070.9**

Table 4.58 Anemia, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of registered cases	**16670**	**21914**	**20979**	**18545**	**23245**	**22220**	**26173**	**31499**	**29087**	**28555**
Prevalence rate per 100000 population	433.2	574.5	554.0	493.7	623.4	597.7	703.7	845.5	780.3	766.0
Total number of new cases	**10419**	**16012**	**15902**	**13734**	**17334**	**16007**	**17428**	**22893**	**19706**	**17971**
Incidence rate per 100000 population	270.7	419.8	419.9	365.6	464.9	430.6	468.6	614.5	528.7	482.1

Table 4.59 Anemia in children Under-15, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of registered cases	**7594**	**11449**	**11146**	**10339**	**10888**	**10513**	**11391**	**12186**	**10032**	**10347**
Prevalence rate per 100000 population	1105.3	1673.5	1626.6	1512.2	1597.0	1538.4	1641.2	1713.9	1381.7	1400.3
Total number of new cases	**5177**	**9666**	**9472**	**8450**	**8505**	**8257**	**8691**	**9364**	**7595**	**7617**
Incidence rate per 100000 population	753.5	1412.9	1382.3	1235.9	1247.5	1208.2	1252.2	1317.0	1046.1	1030.8

Table 4.60 Anemia by regions, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	1024	--	611	--	796	--	352	--
Ajara	2451	717.5	1697	496.8	2368	687.0	1268	367.9
Tbilisi	5250	461.0	3231	283.7	5778	501.5	3422	297.0
Kakheti	2387	753.4	1649	520.5	2453	778.0	1660	526.5
Imereti	6463	1245.2	4205	810.2	5240	1026.0	3140	614.8
Samegrelo and Zemo Svaneti	3319	1017.3	2347	719.3	3194	990.4	2089	647.8
Shida Kartli	2045	783.1	1540	589.7	2191	843.3	1666	641.3
Kvemo Kartli	3059	713.3	2105	490.8	3303	766.4	2065	479.1
Guria	1452	1297.1	1158	1034.4	1402	1263.1	1085	977.5
Samtskhe-Javakheti	440	278.6	327	207.0	664	424.3	438	279.9
Mtskheta-Mtianeti	732	778.8	565	601.1	589	627.3	433	461.1
Racha-Lechkhumi and Kvemo Svaneti	163	523.2	102	327.4	145	475.4	73	239.3
Other departments	302	--	169	--	432	--	280	--
Georgia	**29087**	**780.3**	**19706**	**528.7**	**28555**	**766.0**	**17971**	**482.1**

Table 4.61 Endocrine, nutritional and metabolic diseases by regions, Georgia, 2017

	Cases registered by the end of the year				New cases			
	All ages		In children		All ages		In children	
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of registered cases	Incidence per 100000 population	Number of registered cases	Incidence per 100000 children
Abkhazia	4650	--	152	--	1168	--	86	--
Ajara	28893	8382.1	1840	2694.0	7759	2250.9	958	1402.6
Tbilisi	78575	6820.2	2161	946.1	33081	2871.4	1628	712.8
Kakheti	20576	6525.8	970	1552.0	4454	1412.6	513	820.8
Imereti	43616	8540.4	1247	1232.2	8418	1648.3	719	710.5
Samegrelo and Zemo Svaneti	17693	5486.2	756	1183.1	5363	1662.9	496	776.2
Shida Kartli	23694	9120.1	1846	3584.5	7238	2786.0	1339	2600.0
Kvemo Kartli	32459	7531.1	1532	1857.0	14347	3328.8	980	1187.9
Guria	5617	5060.4	368	1672.7	1264	1138.7	186	845.5
Samtskhe-Javakheti	4608	2944.4	305	983.9	1363	870.9	202	651.6
Mtskheta-Mtianeti	5260	5601.7	305	1639.8	1241	1321.6	211	1134.4
Racha-Lechkhumi and Kvemo Svaneti	2064	6767.2	102	1700.0	261	855.7	34	566.7
Other departments	4911	--	52	--	1898	--	50	--
Georgia	**272616**	**7312.7**	**11636**	**1574.8**	**87855**	**2356.6**	**7402**	**1001.8**

Table 4.62 Endocrine, nutritional and metabolic diseases, Georgia

	All ages				Children aged 0-15			
	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of cases registered by the end	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
2008	119864	3114.6	30580	794.6	9356	1361.8	5323	774.8
2009	124793	3271.6	40054	1050.1	9053	1323.3	7982	1166.7
2010	129731	3426.0	43545	1149.9	8124	1185.6	6416	936.3
2011	140267	3734.0	41141	1095.2	7254	1061.0	6494	949.8
2012	133419	3578.0	60284	1616.7	4797	703.6	5222	766.0
2013	150931	4059.8	66824	1797.5	4574	669.3	5514	806.9
2014	173554	4666.2	77902	2094.5	6234	898.2	6101	879.0
2015	173705	4662.9	88758	2382.6	5656	795.5	7896	1110.5
2016	186814	5011.8	85018	2280.8	5059	696.8	6828	940.4
2017	**183093**	**4911.3**	**87855**	**2356.6**	**4796**	**649.1**	**7402**	**1001.7**

Table 4.63 Endocrine, nutritional and metabolic diseases, Georgia

	2016				2017			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Endocrine, nutritional and metabolic diseases	**186814**	**5011.8**	**85018**	2280.8	**183093**	**4911.3**	**87855**	**2356.6**
Including:								
Sub clinical iodine-deficiency hypothyroidism and other hypothyroidism	34740	932.0	20836	559.0	34648	929.4	6008	161.2
Thyrotoxicosis	10065	270.0	6027	161.7	9628	258.3	6063	162.6
Thyrotoxicosis (hyperthyroidism)	7264	194.9	3354	90.0	7140	191.5	3575	95.9
Diabetes mellitus type I	19497	523.1	2933	78.7	17567	471.2	2776	74.5
Diabetes mellitus type II	66112	1773.6	15150	406.4	65721	1762.9	12931	346.9

Table 4.64 Mental and behavioral disorders, morbidity rates, Georgia

	All ages				Children Under-15			
	Number of cases registered by the end of the	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of cases registered by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
2008	75448	1960.5	3740	97.2	1672	243.4	284	41.3
2009	76457	2004.4	2505	65.7	1651	241.3	343	50.1
2010	79216	2092.0	2339	61.8	1628	237.6	298	43.5
2011	67736	1803.2	1870	49.8	1159	169.5	137	20.0
2012	78296	2099.7	4075	109.3	1357	199.0	183	26.8
2013	68922	1853.9	3020	81.2	1769	258.9	673	98.5
2014	83546	2246.2	3893	104.7	2015	290.3	414	59.6
2015	86497	2321.9	4229	113.5	2004	281.8	525	73.8
2016	90139	2418.2	5228	140.3	2708	373.0	660	90.9
2017	**88610**	**2376.9**	**4841**	**129.9**	**3059**	**414.0**	**649**	**87.8**

Table 4.65 Mental and behavioural disorders by sex and age, Georgia, 2017*

	Total	Including in ages:				Including Females
		0-14	15-19	20-24	25 and more	
Mental and behavioural disorders	**4841**	**649**	**254**	**359**	**3579**	**2303**
Including:						
Organic, including symptomatic, mental disorders	1047	6	6	18	1017	518
Mental and behavioural disorders due to psychoactive substances use	247	0	2	16	229	8
Schizophrenia, schizotypal and delusional disorders	889	2	45	74	768	431
Including schizophrenia	237		3	14	220	110
Mood (affective) disorders	465	1	17	47	400	289
Neurotic, stress-related and somatoform disorders	1039	14	66	132	827	604
Behavioural syndromes associated with physiological disturbances and physical factors	23	0	2	3	18	16
Disorders of adult personality and behaviour	96	0	0	35	61	52
Mental retardation	814	432	92	33	257	313
Disorders of psychological development	15	15	0	0	0	6
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	206	179	24	1	2	66

Table 4.66 Mental and behavioural disorders, hospital discharges, Georgia, 2017*

	Number of discharges	Including hospital deaths	Case fatality rate (%)
Mental and behavioural disorders	**4676**	**22**	**0.5**
Including:			
Organic, including symptomatic, mental disorders	636	6	0.9
Mental and behavioural disorders due to psychoactive substances use	15	0	0.0
Schizophrenia, schizotypal and delusional disorders	3382	14	0.4
Including schizophrenia	2280	13	0.6
Mood (affective) disorders	179	0	0.0
Neurotic, stress-related and somatoform disorders	53	0	0.0
Behavioural syndromes associated with physiological disturbances and physical factors	1	0	0.0
Disorders of adult personality and behaviour	107	0	0.0
Mental retardation	303	2	0.7

* *Data collected from mental health dispensaries*

Table 4.67 Diseases of the nervous system, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
2009	121062	3173.8	45489	1192.6	27474	4015.8	13149	1922.0
2010	125619	3317.4	47742	1260.8	26896	3925.1	11406	1664.5
2011	143717	3825.9	46095	1227.1	28079	4106.8	10340	1512.3
2012	156826	4205.7	68169	1828.1	26115	3830.5	8130	1192.5
2013	139602	3755.1	57971	1559.3	18434	2697.4	8670	1268.7
2014	154876	4164.0	66823	1796.6	19526	2813.3	10241	1475.5
2015	175194	4702.8	73538	1974.0	19264	2709.4	11077	1557.9
2016	156842	4207.7	69178	1855.9	15356	2115.0	8739	1203.6
2017	**154472**	**4143.6**	**61130**	**1639.8**	**15596**	**2110.7**	**8446**	**1143.0**

Table 4.68 Diseases of the nervous system, certain groups of diseases, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the nervous system	**156842**	**4207.7**	**69178**	**1855.9**	**154472**	**4143.6**	**61130**	**1639.8**
Including:								
Inflammatory diseases of the central nervous system	4358	116.9	1930	51.8	4558	122.3	1687	45.3
Systemic atrophies primarily affecting the central nervous system	2719	72.9	1042	28.0	2876	77.1	1079	28.9
Extrapyramidal and movement disorders	14235	381.9	3712	99.6	15736	422.1	4005	107.4
Other degenerative and demyelinating diseases of the nervous system	4585	123.0	2225	59.7	4203	112.7	1398	37.5
Episodic and paroxysmal disorders	45711	1226.3	22146	594.1	48441	1299.4	19347	519.0
Including: Epilepsy and status epilepticus	13947	374.2	4366	117.1	14048	376.8	4180	112.1
Disorders of the peripheral nervous system	50505	1354.9	23123	620.3	49923	1339.1	19347	519.0
Cerebral palsy and other paralytic syndromes	7542	202.3	2182	58.5	7993	214.4	4180	112.1

Table 4.69 Diseases of the eye and adnexa, Georgia

	All ages				In children			
	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	New cases	Incidence per 100000 children
2008	104858	27724.7	35072	911.3	17102	2489.2	8648	1258.7
2009	123384	3234.7	47797	1253.1	19241	2812.4	10415	1522.3
2010	124576	3289.8	49531	1308.0	17695	2582.3	9679	1412.5
2011	138351	3683.0	51745	1377.5	18423	2694.5	10296	1505.9
2012	159139	4267.8	77822	2087.0	20442	2998.4	11359	1666.1
2013	190355	5120.3	92013	2475.0	22929	3355.2	14048	2055.6
2014	215543	5795.1	106763	2870.4	29348	4228.4	21575	3108.5
2015	225357	6049.4	107097	2874.9	27092	3810.3	16883	2374.5
2016	193482	5190.7	93273	2502.3	20363	2804.6	14233	1960.3
2017	**244936**	**6570.2**	**125672**	**3371.0**	**41382**	**5600.4**	**32877**	**4449.4**

Table 4.70 Diseases of the eye and adnexa by certain groups of diseases, all ages, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the eye and adnexa	**193482**	**5190.7**	**93273**	**2502.3**	**244936**	**6570.2**	**125672**	**3371.0**
Including								
Disorders of lens (cataract)	56626	1519.1	23068	618.9	57707	1547.9	22205	595.6
Glaucoma	25379	680.9	8265	221.7	24343	653.0	5969	160.1
Diseases of the eye and adnexa	54211	1454.4	25703	689.6	102373	2746.1	61882	1659.9

Table 4.71 Diseases of the eye and adnexa, certain groups of diseases, children Under-15, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Diseases of the eye and adnexa	**20363**	**2804.6**	**14233**	**1960.3**	**41382**	**5600.5**	**32877**	**4449.5**
Including:								
Disorders of lens (cataract)	118	16.3	54	7.4	432	58.5	44	6.0
Glaucoma	145	20.0	10	1.4	211	28.6	32	4.3
Disorders of refraction and accommodation	9072	1249.5	6004	826.9	28125	3806.3	23542	3186.1

Table 4.72 Diseases of the ear and mastoid process, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
2008	32167	835.8	19900	517.1	8859	1289.4	6872	1000.2
2009	42031	1101.9	28289	741.6	13682	1999.9	11621	1698.6
2010	41059	1084.3	27902	736.8	12559	1832.8	10622	1550.1
2011	45463	1210.3	29862	795.0	14797	2164.2	12269	1794.4
2012	70444	1889.1	53128	1424.8	20356	2985.8	17172	2518.8
2013	75367	2027.3	55105	1482.2	21963	3213.8	17983	2631.4
2014	75552	2031.3	54665	1469.7	24709	3560.1	20880	3008.4
2015	100402	2695.2	69877	1875.8	30229	4251.5	26652	3748.4
2016	90886	2438.3	65485	1756.8	29690	4089.2	25958	3575.2
2017	**87283**	**2341.3**	**59082**	**1584.8**	**29754**	**4026.7**	**24600**	**3329.2**

Table 4.73 Diseases of the ear and mastoid process, all ages, Georgia, 2016-2017

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Diseases of the ear and mastoid process	**90886**	**2438.3**	**65485**	**1756.8**	**87283**	**2341.3**	**59082**	**1584.8**
Including:								
Otitis media	31586	847.4	22802	611.7	33595	901.2	23195	622.2

Table 4.74 Diseases of the ear and mastoid process, children Under-15, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Diseases of the ear and mastoid process	**29690**	**4089.2**	**25958**	**3575.2**	**29754**	**4026.8**	**24600**	**3329.3**
Including:								
Otitis media	12498	1721.4	10885	1499.2	12095	1636.9	9985	1351.3

Table 4.75 Diseases of the circulatory system by regions, Georgia, 2017

	Registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	8732	--	1268	--
Ajara	25500	7397.7	13964	4051.1
Tbilisi	115486	10024.0	60160	5221.8
Kakheti	42523	13486.5	11800	3742.5
Imereti	98098	19208.5	25223	4938.9
Samegrelo and Zemo Svaneti	35403	10977.7	14893	4618.0
Shida Kartli	29230	11251.0	19722	7591.2
Kvemo Kartli	27270	6327.1	16186	3755.5
Guria	11160	10054.1	4416	3978.4
Samtskhe-Javakheti	15110	9655.0	7093	4532.3
Mtskheta-Mtianeti	12071	12855.2	5509	5866.9
Racha-Lechkhumi and Kvemo Svaneti	5254	17226.2	1123	3682.0
Other departments	4095	--	3372	--
Georgia	**429932**	**11532.5**	**184729**	**4955.2**

Table 4.76 Hypertensive diseases, morbidity rates by regions, Georgia, 2017

	Registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Abkhazia	5938	--	724	--
Ajara	17194	4988.1	6344	1840.4
Tbilisi	64673	5613.5	30108	2613.3
Kakheti	29913	9487.2	6161	1954.0
Imereti	69911	13689.3	12599	2467.0
Samegrelo and Zemo Svaneti	24243	7517.2	9176	2845.3
Shida Kartli	18837	7250.6	10812	4161.7
Kvemo Kartli	19165	4446.6	10486	2432.9
Guria	7659	6900.0	2598	2340.5
Samtskhe-Javakheti	9169	5858.8	3750	2396.2
Mtskheta-Mtianeti	8900	9478.2	3299	3513.3
Racha-Lechkhumi and Kvemo Svaneti	3528	11567.2	629	2062.3
Other departments	1936		1714	--
Georgia	**281066**	**7539.3**	**98400**	**2639.5**

Table 4.77 Diseases of the circulatory system, hospital discharges, Georgia, 2017

	All ages	Children under -15	Case fatality rate (%)
Diseases of circulatory system	**97557**	**154**	**4.6**
Including:			
Acute rheumatic fever	**3**	**1**	**0.0**
Including rheumatic fever with heart involvement	3	1	0.0
Chronic rheumatic heart diseases	**361**	**0**	**1.9**
Hypertensive diseases	**4704**	**6**	**0.7**
Ischaemic heart diseases	**43850**	**2**	**1.9**
Including: *Angina pectoris*	28570	0	0.4
Acute myocardial infarction	9967	0	6.0
Recurrent myocardial infarction	16	0	
Other acute Ischaemic heart diseases	700	0	2.6
Chronic ischaemic heart disease	4591	2	2.0
Pulmonary heart disease and diseases of pulmonary circulation	**724**	**1**	**25.4**
Cerebrovascular diseases	**11844**	**22**	**19.2**
Including: Subarachnoid haemorrhage	342	1	665.5
Intracerebral and other nontraumatic intracranial haemorrhages	2203	0	0.9
Cerebral infarction	6783	5	19.2
Occlusion and stenosis of precerebral and cerebral arteries, not resulting in cerebral infarction	265	0	1.1
Other cerebrovascular diseases	549	0	3.6

Table 4.78 Diseases of the circulatory system, hospital discharges by regions, Georgia, 2017

	Total number of discharges	Including hospital deaths	Case fatality rate (%)
Ajara	8371	307	3.7
Tbilisi	56678	2111	3.7
Kakheti	4565	298	6.5
Imereti	14330	750	5.2
Samegrelo and Zemo Svaneti	3192	269	8.4
Shida Kartli	3475	251	7.2
Kvemo Kartli	3520	176	5.0
Guria	1115	116	10.4
Samtskhe-Javakheti	861	57	6.6
Mtskheta-Mtianeti	1239	179	14.4
Racha-Lechkhumi and Kvemo Svaneti	211	2	0.9
Georgia	**97557**	**4516**	**4.6**

Table 4.79 Elective surgeries on the circulatory system, Georgia, 2017

	Number of inpatient surgeries, all ages	Case fatality rate (%)	In children Under-15			
			Total	Case fatality rate (%)	In infants	Case fatality rate (%)
Surgeries on the heart and on the blood vessels	**15027**	**0.5**	**399**	**2.3**	**140**	**5.7**
Including:						
On the open heart	**8110**	**0.8**	**374**	**2.4**	**134**	**6.0**
Correction of the congenital heart malformation	705	0.4	193	1.0	54	1.9
Correction of the acquired heart malformation	483	3.5	0	0.0	0	0.0
Implantation of a cardiac stimulator	1579	1.6	0	0.0	0	0.0
Operation on aorta	262	2.3	0	0.0	0	0.0
Coronary artery bypass surgery	14	0.0	0	0.0	0	0.0
Coronary artery angioplasty	3675	0.1	84	0.0	26	0.0
Arrhythmogenic interference	899	0.0	17	0.0	0	0.0
Other cardiac surgery	493	0.0	79	0.0	0	0.0
Surgeries on blood vessels	**6971**	**0.1**	**25**	**0.0**	**6**	**0.0**
Other surgeries on arteries	1061	0.1	4	0.0	3	0.0
Other surgeries on veins	3594	0.0	12	0.0	3	0.0
Surgeries on lymphatic ducts	450	0.0	1	0.0	0	0.0
Endovascular surgery	414	0.0	0	0.0	0	0.0
Other surgeries on blood vessels	**1092**	**0.5**	**8**	**0.0**	**0**	**0.0**

Table 4. 80 Diseases of the respiratory system by regions, Georgia, 2017

	All ages				Children Under-15			
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
Abkhazia	10758	--	9137	--	5145	--	4893	-
Ajara	54375	15774.6	44397	12879.9	24994	36594.4	22924	33563.7
Tbilisi	206919	17960.2	198382	17219.2	98986	43338.9	97397	42643.2
Kakheti	71651	22724.7	66802	21186.8	28453	45524.8	27836	44537.6
Imereti	107481	21045.8	97034	19000.2	48256	47683.8	47438	46875.5
Samegrelo and Zemo Svaneti	47413	14701.7	41184	12770.2	18337	28696.4	17349	27150.2
Shida Kartli	67340	25919.9	63722	24527.3	35481	68895.1	35275	68495.1
Kvemo Kartli	48035	11145.0	43608	10117.9	22578	27367.3	22210	26921.2
Guria	27063	24381.1	25093	22606.3	9921	45095.5	9698	44081.8
Samtskhe–Javakheti	23869	15251.8	21062	13458.1	8825	28467.7	8627	27829.0
Mtskheta–Mtianeti	21724	23135.3	20670	22012.8	8861	47639.8	8715	46854.8
Racha–Lechkhumi and Kvemo Svaneti	5436	17823.0	4742	15547.5	1551	25850.0	1528	25466.7
Other departments	12917	--	11233	--	1856	--	1856	--
Georgia	**704981**	**18910.4**	**647066**	**17356.9**	**313244**	**42393.3**	**305746**	**41378.5**

Table 4.81 New cases of asthma and status asthmaticus by regions, Georgia

	2016				2017			
	All ages		Children Under-15		All ages		Children Under-15	
	Number of new cases	Incidence per 100000 population	Number of new cases	Incidence per 100000 children	Number of new cases	Incidence per 100000 population	Number of new cases	Incidence per 100000 children
Abkhazia	29	--	8	--	24	--	3	--
Ajara	243	71.1	26	39.1	193	56.0	33	48.3
Tbilisi	748	65.7	101	45.5	649	56.3	103	45.1
Kakheti	163	51.4	21	34.0	236	74.8	5	8.0
Imereti	656	126.4	149	147.4	460	90.1	147	145.3
Samegrelo and Zemo Svaneti	244	74.8	28	44.1	221	68.5	30	46.9
Shida Kartli	243	93.0	1	2.0	146	56.2	0	0.0
Kvemo Kartli	271	63.2	16	19.2	222	51.5	32	38.8
Guria	103	92.0	4	18.3	76	68.5	3	13.6
Samtskhe–Javakheti	127	80.4	4	13.0	106	67.7	1	3.2
Mtskheta–Mtianeti	60	63.8	5	27.3	63	67.1	2	10.8
Racha–Lechkhumi and Kvemo Svaneti	9	28.9	0	0.0	27	88.5	3	49.6
Other departments	87	--	12	--	177	--	2	--
Georgia	**2983**	**80.0**	**375**	**51.6**	**2600**	**69.7**	**361**	**48.9**

Table 4.82 Diseases of the respiratory system, hospital discharges, Georgia, 2017

	All ages		Children			
			Under-15		Under–1	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %
Diseases of the respiratory system	**99052**	**3.0**	**49585**	**0.09**	**11098**	**1.14**
Including:						
Acute upper respiratory infections	17567	0.02	16621	0.01	4312	0.02
Influenza	283	2.12	217	0.00	56	0.00
Pneumonia	28762	3.25	8357	0.08	1840	0.11
Other lower respiratory infections	10594	0.05	9865	0.04	4562	0.04
Other diseases of upper respiratory tract	29004	0.01	13767	0.01	4	0.0
Including allergic rhinitis	3780	1.98	5	0.0	1	0.0
Chronic lower respiratory diseases	517	0.2	0	0.0	0	0.0
Including: chronic and not specified bronchitis	59	1.7	0	0.0	0	0.0
emphysema	249	1.6	0	0.0	0	0.0
asthma and status asthmaticus	2940	2.3	0	0.0	0	0.0
other chronic obstructive pulmonary disease	15	0.0	0	0.0	0	0.0
bronchiectasis	38	15.79	0	0.0	0	0.0
Lung diseases due to external agents	276	23.55	2	1	1	0.0
Other respiratory diseases principally affecting the interstitium	152	6.58	31	0.0	1	0.0
Suppurative and necrotic conditions of lower respiratory tract	8202	22.38	717	0.0	320	3.4
Other diseases of the respiratory system	17567	0.02	16621	0.01	4312	0.02

Table 4.83 Diseases of the respiratory system, hospital discharges, Georgia, 2017

	All ages		Children			
			Under-15		Under–1	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %
Diseases of the respiratory system	**99052**	**3.0**	**49585**	**0.09**	**11098**	**1.14**
Including:						
Acute upper respiratory infections	17567	0.02	16621	0.01	4312	0.02
Influenza	283	2.12	217	0.00	56	0.00
Pneumonia	28762	3.25	8357	0.08	1840	0.11
Other lower respiratory infections	10594	0.05	9865	0.04	4562	0.04
Other diseases of upper respiratory tract	29004	0.01	13767	0.01	4	0.0
Including allergic rhinitis	3780	1.98	5	0.0	1	0.0
Chronic lower respiratory diseases	517	0.2	0	0.0	0	0.0
Including: chronic and not specified bronchitis	59	1.7	0	0.0	0	0.0
emphysema	249	1.6	0	0.0	0	0.0
asthma and status asthmaticus	2940	2.3	0	0.0	0	0.0
other chronic obstructive pulmonary disease	15	0.0	0	0.0	0	0.0
bronchiectasis	38	15.79	0	0.0	0	0.0
Lung diseases due to external agents	276	23.55	2	1	1	0.0
Other respiratory diseases principally affecting the interstitium	152	6.58	31	0.0	1	0.0
Suppurative and necrotic conditions of lower respiratory tract	8202	22.38	717	0.0	320	3.4
Other diseases of the respiratory system	17567	0.02	16621	0.01	4312	0.02

Table 4.84 Diseases of the digestive system, incidence by certain groups of diseases, Georgia, 2017

	Number of new cases, all ages	Incidence per 100000 population	In children	
			Number of new cases	Incidence per 100000 children
Diseases of the digestive system	**267788**	**7183.2**	**39396**	**5331.7**
Including:				
Diseases of oral cavity, salivary glands and jaw	185648	4979.8	28248	3823.0
Diseases of oesophagus, stomach and duodenum	31162	835.9	2827	382.6
Including: gastric and duodenal peptic ulcers	5525	148.2	69	9.3
gastritis and duodenitis	20470	549.1	1605	217.2
Liver diseases	4525	121.4	31	4.2
Disorders of gallbladder, biliary tract and pancreas	18740	502.7	921	124.6
Including: cholelithiasis and cholecystitis	14454	387.7	704	95.3
acute pancreatitis and other disorders of pancreas	1036	27.8	0	0.0

Table 4.85 Diseases of the digestive system, incidence by regions, Georgia

	2016				2017			
			In children				In children	
	New cases	Incidence per 100000 population	New cases	Incidence per 100000 children	New cases	Incidence per 100000 population	New cases	Incidence per 100000 children
Abkhazia	1670	--	419	--	1475	--	304	--
Ajara	41963	12284.2	4847	7284.6	44581	12933.3	5656	8281.1
Tbilisi	183723	16134.2	29810	13439.9	137920	11971.2	21091	9234.2
Kakheti	8854	2794.6	1716	2780.6	9881	3133.8	2023	3236.8
Imereti	52237	10064.3	11825	11696.5	25710	5034.3	2800	2766.8
Samegrelo and Zemo Svaneti	21199	6497.4	5085	8001.4	15600	4837.2	2727	4267.6
Shida Kartli	8359	3200.8	1870	3676.1	7290	2806.0	1860	3611.7
Kvemo Kartli	10045	2342.3	1617	1935.8	8916	2068.7	1434	1738.2
Guria	3546	3167.6	358	1641.8	3652	3290.1	353	1604.5
Samtskhe–Javakheti	3384	2142.4	474	1540.7	2955	1888.2	517	1667.7
Mtskheta–Mtianeti	3588	3817.4	411	2245.0	3347	3564.4	447	2403.2
Racha–Lechkhumi and Kvemo Svaneti	570	1829.6	72	1186.5	502	1645.9	74	1233.3
Other departments	3624	--	61	--	5959	--	110	--
Georgia	**342762**	**9195.5**	**58565**	**8066.2**	**267788**	**7183.2**	**39396**	**5331.7**

Table 4.86 Diseases of the digestive system, hospital discharges, Georgia, 2017

	Number of hospital discharges, all ages	Including deaths	Case fatality rate (%)	Number of hospital discharges, children Under-15	Including deaths in children	Case fatality rate (%) in children
Diseases of the digestive system	**44311**	**1068**	**2.4**	**4101**	**5**	**0.1**
Including:						
Diseases of oral cavity, salivary glands and jaw	2186	0	0.0	251	1	0.4
Gastric and duodenal, peptic ulcers	4595	188	4.1	37	0	0.0
Gastritis and duodenitis	168	5	3.0	27	0	0.0
Diseases of appendix	8714	9	0.1	2120	5	0.2
Hernia	9254	37	0.4	1134	2	0.2
Diseases of peritoneum	1008	151	15.0			
Diseases of liver	1440	257	17.8	18	2	11.1
Cholecystitis, cholelithiasis and other disorders of biliary tract	7975	50	0.6	19	0	0.0

Table 4.87 Diseases of the digestive system, hospital discharges by regions, Georgia

	2016				2017			
	All ages		Children Under-15		All ages		Children Under-15	
	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %	Number of hospital discharges	Case fatality rate, %
Ajara	3516	3.2	243	0.0	3989	3.1	252	0.0
Tbilisi	20768	2.5	1861	0.2	21997	2.2	1910	0.3
Kakheti	2541	2.2	220	0.0	2382	3.1	190	0.0
Imereti	6107	2.4	429	0.0	5787	3.0	367	0.0
Samegrelo and Zemo Svaneti	1815	3.4	94	0.0	2351	3.0	143	0.0
Shida Kartli	2611	2.1	293	0.0	2280	2.8	266	0.0
Kvemo Kartli	2828	1.4	353	0.0	2798	1.5	341	0.0
Guria	842	1.7	125	0.0	853	1.9	94	0.0
Samtskhe-Javakheti	1333	1.4	278	0.0	1181	0.8	229	0.0
Mtskheta–Mtianeti	423	5.2	12	0.0	586	1.7	38	0.0
Racha–Lechkhumi and Kvemo Svaneti	105	1.9	0	0.0	107	1.9	1	0.0
Georgia	**42889**	**2.4**	**3908**	**0.1**	**44311**	**2.4**	**3831**	**0.1**

Table 4.88 Diseases of the genitourinary system, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2008	91904	2388.1	48298	1255.0	5861	853.1	3878	564.4
2009	112647	2953.2	64652	1694.9	7981	1166.6	6152	899.2
2010	121634	3212.1	71952	1900.1	7193	1049.7	5582	814.6
2011	138016	3674.1	77139	2053.5	6889	1007.6	5215	762.7
2012	198555	5324.8	127148	3409.8	5952	873.0	4259	624.7
2013	193595	5207.4	111163	2990.1	5936	868.6	3927	574.6
2014	203414	5469.0	114351	3074.4	7835	1128.9	5428	782.1
2015	236430	6346.6	130256	3496.5	8840	1243.3	6008	845.0
2016	228166	6121.1	141797	3804.1	7674	1057.0	5537	762.6
2017	**236713**	**6349.6**	**124934**	**3351.2**	**7358**	**995.8**	**5181**	**701.2**

Table 4.89 Diseases of the genitourinary system by certain pathologies, Georgia

	Number of registered cases	Prevalence per 100000 population	New cases	Incidence per 100000 population
Diseases of the genitourinary system	**236713**	**6349.6**	**124934**	**3351.2**
Glomerulonephritis, nephritic and nephritic syndromes	5251	140.9	1859	49.9
Chronic tubulo-interstitial nephritis (kidney infections)	6633	177.9	2535	68.0
Renal failure	4077	109.4	1968	52.8
Urolithiasis	19388	520.1	8167	219.1
Diseases of male genital organs	39082	2185.1	18659	1043.2
Including: Hyperplasia of prostate	18948	1059.4	7713	431.2
Inflammatory diseases of prostate	10237	572.3	4920	275.1
Male infertility	2735	248.6	1351	122.8
Diseases of female genital organs	109265	5634.0	65041	3353.7
Including: Salpingitis, oophoritis	15063	776.9	8564	441.7
Endometriosis	7645	394.3	4836	249.4
Erosion and ectropion of cervix uteri	13563	699.6	9037	466.1
Disorders of menstruation	20977	2458.6	12647	1482.3
Menopausal and other perimenopausal disorders	13322	1561.4	7395	866.7
Female infertility	9073	1063.4	4162	487.8

Table 4.90 Diseases of the genitourinary system, hospital discharges by regions, Georgia, 2017

	Number of hospital discharges, all ages	Including deaths	Case fatality rate (%)	Children Under-15		
				Number of hospital discharges	Including deaths	Case fatality rate (%)
Ajara	3021	21	0.7	246	0	0.0
Tbilisi	17382	181	1.0	1593	0	0.0
Kakheti	767	9	1.2	73	0	0.0
Imereti	2715	26	1.0	162	0	0.0
Samegrelo and Zemo Svaneti	600	3	0.5	47	0	0.0
Shida Kartli	724	8	1.1	75	0	0.0
Kvemo Kartli	940	8	0.9	135	0	0.0
Guria	104	3	2.9	10	0	0.0
Samtskhe–Javakheti	346	0	0.0	77	0	0.0
Mtskheta–Mtianeti	176	3	1.7	16	0	0.0
Racha–Lechkhumi and Kvemo Svaneti	10		0.0	4	0	0.0
Georgia	**26785**	**262**	**1.0**	**2438**	**0**	**0.0**

Table 4.91 Diseases of the genitourinary system, hospital discharges and case fatality rates, Georgia, 2017

	All ages			Children Under-15	
	Number of hospital discharges	Including deaths		Number of hospital discharges	
		Total	Case fatality rate (%)	Total	Case fatality rate (%)
Total	**26785**	**262**	**1.0**	**2438**	**0.0**
Including:					
Glomerulonephritis, nephritic and nephritic syndromes	393	1	0.3	272	0.0
Chronic tubulo-interstitial nephritis (kidney infections)	1166	11	0.9	79	0.0
Urolithiasis	1520	1	0.1	0	0.0
Prostate disorders	1698	2	0.1	1	0.0

Table 4.92 Congenital malformations, deformations and chromosomal abnormalities, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 children	Number of new cases	Incidence per 100000 children
2008	7251	188.4	1685	43.8	6100	887.8	1318	191.8
2009	8148	213.6	1887	49.5	6749	986.5	1382	202.0
2010	8959	236.6	2443	64.5	7547	1101.4	1932	281.9
2011	9198	244.9	1664	44.3	7677	1122.8	1415	207.0
2012	7614	204.2	2073	55.6	6059	888.7	1618	237.3
2013	6432	173.0	2096	56.4	4989	730.0	1673	244.8
2014	7217	194.0	2260	60.8	6030	868.8	1972	284.1
2015	6749	181.2	2869	77.0	4762	669.7	1775	249.6
2016	4865	130.5	2052	55.1	3439	473.7	1718	236.6
2017	**5546**	**148.8**	**2353**	**63.1**	**3855**	**521.7**	**1813**	**245.4**

Table 4.93 Congenital malformations, deformations and chromosomal abnormalities by regions, Georgia, 2017

	Number of registered cases		Prevalence per 100000 population		New cases		Incidence per 100000 population	
	All ages	In children	All ages	In children	All ages	In children	All ages	In children
Abkhazia	68	51	--	--	11	11	--	--
Ajara	693	397	201.0	581.3	257	192	74.6	281.1
Tbilisi	2185	1595	189.7	698.3	1318	1053	114.4	461.0
Kakheti	474	379	150.3	606.4	109	98	34.6	156.8
Imereti	825	665	161.5	657.1	357	307	69.9	303.4
Samegrelo and Zemo Svaneti	291	175	90.2	273.9	42	27	13.0	42.3
Shida Kartli	284	167	109.3	324.3	25	21	9.6	40.8
Kvemo Kartli	132	92	30.6	111.5	37	23	8.6	27.9
Guria	189	132	170.3	600.0	8	8	7.2	36.4
Samtskhe–Javakheti	101	69	64.5	222.6	33	20	21.1	64.5
Mtskheta–Mtianeti	150	107	159.7	575.3	47	37	50.1	198.9
Racha–Lechkhumi and Kvemo Svaneti	19	15	62.3	250.0	5	5	16.4	83.3
Other departments	135	11	--	--	104	11	--	--
Georgia	**5546**	**3855**	**148.8**	**521.7**	**2353**	**1813**	**63.1**	**245.4**

Table 4.94 Congenital malformations, deformations and chromosomal abnormalities, children Under-5, prevalence per 100000 children, Georgia, 2017

	Children aged 0-5		Including children Under-1	
	New cases	Prevalence per 100000 children	New cases	Prevalence per 100000 children
Congenital malformations, deformations and chromosomal abnormalities	**2094**	**757.9**	**1235**	**2253.6**
Including:				
Congenital malformations of the nervous system	107	38.7	49	89.4
Including: Anencephaly and similar malformations	11	4.0	4	7.3
Congenital hydrocephalus	29	10.5	16	29.2
Spina bifida	13	4.7	4	7.3
Congenital malformations of the circulatory system	580	209.9	300	547.4
Including: Congenital malformations of cardiac chambers and connections	75	27.1	28	51.1
Congenital malformations of cardiac septa	285	103.1	157	286.5
Congenital malformations of pulmonary and tricuspid valves	56	20.3	40	73.0
Congenital malformations of aortic and mitral valves	35	12.7	15	27.4
Other congenital malformations of heart	38	13.8	15	27.4
Congenital malformations of the respiratory system	14	5.1	7	12.8
Cleft lip and cleft palate	7	2.5	4	7.3
Atresia of oesophagus with trachea-oesophageal fistula and without fistula	50	18.1	24	43.8
Congenital absence, atresia and stenosis of large intestine	5	1.8	2	3.6
Congenital malformations of genital organs	9	3.3	3	5.5
Congenital malformations of the urinary system	104	37.6	62	113.1
Including: Congenital hydro*nephrosis*	39	14.1	17	31.0
Congenital malformations and deformations of the musculoskeletal system	12	4.3	4	7.3
Including: Osteogenesis imperfecta	605	219.0	413	753.6
Down syndrome	94	34.0	61	111.3

Table 4.95 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2017

	Hospital discharges, all ages		Including					
			Hospital discharges, children Under-15			Hospital deaths, children Under-15		
	Number of hospital discharge	Including deaths	Total	Including in children Under-5	Including children Under-1	Total	Including in children Under-5	Including in children Under-1
Total	**3218**	**46**	**1458**	**1204**	**928**	**42**	**0**	**42**
Including:								
Congenital malformations of the nervous system	105	2	67	60	52	2	0	2
Congenital malformations of eye, ear, face and neck	258	0	82	55	46	0	0	0
Congenital malformations of the circulatory system	837	35	462	410	356	35	0	31
Congenital malformations of the respiratory system	32	1	17	16	14	1	0	1
Cleft lip and cleft palate	135	0	99	94	66	0	0	0
Congenital malformations of the digestive system	282	7	183	177	141	2	0	2
Congenital malformations of genital organs	962	0	281	185	97	0	0	0
Congenital malformations of the urinary system	69	0	138	34	25	0	0	0
Congenital malformations of the musculoskeletal system	464	1	211	152	112	1	0	1
Including: Osteogenesis imperfecta	45		19	6	1	0	0	0
Polyostotic fibrous dysplasia	0	0	0	0	0	0	0	0
Other congenital malformations	68	0	16	16	14	0	0	0
Chromosomal abnormalities, not elsewhere classified	6	0	5	0	5	0	0	0
Down syndrome	5	0	0	0	0	0	0	0

Table 4.96 Congenital malformations, deformations and chromosomal abnormalities in children under-5, Georgia, 2017

	Children Under-5		Including children Under-1	
	New cases	Incidence per 100000 children	New cases	Incidence per 100000 children
Total	**1047**	**378.9**	**749**	**1366.8**
Including:				
Congenital malformations of the nervous system	48	17.4	29	52.9
Including: Anencephaly and similar malformations	2	0.7	1	1.8
Congenital hydrocephalus	10	3.6	8	14.6
Spina bifida	4	1.4	1	1.8
Congenital malformations of the circulatory system	150	54.3	106	193.4
Including: Congenital malformations of cardiac chambers and connections	19	6.9	9	16.4
Congenital malformations of cardiac septa	74	26.8	57	104.0
Congenital malformations of pulmonary valves	12	4.3	9	16.4
Congenital malformations of aortic and mitral valves	8	2.9	6	10.9
Congenital malformations of great arteries	12	4.3	3	5.5
Other congenital malformations of the circulatory system	4	1.4	3	5.5
Congenital malformations of respiratory system	24	8.7	17	31.0
Cleft lip and cleft palate	0	0.0	0	0.0
Atresia of oesophagus	0	0.0	0	0.0
Congenital absence, atresia and stenosis of large intestine	67	24.2	46	83.9
Congenital malformations of genital organs	12	4.3	8	14.6
Congenital malformations of the urinary system	4	1.4	1	1.8
Including congenital hydronephrosis	438	158.5	324	591.2
Congenital malformations of the musculoskeletal system	70	25.3	47	85.8
Including osteogenesis imperfecta	39	14.1	28	51.1
Down syndrome	48	17.4	29	52.9

Table 4.97 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2017

	Hospital discharges, all ages		Including					
			Hospital discharges, children Under-15			Hospital deaths, children Under-15		
	Number of hospital discharges	Including deaths	Total	Including in children Under-5	Including children Under-1	Total	Including in children Under-5	Including in children Under-1
Total	**3218**	**46**	**1458**	**1204**	**928**	**42**	**0**	**42**
Including:								
Congenital malformations of the nervous system	105	2	67	60	52	2	0	2
Congenital malformations of eye, ear, face and neck	258	0	82	55	46	0	0	0
Congenital malformations of the circulatory system	837	35	462	410	356	35	0	31
Congenital malformations of the respiratory system	32	1	17	16	14	1	0	1
Cleft lip and cleft palate	135	0	99	94	66	0	0	0
Congenital malformations of the digestive system	282	7	183	177	141	2	0	2
Congenital malformations of genital organs	962	0	281	185	97	0	0	0
Congenital malformations of the urinary system	69	0	138	34	25	0	0	0
Congenital malformations of the musculoskeletal system	464	1	211	152	112	1	0	1
Including: Osteogenesis imperfecta	45		19	6	1	0	0	0
Polyostotic fibrous dysplasia	0	0	0	0	0	0	0	0
Other congenital malformations	68	0	16	16	14	0	0	0
Chromosomal abnormalities, not elsewhere classified	6	0	5	0	5	0	0	0
Down syndrome	5	0	0	0	0	0	0	0

Table 4.98 Injury, poisoning and certain other consequences of external causes, Georgia

	All ages				Children Under-15			
	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
2008	31088	807.8	29201	758.8	7298	1062.2	6978	1015.6
2009	44673	1171.2	42147	1104.9	7428	1085.7	7211	1054.0
2010	39522	1043.7	38302	1011.5	7361	1074.2	7286	1063.3
2011	43384	1154.9	35914	956.1	7651	1119.0	7087	1036.5
2012	75968	2037.3	67898	1820.9	8929	1309.7	8454	1240.0
2013	65192	1753.6	58260	1567.1	8571	1254.2	8003	1171.1
2014	72035	1936.7	66932	1799.5	10293	1483.0	9890	1424.9
2015	93066	2498.2	87101	2338.1	13317	1872.9	12951	1821.5
2016	105000	2816.9	100176	2687.5	16721	2303.0	16104	2218.0
2017	**80307**	**2154.2**	**73842**	**1980.7**	**12264**	**1659.7**	**11556**	**1563.9**

Table 4.99 Injury, poisoning and certain other consequences of external causes, incidence rates and case distribution, Georgia, 2017

	All ages			Children Under-15		
	New cases	Incidence per 100000 population	New cases	Incidence per 100000 population	New cases	Incidence per 100000 population
Injury, poisoning and certain other consequences of external causes	**73842**	**1980.7**	**100**	**11556**	**1563.9**	**100**
Including:						
Fracture of skull and facial bones, neck, ribs, sternum and spine	3421	91.8	4.6	522	70.6	4.5
Intracranial injury	1131	30.3	1.5	131	17.7	1.1
Injuries to upper and lower limbs	9534	255.7	12.9	1215	164.4	10.5
Dislocation, sprain and strain of joints and ligaments	10027	269.0	13.6	1067	144.4	9.2
Injuries to the thorax, intra-abdominal and pelvic organs	1228	32.9	1.7	116	15.7	1.0
Wounds, injuries of blood vessels, superficial injuries	24051	645.1	32.6	3814	516.2	33.0
Injuries of nerves and spinal cord	212	5.7	0.3	19	2.6	0.2
Burns and corrosions	1334	35.8	1.8	361	48.9	3.1
Poisoning by drugs, medicaments and biological substances, toxic effects of substances chiefly nonmedical as to source	13423	360.1	18.2	2240	303.2	19.4
Including: Poisoning by drugs, medicaments and biological substances	437	11.7	0.6	50	6.8	0.4
Toxic effects of substances chiefly nonmedical as to source	12986	348.3	17.6	2190	296.4	19.0

Table 4.100 Injury, poisoning and certain other consequences of external causes, by regions, Georgia

	2016				2017			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population
Abkhazia	749	--	741	--	563	--	538	--
Ajara	20545	6014.3	19413	5682.9	12904	3743.5	11319	3283.7
Tbilisi	12917	1134.3	11655	1023.5	8761	760.4	6589	571.9
Kakheti	6031	1903.5	5921	1868.8	5298	1680.3	5151	1633.7
Imereti	8152	1570.6	7775	1498.0	7197	1409.2	6942	1359.3
Samegrelo and Zemo Svaneti	27080	8299.9	26992	8272.9	13608	4219.5	13129	4071.0
Shida Kartli	3625	1388.1	3134	1200.0	3605	1387.6	3258	1254.0
Kvemo Kartli	3555	828.9	3431	800.0	4194	973.1	4005	929.2
Guria	9922	8863.3	9881	8826.7	10112	9109.9	10083	9083.8
Samtskhe–Javakheti	8173	5174.4	7904	5004.1	6040	3859.4	6007	3838.3
Mtskheta–Mtianeti	1036	1102.2	1030	1095.8	1099	1170.4	1094	1165.1
Racha–Lechkhumi and Kvemo Svaneti	403	1293.6	396	1271.1	653	2141.0	630	2065.6
Other departments	2812	--	1903	--	6273	--	5097	--
Georgia	**105000**	**2816.9**	**100176**	**2687.5**	**80307**	**2154.2**	**73842**	**1980.7**

Maternal and child health

Table 5.8 Births and infant deaths by the region, Georgia, 2017

	Number of live births	Number of stillbirths	Stillbirth ratio per 1000 births	Number of infant deaths	Infant mortality rate per 1000 live births	Number of early neonatal deaths	Early neonatal death ratio per 1000 live births	Perinatal mortality rate per 1000 births
Ajara	6108	53	8.6	34	5.6	13	2.1	10.7
Tbilisi	14906	280	18.4	324	21.7	164	11.0	29.2
Kakheti	4722	18	3.8	15	3.2	5	1.1	4.9
Imereti	7574	59	7.7	87	11.5	36	4.8	12.4
Samegrelo and Zemo Svaneti	4436	12	2.7	10	2.3	6	1.4	4.0
Shida Kartli	3659	19	5.2	8	2.2	5	1.4	6.5
Kvemo Kartli	6693	47	7.0	25	3.7	8	1.2	8.2
Guria	1471	10	6.8	3	2.0	1	0.7	7.4
Samtskhe-Javakheti	2178	6	2.7	1	0.5	0	0.0	2.7
Mtskheta-Mtianeti	1205	1	0.8	0	0.0	0	0.0	0.8
Racha-Lechkhumi and Kvemo Svaneti	341	1	2.9	0	0.0	0	0.0	2.9
Unknown	0	0	--	5	--	0	--	--
Georgia	**53293**	**506**	**9.4**	**512**	**9.6**	**238**	**4.5**	**13.8**

Table 5.9 Antenatal care, data collected from women consultancy facilities, Georgia, 2017

	Number of pregnant women who initiated antenatal care during the reporting year	Number of pregnant women tested for syphilis	Number of pregnant women tested for HIV	Number of pregnant women tested for Hepatitis B	Number of pregnant women tested for Hepatitis C
Ajara	5753	5043	4884	4909	4874
Tbilisi	22148	19817	19318	19347	19094
Kakheti	2845	2503	2320	2329	2308
Imereti	6328	6060	5754	5863	5819
Samegrelo and Zemo Svaneti	2922	2698	2617	2697	2660
Shida Kartli	2617	2571	2506	2545	2508
Kvemo Kartli	4454	4212	4168	4193	4079
Guria	759	761	764	760	760
Samtskhe-Javakheti	1588	1563	1519	1552	1549
Mtskheta-Mtianeti	241	245	242	241	234
Racha-Lechkhumi and Kvemo Svaneti	90	84	85	86	80
Georgia	**49745**	**45557**	**44177**	**44522**	**43965**

Table 5.10 Hospital admissions, children Under-5, Georgia, 2017

	Total number of hospital admissions	Case fatality rate
All diseases	**59846**	**0.8**
Including:		
Certain infectious and parasitic diseases	10029	0.1
Neoplasms	759	1.1
Diseases of blood and blood-forming organs	303	0.3
Endocrine, nutritional and metabolic diseases	101	0.0
Mental and behavioral disorders	2	0.0
Diseases of the nervous system	594	1.7
Diseases of the eye and adnexa	212	0.0
Diseases of the ear and mastoid process	47	0.0
Diseases of the circulatory system	46	13.0
Diseases of the respiratory system	31183	0.1
Diseases of the digestive system	1217	0.3
Diseases of the skin and subcutaneous tissue	222	0.0
Diseases of the musculoskeletal system and connective tissue	175	0.0
Diseases of the genitourinary system	1176	0.0
Certain conditions originating in the perinatal period	6918	4.9
Congenital malformations, deformations and chromosomal abnormalities	1734	2.4
Ill-defined cases	2305	1.0
Injury, poisoning and certain other consequences of external causes	2621	0.5
Factors influencing health status and contact with health services	202	**0.0**

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