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

2018
Georgia

Tbilisi
2019


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


ეროვნული ცენტრი

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 using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems.

This yearbook describes health services, maternal and child health status, and data on communicable and noncommunicable 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 yearbook discusses the population health status, maternal and child health, communicable and noncommunicable diseases, and numbers of cases of diseases and corresponding indicators by classes of diseases: infectious and parasitic, neoplasms, circulatory, endocrine, respiratory, genitourinary, mental diseases, and etc.

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Chapter 1.

Sustainable Development Goals in Georgia

Sustainable Development Goals

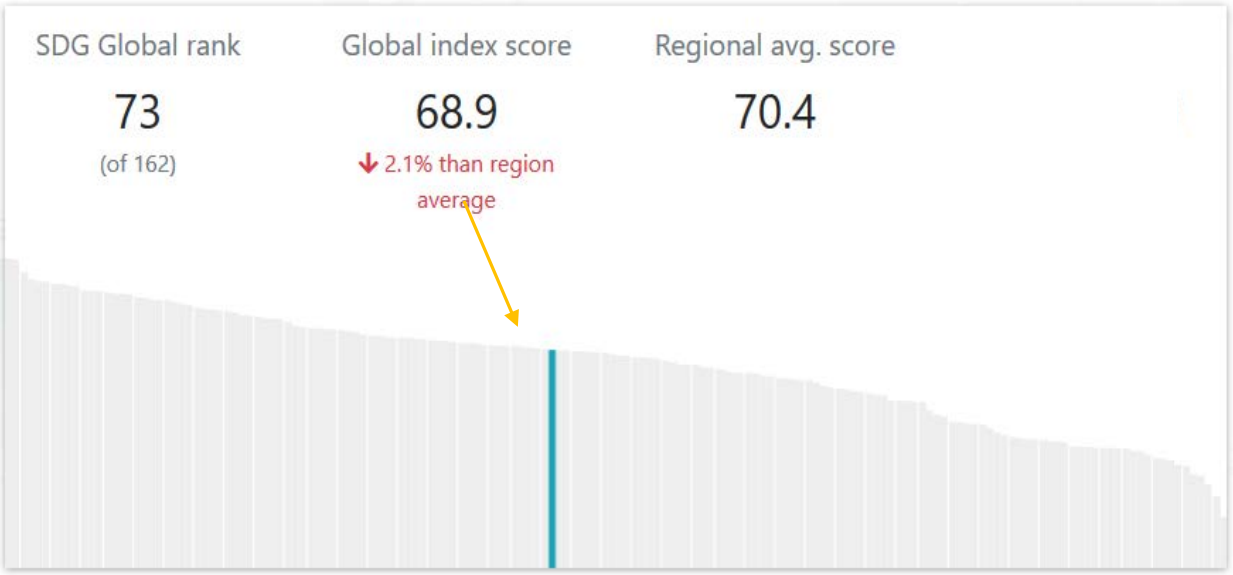
In 2015, Sustainable Development Goals (SDGs) have been adopted at the UN Summit after a partial achievement of the Millennium Development Goals – MDGs, to maintain and further advance the successes.

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 2018, 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 noncommunicable diseases global initiatives and is actively involved in monitoring the progress of the achievement of the abovementioned goals.

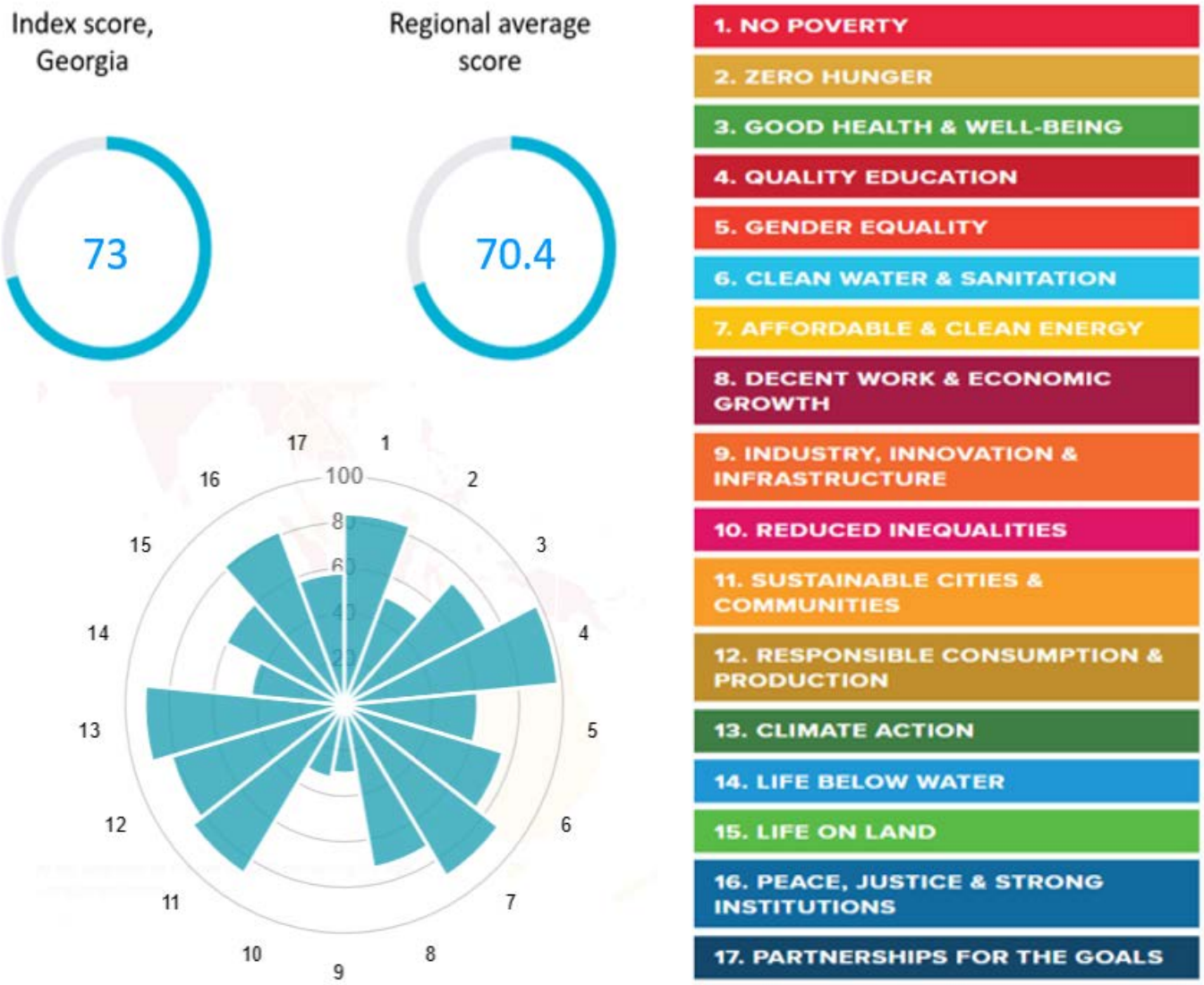
A global SDG index was developed to measure a progress toward the SDGs. According to this index, Georgia ranks 73rd out of 162 countries (Figure 1.1).

Figure 1.1 SDG Global rank, 2019



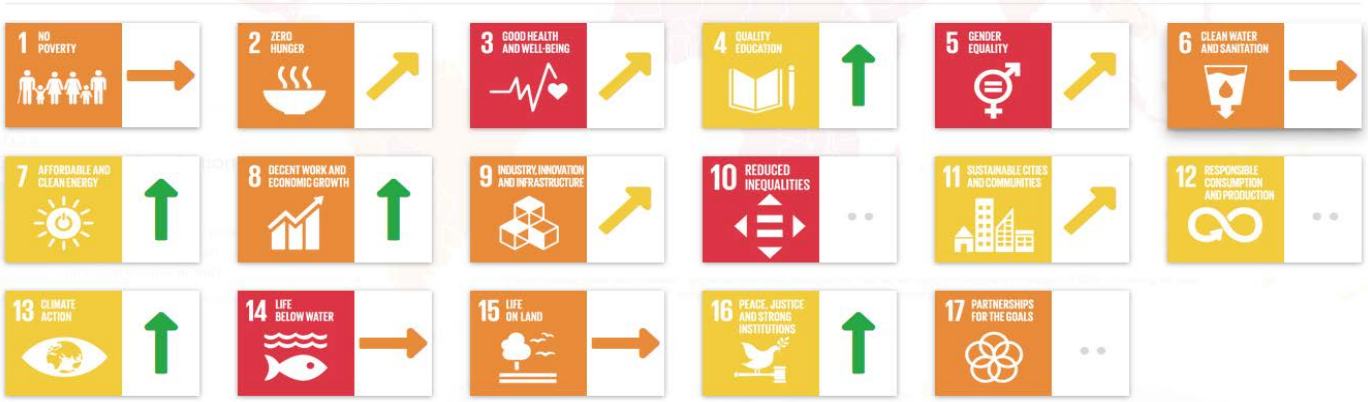
Source: https://dashboards.sdgindex.org/#/GEO

Figure 1.2 Average Performance by SDG, Georgia, 2019



Source: https://dashboards.sdgindex.org/#/GEO

Current Assessment, Georgia, 2019



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

Performance by Indicator[1]

	Value	Rating	Trend
SDG1 – No Poverty			
Poverty headcount ratio at $1.90/day (%)	3.3		
Projected poverty headcount ratio at $3.20/day (%)	14.3		
SDG2 – Zero Hunger			
Prevalence of undernourishment (%)	7.4		
Prevalence of stunting in children under 5 years of age (%) (low height-for-age)	11.3		
Prevalence of wasting in children under 5 years of age (%)	1.6		
Prevalence of adult obesity (%)	21.7		
Cereal yield (t/ha)	2.5		
Sustainable Nitrogen Management Index	1.1		
Human Tropic level (best 2-3 worst)	2.3		
SDG3 – Good Health and Well-Being			
Maternal mortality rate (per 100.000 live births)	36.0		
Neonatal mortality rate (per 1.000 live births)	6.7		
Under 5 mortality (per 1.000 live births)	10.8		
Incidence of tuberculosis (per 100.000)	86		
HIV prevalence (per 1.000)	0.2		
Death rate from NCDs (per 100.000)	24.9		
Death rate from household and ambient pollution (per 100.000)	102		
Traffic deaths (per 100.000)	11.6		
Life expectancy at birth (years)	72.6		
Adolescent fertility (births per 1.000)	47.1		
Births attended by skilled health personnel (%)	99.9		
Infants who receive two WHO recommended vaccines (%)	91.0		

[1] *May not match some national data*

Universal Health Coverage Tracer Index (0-100)	71.2		
Subjective Wellbeing (0-10)	4.5		
SDG4 – Quality Education			
Net primary enrolment rate (%)	97.9		
Lower secondary completion rate (%)	107.4		
Literacy rate of 15-24 year olds (%)	99.7		
SDG5 – Gender Equality			
Demand for family planning satisfied by modern methods (% women married or in unions, ages 15-49)	57.3		
Female years of schooling (% male)	100		
Female labor force participation (% male)	73.4		
Women in national parliaments (%)	16.0		
SDG6 – Clean Water and Sanitation			
Population using at least basic drinking water services (%)	93.3		
Population using at least basic sanitation services (%)	84.9		
Freshwater withdrawal (%)	4.57		
Imported groundwater depletion (m 3/year/capita)	5.3		
Wastewater treated (%)	18.2		
SDG7 – Affordable and Clean Energy			
Access to electricity (%)	100.0		
Access to clean fuels (%)	77.8		
CO2 from fuels / electricity (MtCO2/TWh)	0.7		
SDG8 – Decent Work and Economic Growth			
Adjusted growth rate (%)	0.1		
Prevalence of modern slavery (victims per 1000 population)	4.3		
Access to bank account or mobile-money (% adult population)	61.2		
Unemployment rate (%)	11.6		
Fatal accidents at work embodies in imports (fatal accidents per 100.000)	0.3		
SDG9 – Industry, Innovation and Infrastructure			
Internet use (%)	60.5		
Mobile broadband subscriptions (per 100)	66.7		
Logistics performance index (1-5)	2.4		
Average of top three University Rankings (0-100)	14.4		
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		
SDG11 – Sustainable Cities and Communities			
Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5)	22.2		
Improved water source, piped (%)	97.0		
Satisfaction with public transport (%)	72.9		
SDG12 – Responsible Consumption and Production			
Municipal Solid Waste (kg/person/day)	1.7		
E-waste (kg/capita)	5.7		
Production-based SO2 emissions (kg/capita)	1.6		
Net imported SO2 emissions (kg/capita)	4.5		
Nitrogen production footprint (kg/capita)	14.1		
Net imported emissions of reactive nitrogen (kg/capita)	35.5		

SDG13 – Climate Action			
CO2 emissions from energy (tCO2/capita)	1.7		
Imported CO2 emissions, technology-adjusted (tCO2/capita)	0.8		
People affected by climate-related disasters (per 100,000 population)	197.3		
CO2 emissions embodied in fossil fuel exports (kg/capita)	133.8		
SDG14 – Life Below Water			
Marine sites, mean protected area (%)	0		
Ocean Health Index - Clean Waters (0-100)	53.6		
Fish stocks overexploited or collapsed (%)	NA		
Fish caught by trawling (%)	6.4		
SDG15 – Life on Land			
Terrestrial sites, mean protected area (%)	28.4		
Freshwater sites, mean protected area (%)	27.3		
Red List Index of species survival (0-1)	0.9		
Permanent deforestation, 5 year average annual (%)	0		
Imported biodiversity threats (threats/capita)	4		
SDG16 – Peace, Justice and Strong Institutions			
Homicides (per 100.000 population)	1		
Unsentenced detainees as a proportion of overall prison population	0.1		
Feel safe walking at night (%)	78.3		
Property Rights (1-7)	4.3		
Registered birth (%)	99.6		
Corruption Perception Index (0-100)	58		
Child labor (%)	4.2		
Conventional weapons exports (US$ m per 100,000 population)	0.2		
Freedom of Press Index (best 0 -100 worst)	27.3		
SDG17 – Partnerships for the Goals			
Health and Education spending (% GDP)	3.5		
Official development assistance (% GNI)	NA		
Government revenue excl. Grants (% GDP)	25		
Health and Education spending (% GDP)	0.0		

Source: https://dashboards.sdgindex.org/#/GEO

CHAPTER 2.

Vital Statistics

Vital statistics[2]

Georgia consists of 11 administrative regions and 64 municipalities.

Table 2.1 Main demography indicators, Georgia

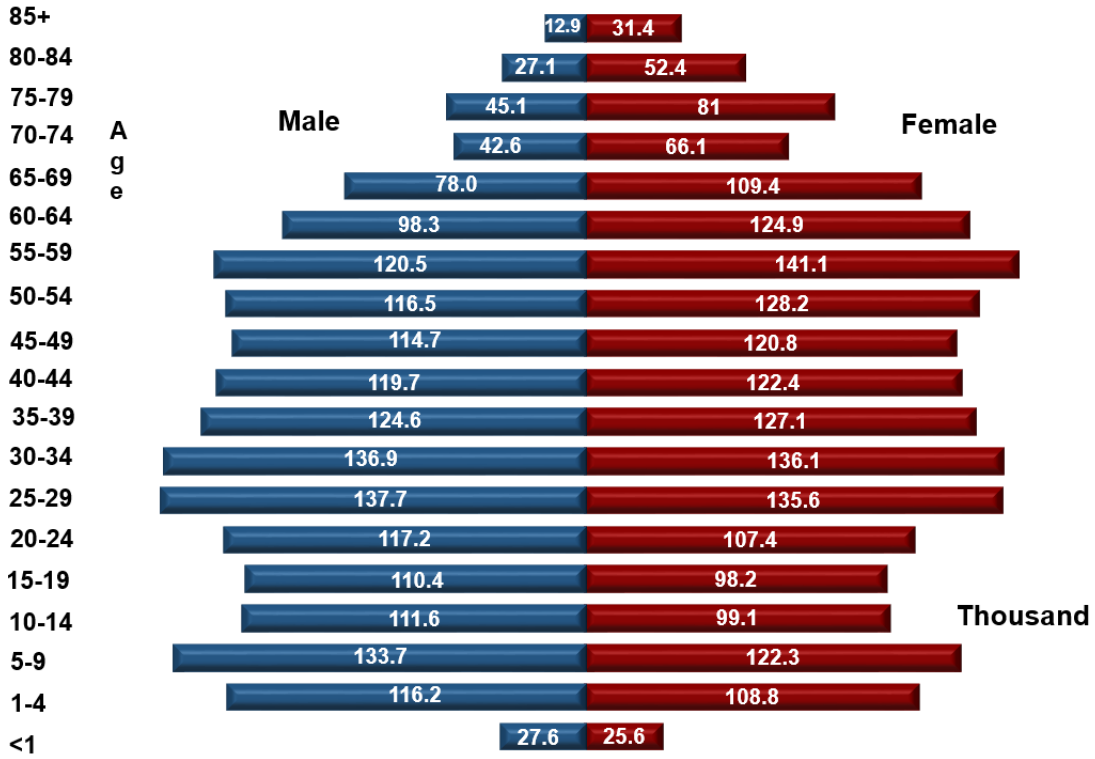
	2017		2018	
	Number of cases	**Indicator**	**Number of cases**	**Indicator**
Number of life birth and birth rate per 1000 population	53 293	14.3	51138	13.7
Natural population growth and rate per 1000 population	5 471	1.5	4614	1.2
Number of death and mortality rate per 1000 population	47 822	12.8	46 524	12.5
Infant mortality per 1000 life birth	512	9.0	416	8.1
Stillbirth and indicator per 1000 births	506	9.4	436	8.5
Marriages and indicator per 1000 population	23 684	6.4	23 202	6.2
Divorces and indicator per 1000 population	10 222	2.7	10 288	2.8
Migration growth and migration balance	-2 212	-0.6	-10 783	-2.9

[2] *This chapter contains data provided by the National Statistics Office of Georgia (GeoStat)*

Population

In 2018, the annual mid-year population number was 3 726 500. Female population constituted 52.96% of the total number; males – 48.03% (Figure 2.1).

Figure 2.1 Population pyramid, Georgia, 2018



Source: National Statistics Office of Georgia

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

	2017			2018		
Age	**Both sexes**	**Males**	**Females**	**Both sexes**	**Males**	**Females**
-1	54.8	28.2	26.6	52.1	27.0	25.1
1-4	221.5	114.7	106.7	226.8	117.2	109.6
5-9	253.7	132.6	121.0	256.0	133.5	122.5
10-14	209.0	110.7	98.2	214.8	113.7	101.1
15-19	212.1	112.3	99.9	207.2	109.8	97.4
20-24	228.3	118.6	109.7	222.6	116.5	106.2
25-29	275.0	138.2	136.7	267.9	135.2	132.7
30-34	272.2	136.1	136.1	272.5	136.7	135.8
35-39	250.6	123.8	126.7	252.0	124.9	127.1
40-44	242.1	119.4	122.7	241.7	119.6	122.1
45-49	235.9	114.5	121.4	234.9	114.7	120.2
50-54	248.9	118.0	130.9	240.5	114.8	125.7
55-59	259.6	119.4	140.2	262.0	120.9	141.1
60-64	221.6	97.5	124.2	226.1	99.7	126.4
65-69	184.6	76.9	107.7	189.6	79.0	110.6
70-74	105.1	41.2	63.9	116.2	45.5	70.7
75-79	131.6	47.2	84.3	117.2	41.9	75.2
80-84	77.3	26.5	50.8	82.5	27.8	54.7
85+	44.2	12.7	31.5	44.0	13.0	31.1
Total	**3728.0**	**1788.6**	**1939.4**	**3726.5**	**1791.2**	**1935.3**

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
2018			
Total	**3,726.5**	**1,791.2**	**1,935.3**
-15	749.7	391.4	358.3
15-64	2427.4	1192.7	1234.7
65+	549.4	207.1	342.3

Birth rate

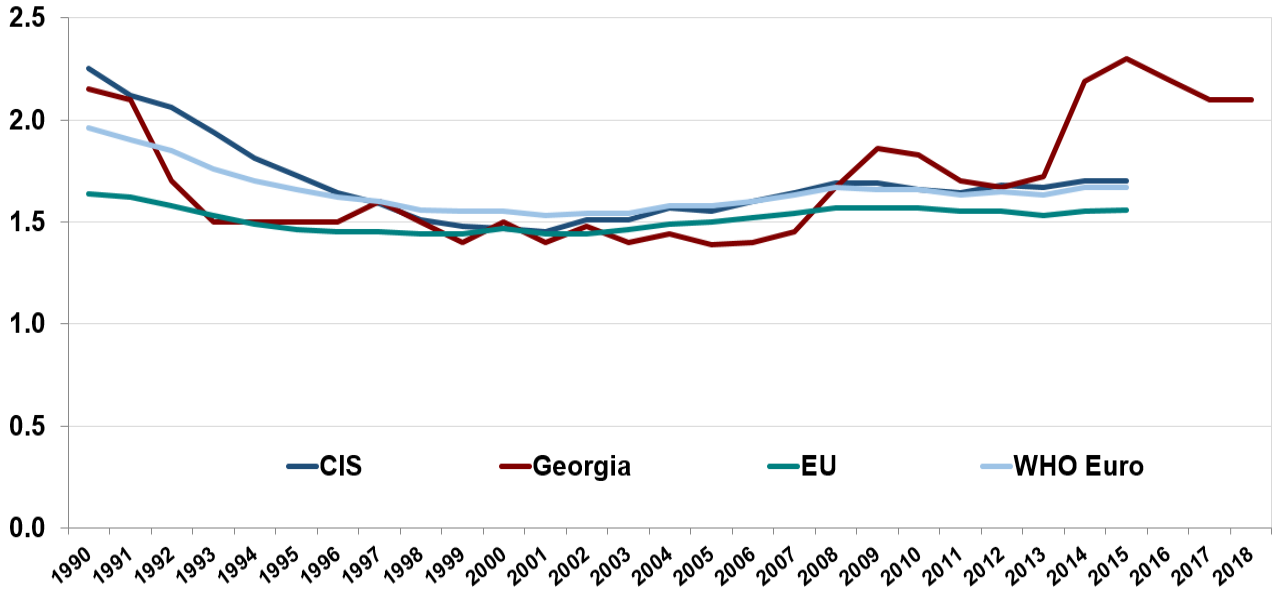
In 2018, the registered number of live births was 51 138 (in 2017 – 53 293), total birth rate was 13.7 per 1000 population. The shares of live births by birth the order were as follow: 1st – 37.8%, 2nd – 38.2%, 3rd – 18.2%.

Table 2.4 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
2018	**19362**	**19511**	**9291**	**2073**	**718**	**51138**

In 2014, total fertility rate (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 2018, the TFR decreased and again was 2.1 (Figure 2.2).

Figure 2.2 Total fertility rate (TFR)



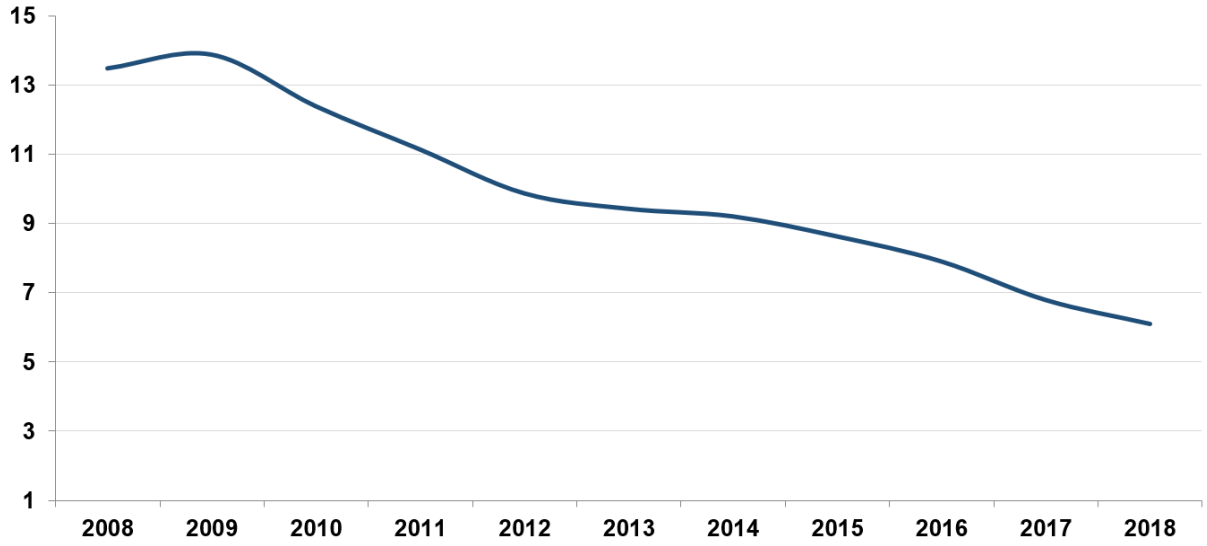
Source:National Statistics Office of Georgia; WHO HFA DB

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
2018	**32.3**	**121.9**	**127.5**	**85.4**	**44.3**	**11.0**	**0.6**	**2.1**	**1.02**	**1.01**

The trend of decrease of the share of babies, born to women aged under 20, which started in 2010, has continued. In 2018, the share of such babies of total number of live births is 6.1% (Figure 2.3).

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



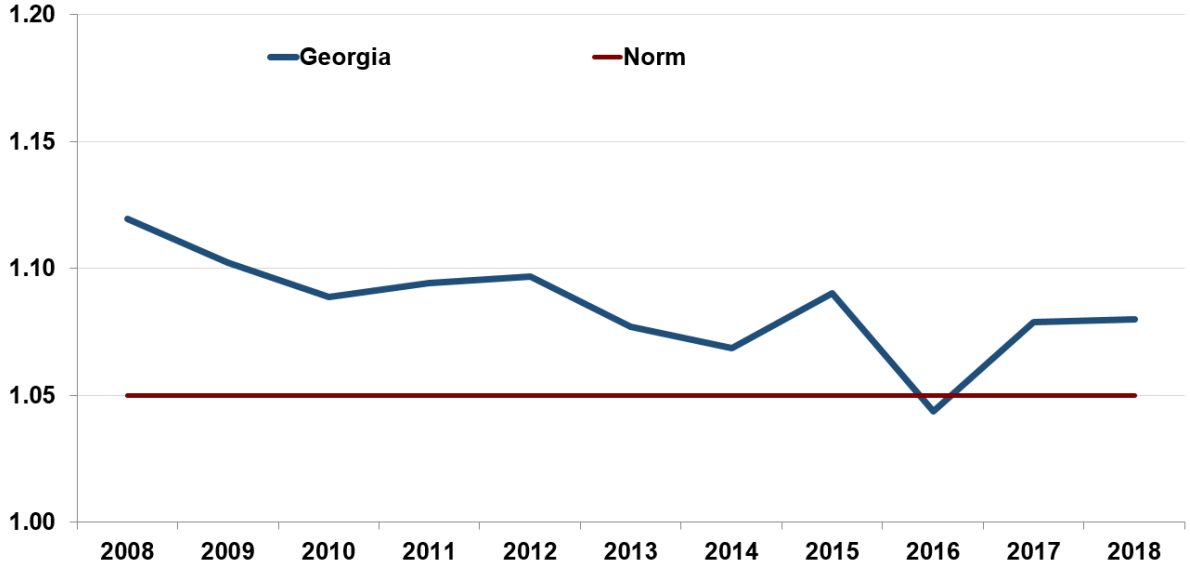
Source:National Statistics Office of Georgia

Table 2.6 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+
2008	52442	7072	19258	13993	7926	3326	782	85
2009	56568	7853	20381	15457	8473	3544	781	79
2010	55230	6841	19291	15465	8862	3793	893	85
2011	51565	5742	18032	14963	8324	3612	803	89
2012	49969	4930	17116	14762	8558	3634	869	100
2013	49657	4678	16486	14806	8797	3880	897	113
2014	60635	5579	19131	18257	11398	4941	1148	181
2015	59249	5108	17917	17739	11729	5266	1311	179
2016	56569	4467	15650	17613	11706	5539	1386	208
2017	53293	3614	13834	17350	11496	5581	1285	133
2018	**51138**	**3117**	**12786**	**16548**	**11564**	**5627**	**1344**	**152**

In 2018, compared to the previous year, the secondary sex ratio at birth is not changed (Figure 2.4).

Figure 2.4 Secondary sex ratio at birth, Georgia



Source: National Statistics Office of Georgia

Table 2.7 Secondary sex ratio at birth, Georgia

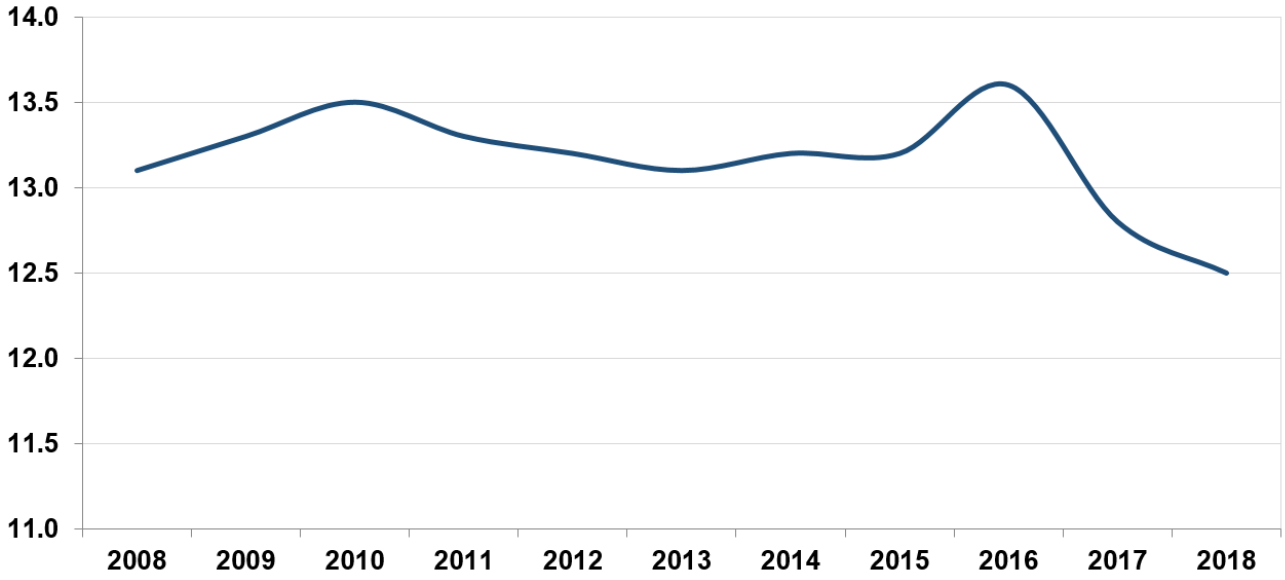
Year	Both sexes	Male	Female	(Male / Female) * 100
2008	52442	27698	24744	111.9
2009	56568	29660	26908	110.2
2010	55230	28787	26443	108.9
2011	51565	26942	24623	109.4
2012	49969	26138	23831	109.7
2013	49657	25747	23910	107.7
2014	60635	31325	29310	106.9
2015	59249	30902	28347	109.0
2016	56569	28887	27682	104.4
2017	53293	27658	25635	107.9
2018	**51138**	**26538**	**24600**	**107.9**

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.

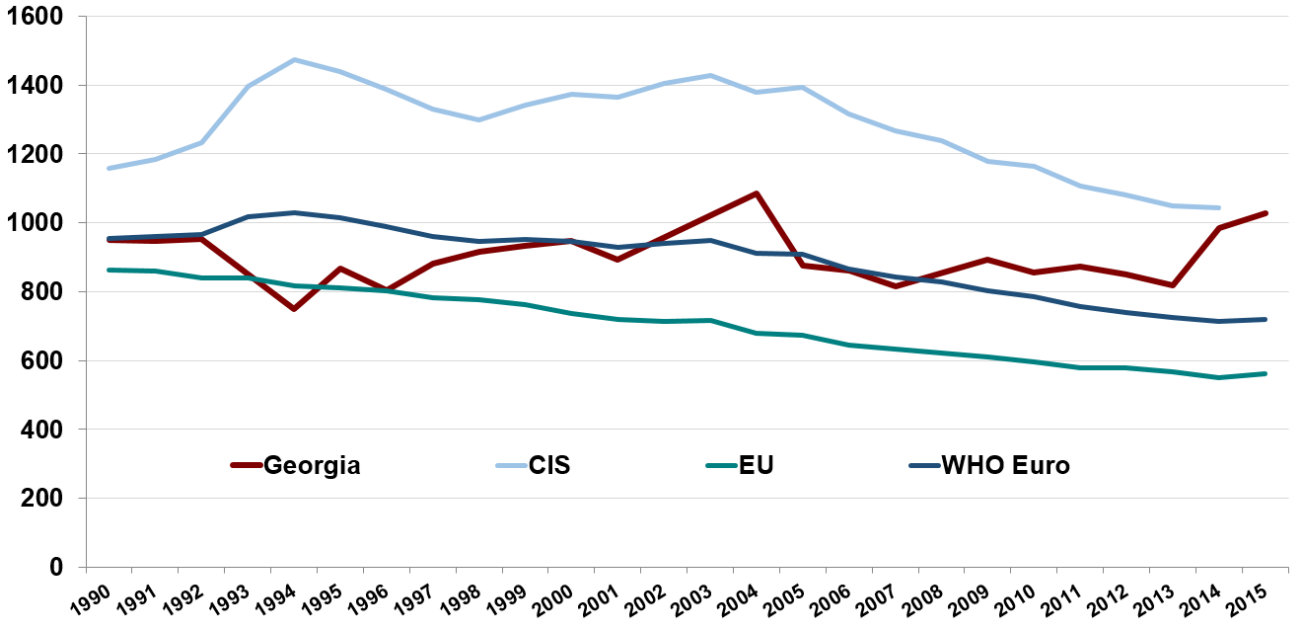
In 2011-2015, according to the National Statistics Office of Georgia, the crude mortality rate was rather stable. In 2018, a trend for decrease, which started in 2017, continued (Figure 2.5, 2.6).

Figure 2.5 Crude mortality rate, Georgia



Source:National Statistics Office of Georgia

Figure 2.6 Age standardized mortality rate



Source: WHO HFA DB

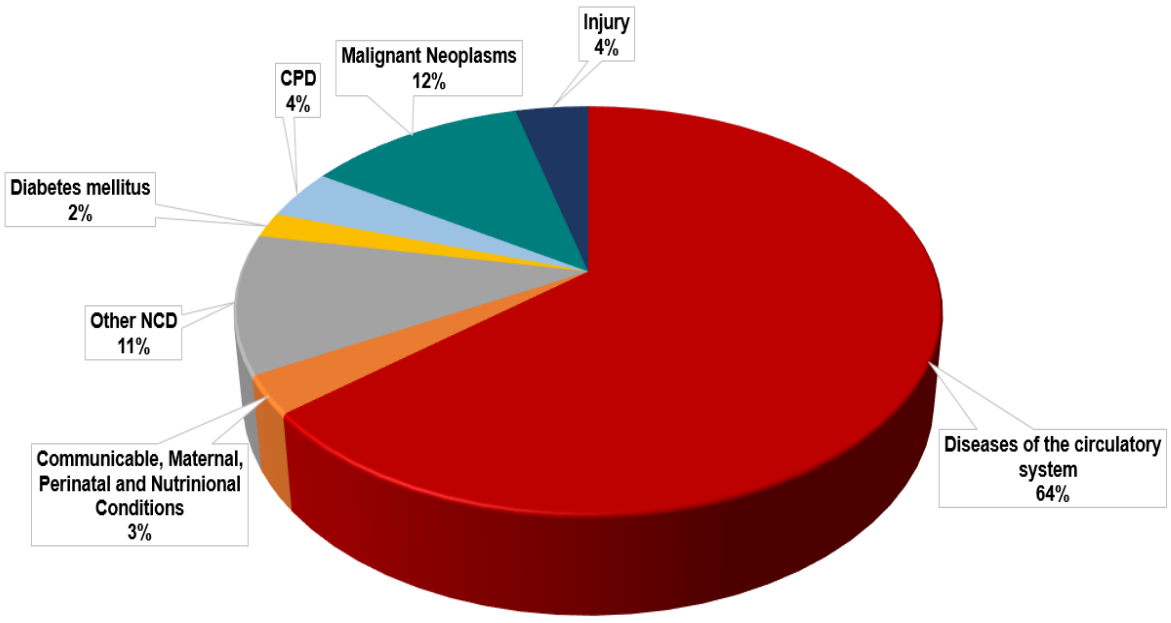
In 2018, 51.2% of the total number of deaths were registered in males, 48.8% - in females;.1.3% of total number of deaths were registered in children under-15, of which 68.8% were in children under-1.

Table 2.8 Number of deaths and mortality rates, Georgia, 2018

Age	Number of deaths			Mortality rate per 1000 population		
	Both sexes	Male	Female	Both sexes	Male	Female
-1	416	246	170	8.0	9.1	6.8
1-4	83	39	44	0.4	0.3	0.4
5-9	55	33	22	0.2	0.2	0.2
10-14	51	36	15	0.2	0.3	0.1
15-19	105	73	32	0.5	0.7	0.3
20-24	185	143	42	0.8	1.2	0.4
25-29	272	210	62	1.0	1.6	0.5
30-34	332	247	85	1.2	1.8	0.6
35-39	456	359	97	1.8	2.9	0.8
40-44	770	612	158	3.2	5.1	1.3
45-49	1068	799	269	4.5	7.0	2.2
50-54	1790	1329	461	7.4	11.6	3.7
55-59	2903	2094	809	11.1	17.3	5.7
60-64	3569	2448	1121	15.8	24.5	8.9
65-69	4358	2781	1577	23.0	35.2	14.3
70-74	3868	2220	1648	33.3	48.8	23.3
75-79	7293	3445	3848	62.2	82.1	51.2
80-84	8704	3600	5104	105.6	129.7	93.3
85+	10246	3122	7124	232.6	241.0	229.2
Total	**46524**	**23836**	**22688**	**12.5**	**13.3**	**11.7**

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

Figure 2.7 Mortality structure (estimates), Georgia, 2018



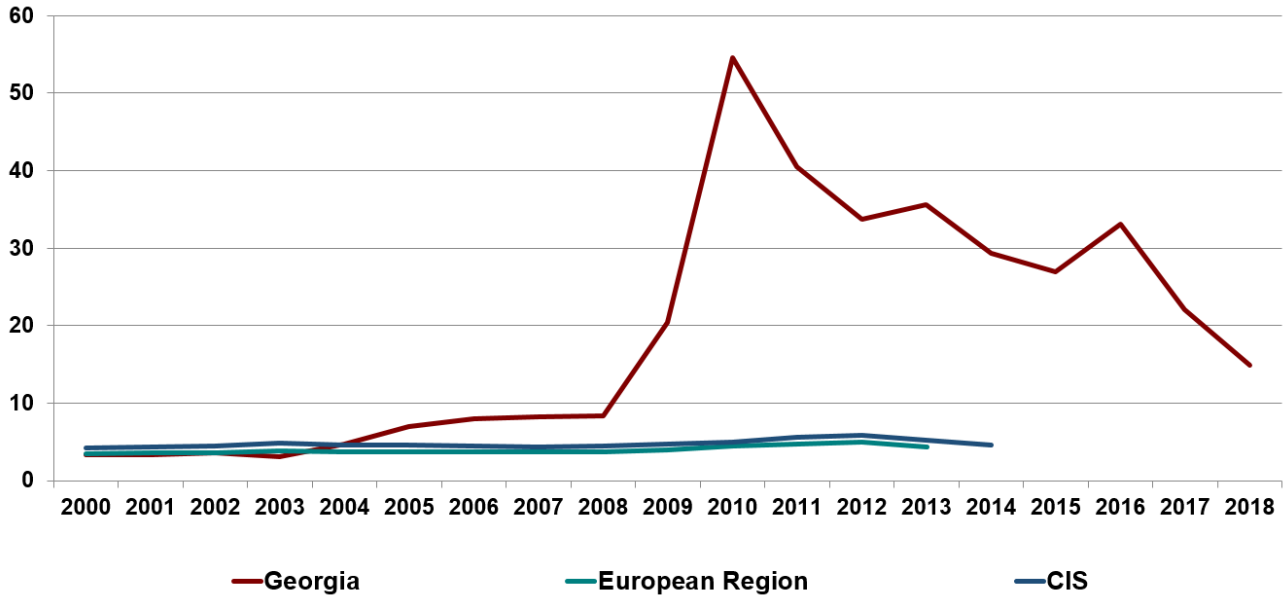
Source: WHO

Table 2.9 Mortality by underlying cause of death (rate per 100000 population), Georgia, 2018

	Number	Rate
Total	**46524**	**1247.4**
Certain infectious and parasitic diseases	588	15.8
Neoplasms	7329	196.5
Diseases of blood and blood-forming organs	491	13.2
Endocrine, nutritional and metabolic diseases	675	18.1
Mental and behavioral disorders	52	1.4
Diseases of the nervous system	521	14.0
Diseases of the eye and adnexa	0	0
Diseases of the circulatory system	0	0
Diseases of the respiratory system	21549	577.8
Diseases of the digestive system	3676	98.6
Diseases of the skin and subcutaneous tissue	1587	42.6
Diseases of the musculoskeletal system and connective tissue	20	0.5
Diseases of the urinary system	30	0.8
Pregnancy, childbirth and the puerperium	642	17.2
Certain conditions originating in the perinatal period	20	0.5
Congenital malformations, deformations and chromosomal abnormalities	297	8.0
Ill-defined causes	105	2.8
Injury, poisoning and certain other consequences of external causes	6927	185.7
Total	2015	54.0

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. The quality of identifying the underlying causes of death has improved significantly, as a result of activities of the National Center for Disease Control, interagency cooperation and municipal public health centers. Now the share of ill-identified underlying causes of death dropped under-15% of total (Figure 2.8).

Figure 2.8 Share of ill-defined causes of death (%)



Source: WHO HFA DB, NCDC

Natural population growth

In Georgia, in 2018, the natural population growth rate in was 1.2 per 1000 population. A negative natural growth rate was identified in: Imereti, Samegrelo and Zemo Svaneti, Guria, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti, Kakheti and Shida Kartli.

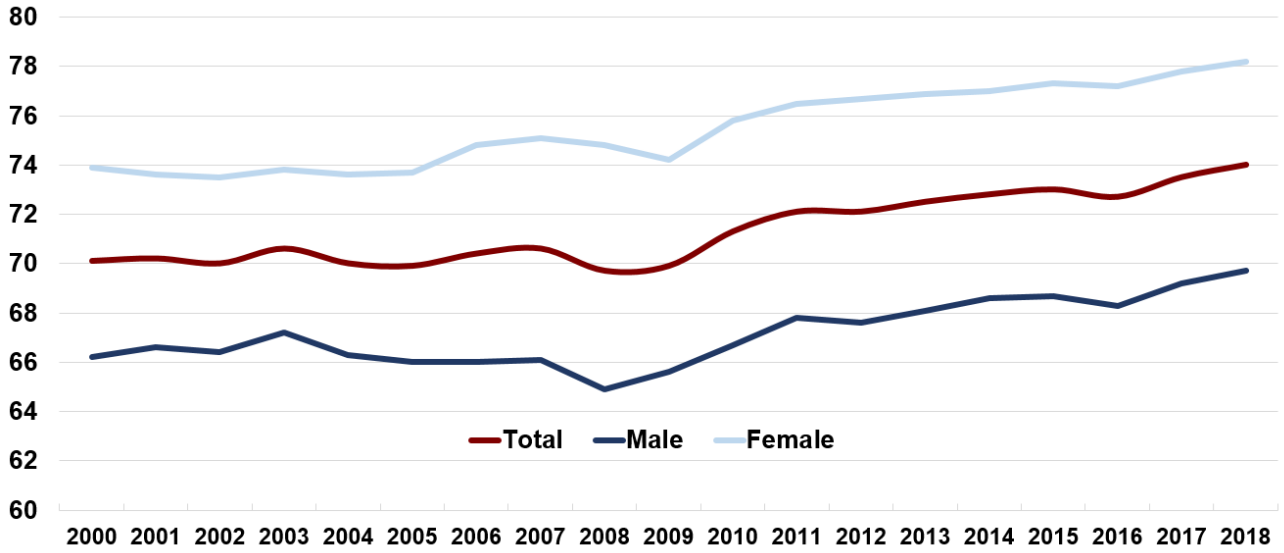
Table 2.10 General indicators of vital statistics, Georgia

Year	Live births		Deaths		Natural population growth		Marriages		Divorces	
	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
2018	**51138**	**13.7**	**46524**	**12.5**	**4614**	**1.2**	**23202**	**6.2**	**10288**	**2.8**

Life expectancy at birth

In 2018, life expectancy at birth was 74.0 years (in females – 78.2; in males – 69.7) (Figure 2.9).

Figure 2.9 Life expectancy at birth, Georgia



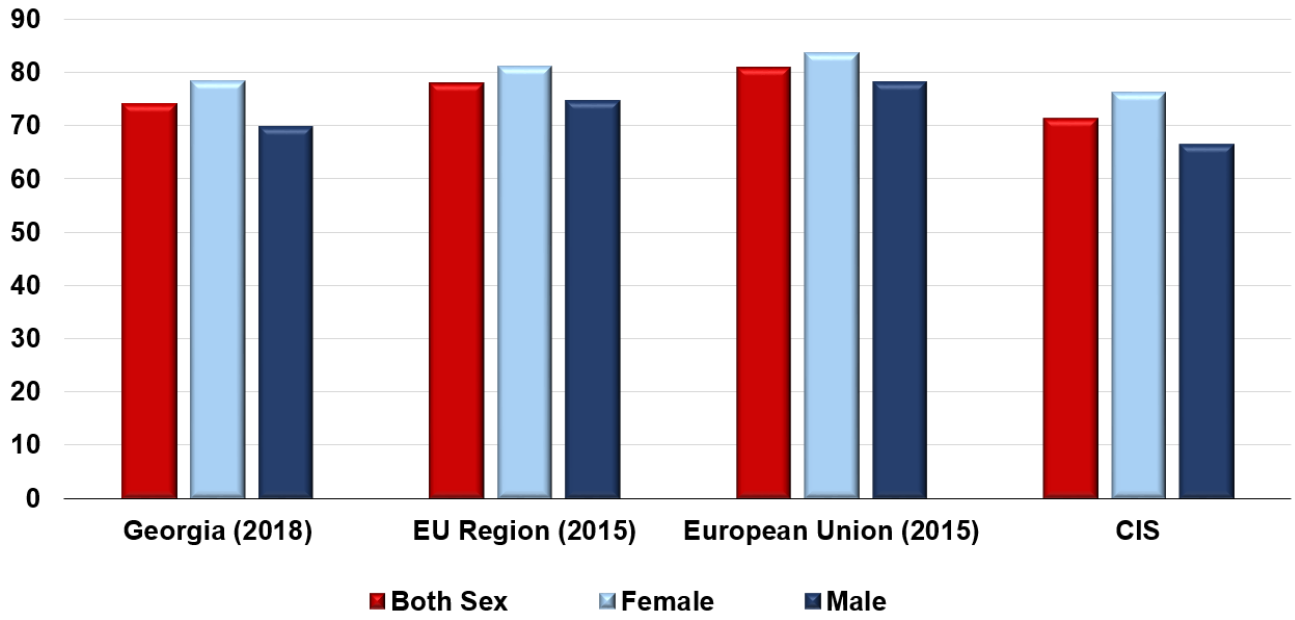
Source:National Statistics Office of Georgia

Table 2.11 Life expectancy at birth, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	69.7	69.9	71.3	72.1	72.1	72.5	72.8	73	72.7	73.5	74.0
Male	64.9	65.6	66.7	67.8	67.6	68.1	68.6	68.7	68.3	69.2	69.7
Female	74.8	74.2	75.8	76.5	76.7	76.9	77.0	77.3	77.2	77.8	78.2

In Georgia, life expectancy at birth is higher than in the CIS countries, and lower than in the European Region (Figure 2.10).

Figure 2.10 Life expectancy at birth (last available year)



Source:National Statistics Office of Georgia; WHO HFA DB

CHAPTER 3.

Population Health Services

Healthcare provision

Table 3.1 Health resources and resource utilization, Georgia, 2018

Number of physicians (including dentists)	30998	Number of In-patient facilities	273
Number of physicians per 100000 population	831.9	Number of out-patient facilities	2283
Number of nurses	17862	Number of hospital beds	15909
Number of nurses per 100000 population	479.3	Number of hospital beds per 100 000 population	426.9
Number of encounters with physicians	12067282	Antenatal care centers	352
Home visits of physicians	190544	Ambulance stations	73
Number of Rural physician-entrepreneur	1267	Blood transfusion facilities	20

Health workforce and healthcare network

Table 3.2 Healthcare facilities network, Georgia, 2018

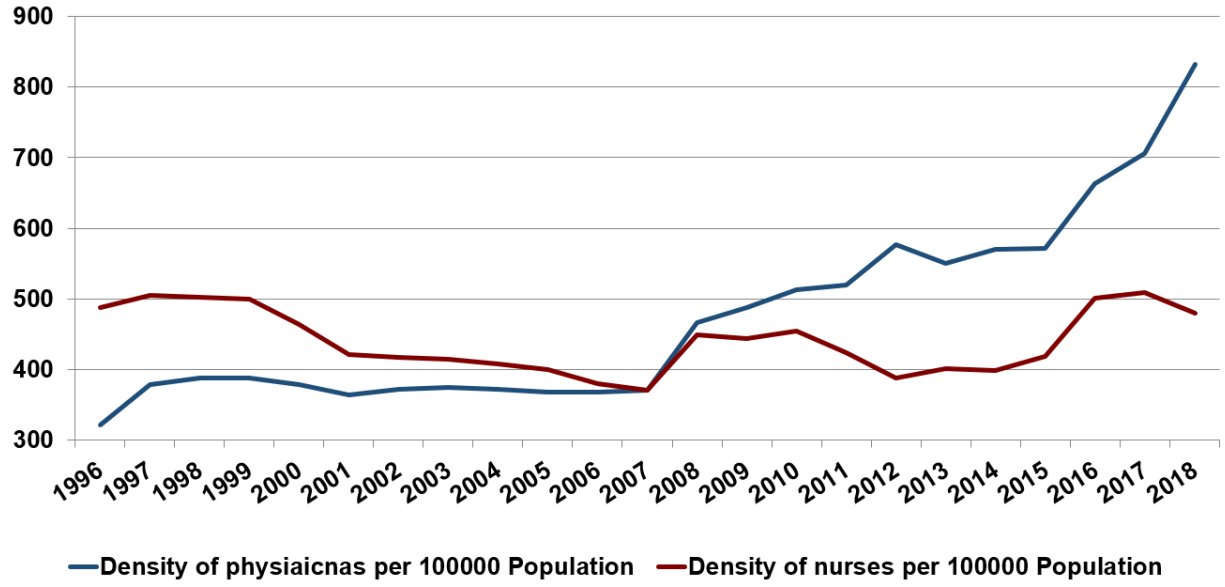
Type of health facility	Number
Inpatient facilities	**273**
Hospitals and medical centers	271
Including specialized	86
Including independent maternity hospitals	16
Dispensaries with in-patient care unit	2
Outpatient facilities and rural doctors	**2283**
Including outpatient centers and policlinics	304
Including Dental Clinics and Offices	625
Ambulatory care clinics	14
Women consultancy centers independent	12
Health Offices (except Dental clinics)	53
Rural physician-entrepreneur	1267
Dispensaries	8
Ambulance stations	73
Blood transfusion	20
Epidemiological centers	60
Other	16

Densities of physicians and nurses (numbers of physicians and nurses per 100000 population) are main indicators of provision the population with healthcare resources.

According to WHO strategy, an adequate number of health workforce in the country is very important to provide effective and productive medical services. 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 3.1).

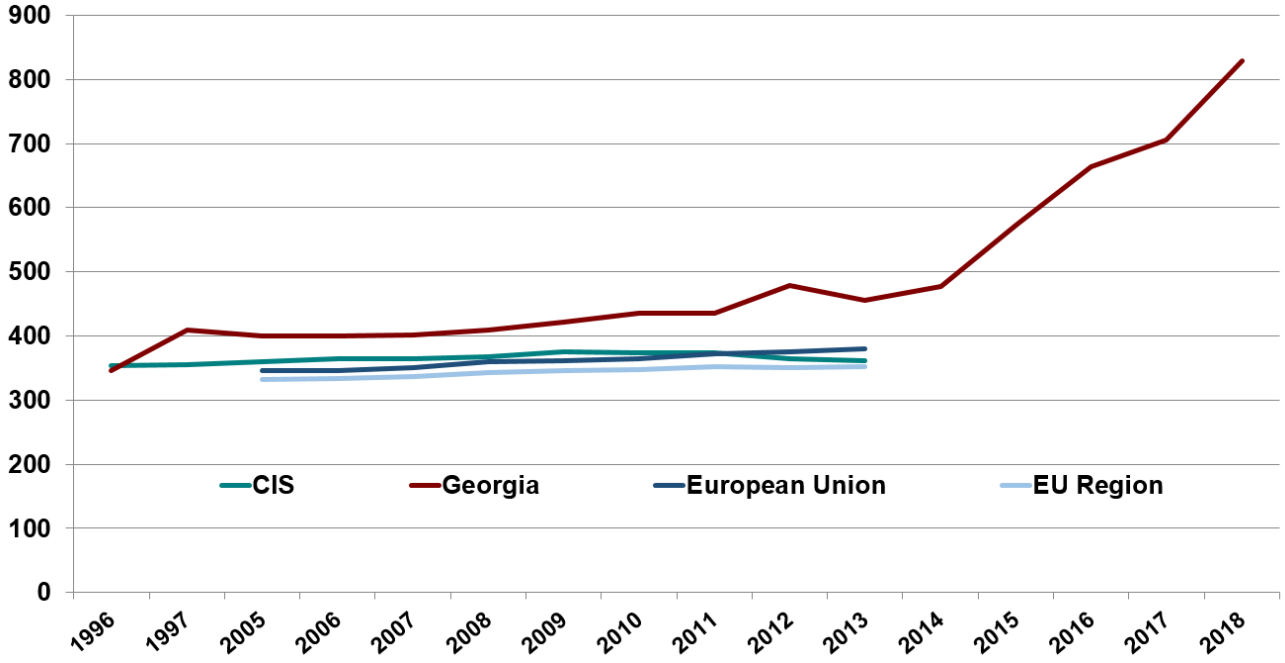
In 1998 – 2013, the number of nurses per 100000 population had a trend of reduction, and despite of the recently observed increase, this indicators is significantly lower than the indicators of the European region, the EU and the CIS countries (Figure 3.1; Figure 3.2).

Figure 3.1 Numbers of professionally active physicians[3] and nurses[4] per 100 000 population, Georgia



Source: WHO HFA DB; NCDC

Figure 3.2 Number of physicians per 100 000 population



Source: WHO HFA DB; NCDC

[3] 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

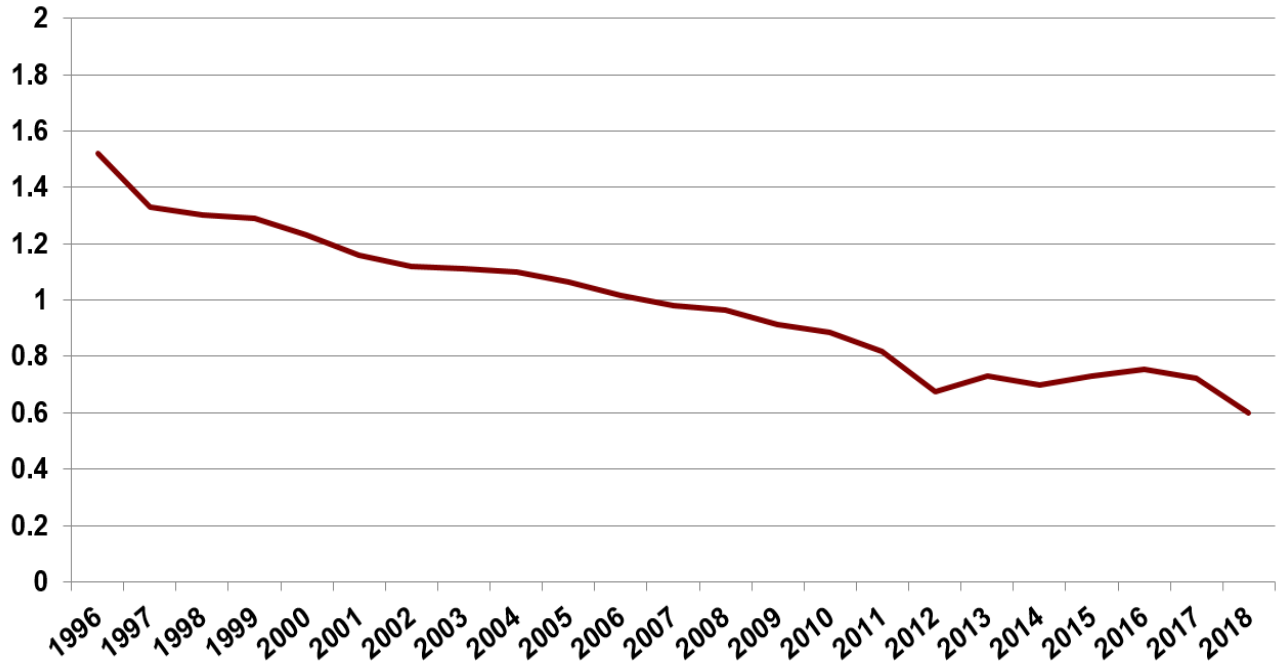
[4] Professionally active nurses include practising and other (non-practising) nurses for whom their education is a prerequisite for the execution of the job. Exclusion: midwives who hold a post / job under which midwifery education is not required, unemployed, midwives and retired midwives, midwives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

Table 3.3 Number of professionally active physicians per 100 000 population, Georgia

	Physicians total		Including professionally active	
	Total	**Rate per 100 000**	**Total**	**Rate per 100 000**
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
2018	**29631**	**795.1**	**29223**	**784.2**

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 over years. In Georgia, the number of physicians prevails the number of nurses and the ratio of the number of nurses to the number of doctors during the last 5 years did not exceed 0.8 (Figure 3.3).

Figure 3.3 Ratio of nurses to physicians, Georgia



Source: NCDC

Table 3.4 Number of professionally active nurses per 100 000 population, Georgia

	Nurses		Midwives	
	Total	Rate per 100 000	Total	Rate per 100 000
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	509.1	491	13.2
2018	**18440**	**494.8**	**491**	**13.2**

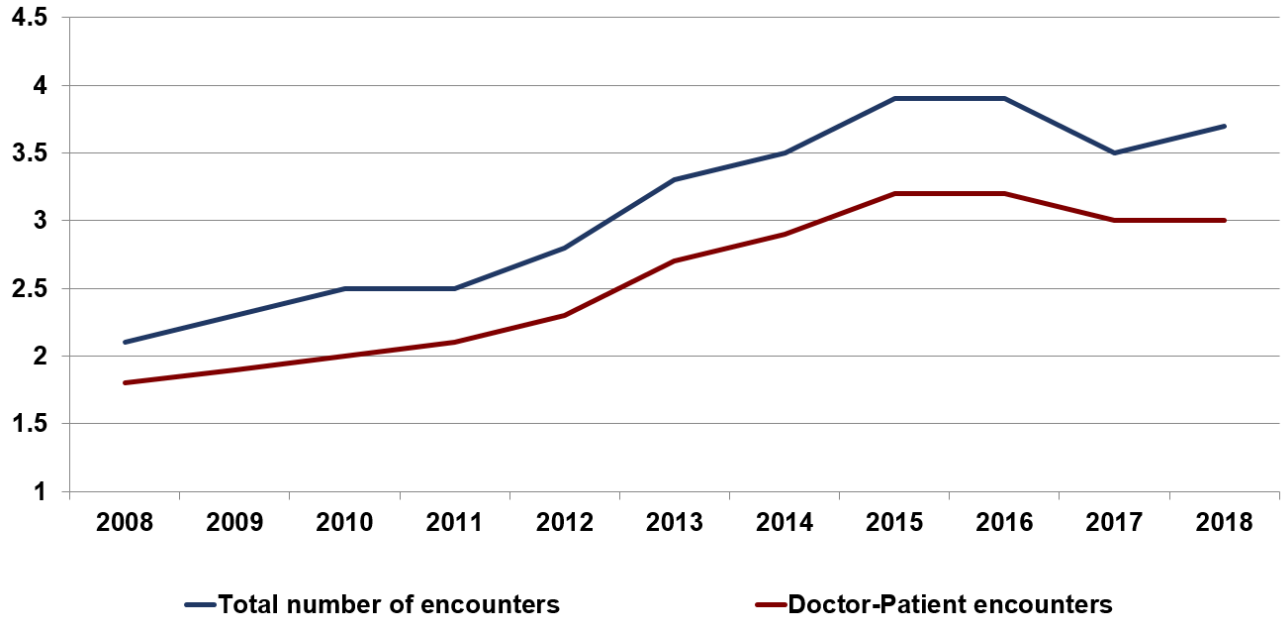
Table 3.5 Health staff working in inpatient facilities, Georgia

	Hospital personnel		Physicians		Nurses and midwives	
	Total	Rate per 100000 population	Total	% of the total professionally active physicians	Total	% of the total professionally active nurses
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
2018	**39514**	**1060.3**	**15543**	**52.6**	**12055**	**63.7**

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 2018, the numbers of encounters of the population with outpatient facilities was 3.7 per capita per year (Figure 3.4).

Figure 3.4 Total number of encounters per capita per year, Georgia



Source: NCDC

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
All encounters	**1.8**	**1.9**	**1.9**	**2.1**	**2.4**	**3.2**	**3.6**	**3.5**	**3.1**	**3.3**
Including:										
Encounters to physicians	1.7	1.8	1.8	2.1	2.4	3.1	3.4	3.4	3.0	3.2
Encounters for children aged under-15	2.7	2.6	2.4	2.6	2.7	3.7	3.8	3.6	3.4	2.8
Ambulance calls	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
Ambulance calls for children aged under-15	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2

Table 3.7 Number of outpatient surgeries, Georgia

	2013	2014	2015	2016	2017	2018
Total number of surgical operations	**78670**	**77289**	**101602**	**102120**	**105604**	**103469**
Including:						
On eye	15941	17576	27517	27185	31369	28920
Including glaucoma	8979	945	1169	1633	1622	1059
cataract	7517	9121	16386	15171	15624	14118
Microsurgery	2957	9894	10490	10423	12752	12789
On throat-ear-nose	2816	4149	4243	14152	12059	16371
On blood vessels	1202	1615	428	642	373	1348
On organs of abdominal cavity	1318	772	732	785	679	2314
Of which dissection of no strangulated hernia	740	113	123	168	112	414
Obstetrical & gynecological	27167	23862	15655	14905	14628	11981
On mammary glands	231	394	404	434	353	634
On skin and subcutaneous tissues	17863	16335	22030	18620	15604	20871

In 2018, annual statistical reports were submitted to the National Center for Disease Control and Public Health by 273 in-patient facilities. There were registered 502756 hospital discharges (the number is almost equal to the number of the previous year).

Table 3.8 Utilization of hospital beds, Georgia

	Number of hospital beds	Number of beds per 100000 population	Bed occupancy rate	Average length of stay	Bed turnover
2008	14069	365.6	156.1	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
2018	**15909**	**426.9**	**187.2**	**4.9**	**37.8**

Among diagnosis at discharge, the respiratory system diseases constituted 20.1%, cardiovascular disorders – 19.4%, and pregnancy, childbirth and puerperium – 10.2% of total. Total hospital case fatality rate was 2.5%.

Table 3.9 Hospital discharges by the ICD10 chapters, all ages, Georgia, 2018

	Number of hospital discharges	Including deaths	Case fatality rate (%)
Total	**502756**	**12733**	**2.5**
Certain infectious and parasitic diseases	31154	344	1.1
Neoplasms	24065	1151	4.8
Diseases of blood and blood-forming organs	5522	191	3.5
Endocrine, nutritional and metabolic diseases	5153	67	1.3
Mental and behavioral disorders	10709	91	0.8
Diseases of the nervous system	21221	264	1.2
Diseases of the eye and adnexa	8370	3	0.04
Diseases of the ear and mastoid process	563	0	0.0
Diseases of the circulatory system	97785	4044	4.1
Diseases of the respiratory system	100885	3351	3.3
Diseases of the digestive system	41242	882	2.1
Diseases of the skin and subcutaneous tissue	4924	52	1.1
Diseases of the musculoskeletal system and connective tissue	9374	9	0.1
Diseases of the genitourinary system	24014	268	1.1
Pregnancy, childbirth and the puerperium	51350	7	0.01
Certain conditions originating in the perinatal period	6847	256	3.7
Congenital malformations, deformations and chromosomal abnormalities	2874	41	1.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	19089	1271	6.7
Injury, poisoning and certain other consequences of external causes	34773	437	1.3
Factors influencing health status and contact with health services	2842	4	0.1

Table 3.10 Hospital discharges by the ICD10 chapters, children under-15, Georgia, 2018

	Number of hospital discharges	Including deaths	Case fatality rate (%)
Total	**97852**	**434**	**0.4**
Certain infectious and parasitic diseases	16810	12	0.1
Neoplasms	1157	17	1.5
Diseases of blood and blood-forming organs	617	1	0.2
Endocrine, nutritional and metabolic diseases	541	1	0.2
Mental and behavioral disorders	104	0	0.0
Diseases of the nervous system	952	17	1.8
Diseases of the eye and adnexa	519	1	0.2
Diseases of the ear and mastoid process	175	0	0.0
Diseases of the circulatory system	137	13	9.5
Diseases of the respiratory system	48181	49	0.1
Diseases of the digestive system	3984	4	0.1
Diseases of the skin and subcutaneous tissue	573	0	0.0
Diseases of the musculoskeletal system and connective tissue	615	0	0.0
Diseases of the genitourinary system	2406	1	0.0
Pregnancy, childbirth and the puerperium	13	0	0.0
Certain conditions originating in the perinatal period	6847	256	3.7
Congenital malformations, deformations and chromosomal abnormalities	2190	39	1.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5890	12	0.2
Injury, poisoning and certain other consequences of external causes	5720	10	0.2
Factors influencing health status and contact with health services	421	1	0.2

Table 3.11 Hospital discharges by the ICD10 chapters, infants, Georgia, 2018

	Number of hospital discharges	Including deaths	Case fatality rate (%)
Total	**24198**	**338**	**1.4**
Certain infectious and parasitic diseases	3611	6	0.2
Neoplasms	260	6	2.3
Diseases of blood and blood-forming organs	77	1	1.3
Endocrine, nutritional and metabolic diseases	16	0	0.0
Mental and behavioral disorders	188	3	1.6
Diseases of the nervous system	27	1	3.7
Diseases of the eye and adnexa	8	0	0.0
Diseases of the ear and mastoid process	24	5	20.8
Diseases of the circulatory system	10049	15	0.1
Diseases of the respiratory system	376	4	1.1
Diseases of the digestive system	68	0	0.0
Diseases of the skin and subcutaneous tissue	19	0	0.0
Diseases of the musculoskeletal system and connective tissue	486	0	0.0
Certain conditions originating in the perinatal period	6838	252	3.7
Congenital malformations, deformations and chromosomal abnormalities	768	37	4.8
Ill-defined cases	1058	7	0.7
Injury, poisoning and certain other consequences of external causes	299	1	0.3
Factors influencing health status and contact with health services	26	0	0.0

In 2018, reporting of data on surgical operations the first time was performed by reconciling the electronic inpatient case reporting and universal health care data. Thus, the comparison 2018 data (structure of surgical interventions) with previous years will not be valid.

In Georgia, 221 849 surgical interventions were performed (rate per 1000 population – 59.5).

In 2018, 2 889 surgeries were performed on heart and major thoracic vessels; 6 349 – on nervous system organs (including 414 surgeries in children under-15); 3 164 – on the endocrine system organs (including 3 040 surgeries on thyroid gland). There were 16 814 surgeries performed on the female genitals, on prostate gland - 1 671 surgery. In 2018, 14 kidney transplantations were performed, including one on the patient aged under-15.

Among surgeries conducted on the musculo-skeletal system there were 4187 hip joints, and 445 knee joints replacements. In 871 cases a limb or its part amputation was conducted.

Table 3.12 In-patient urgeries, Georgia, 2018

Type of surgery	0-14	15+	Total
Total	**24296**	**197553**	**221849**
Including:			
On nervous system	414	5935	6349
On brain	331	2401	2732
On spinal cord	66	2619	2685
On peripheral nervous system	17	908	925
On the endocrine system	9	3155	3164
On thyroid gland	9	3031	3040
Parathyroidectomy	0	50	50
On the eye and adnexa	883	8954	9837
Due to glaucoma	34	853	887
Due to cataract	108	5020	5128
On ear, nose and throat	654	14826	15480
On ear	181	455	636
On teeth, jaws, mouth and larynges	11326	8028	19354
On tongue	159	257	416
On heart and major thoracic vessels	738	18743	19481
On valve	20	66	86
Shunting of the coronary arteries	5	2122	2127
Angioplasty of blood vessels	55	11536	11591
Stenting	38	8817	8855
On chest wall, pleura, midline, diaphragm, trachea, bronchus and lungs	259	2630	2889
On breast	8	3200	3208
On the digestive system	4538	44234	48772
On the genitourinary system, male genital organs and the retroperitoneal space	1471	11706	13177
Kidney transplantation	1	13	14
On prostate gland	1	1670	1671
On female genital organs	112	16702	16814
Obstetrical and gynecological operations	10	18749	18759
On the musculoskeletal system	2326	22568	24894
On peripheral blood vessels and lymphatic system	57	10882	10939
On skin	1491	7210	8701
Acquisition of organs and tissues for transplantation	0	31	31

The ambulance system is providing free emergency medical care for the population. In 2018, the ambulance services completed 1 520 836 emergency visits; this is 0.4 encounters per capita per year.

Table 3.13 Performance of ambulance stations, Georgia

	2011	2012	2013	2014	2015	2016	2017	2018
Total number of ambulance stations	**75**	**78**	**75**	**104**	**78**	**79**	**82**	**73**
Total number of visits	966493	1061690	1231225	1247588	1479212	1617704	1451725	1520836
Number of population with assistance covered by the State Programs	908000	993089	1148445	1201793	1436980	1459415	1345002	1388243

Table 3.14 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 accidents	
		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
2018	**1463076**	**1429291**	**1.6**	**1429291**	**97.7**	**7306**	**0.5**

All licensed blood banks (20 bank) collected 83 375 blood donations, including 21 992 free donations (26.4%).

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.

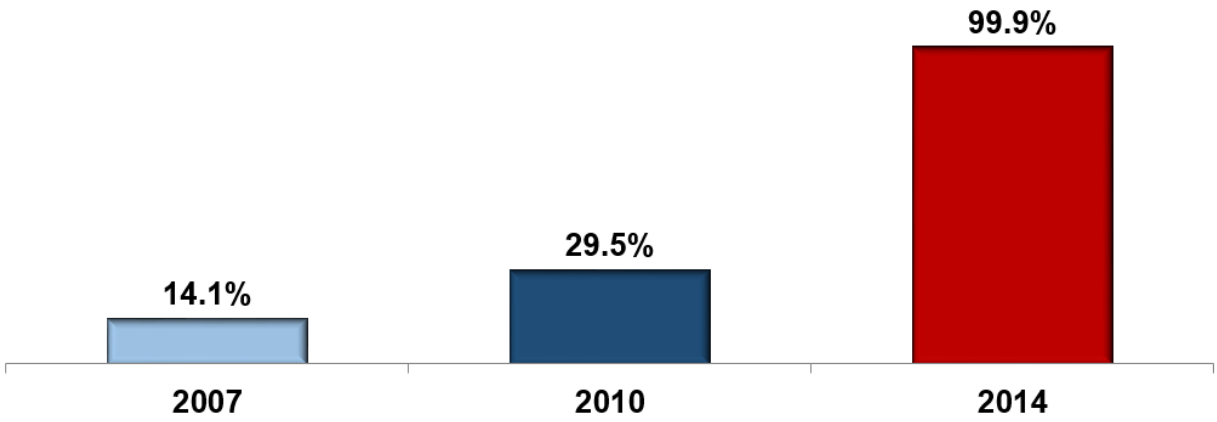
From February 28 to July 1, 2013, the first phase of the UHC program provided the primary healthcare services by the family physician and emergency outpatient and inpatient care.

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.

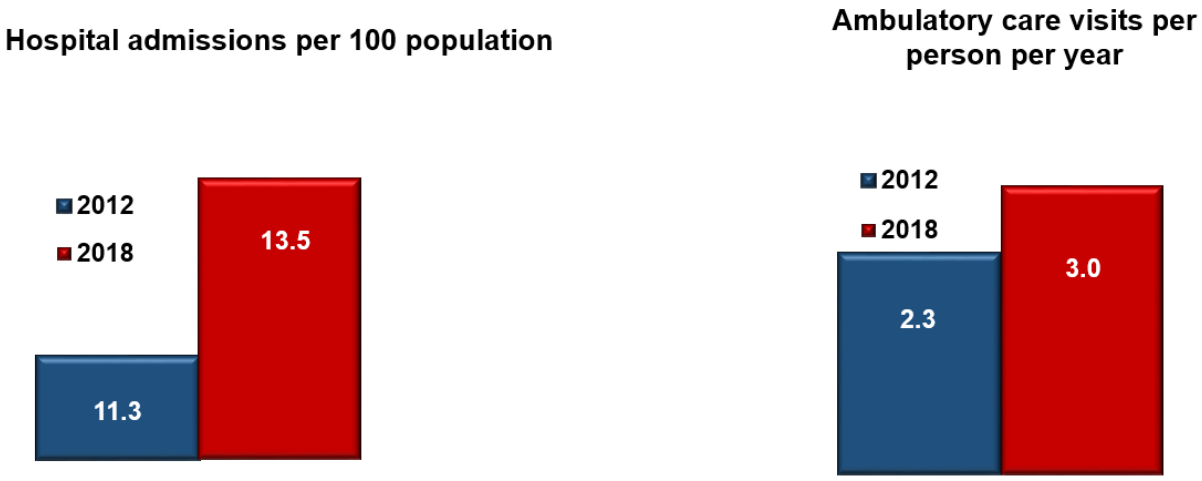
From July 1, 2017, persons suffering from chronic conditions, who are registered in the unified database of "socially vulnerable families" with the rating score not exceeding 100,000, are eligible for the state program providing drugs for chronic conditions. The program provides patients with selected drugs for chronic cardiovascular diseases, chronic obstructive pulmonary disease, diabetes (type 2) and thyroid conditions (Figure 3.5, 3.6).

Figure 3.5 Coverage with healthcare services in the frame of the UHC program



Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

Figure 3.6 Service utilization in the frame of the UHC program



Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

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 2018, the number of contacts with out-patient facilities per capita reached 3.2.

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.

Since May 2017, selective contracting has been introduced to ensure quality of care with limited funds. The selection will be based on the following criteria: coverage of services, quality of services, volume of services, financial transparency and compliance with penalty sanctions.

Since March 1, 2017, selective contracting for provision with delivery services and caesarean sections, and neonatal intensive care services has been introduced. Since July, 2017, selective contracting for intensive care at level II-III and since January 1, 2018, for hospital emergency care have been introduced.

State "vertical" programs

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

- 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
- Tuberculosis 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 programs 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 (individual treatment).

Table 3.15 State Health Programs Expenditure, mill GEL

	2013	2014	2015	2016	2017	2018
Universal health care	70	338	574	681	710	760
Public health programs	31	53	69	73	73	92
Programs in priority areas	95	124	140	149	158	179
Total	**436**	**583**	**783**	**903**	**941**	**1032**

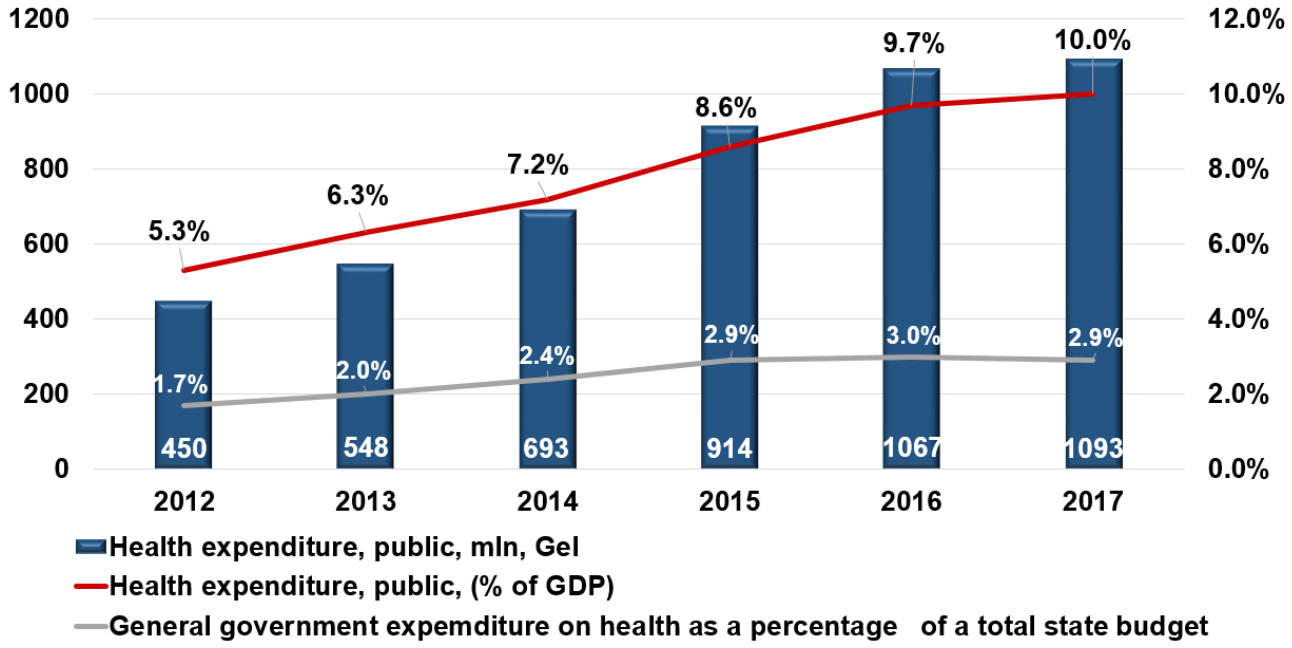
Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

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%) (Figure 3.7).

Figure 3.7 Dynamics of the Health Expenditures, Georgia



Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

Since 2013, the Government of Georgia has laid the foundation for public health and welfare oriented health policy.

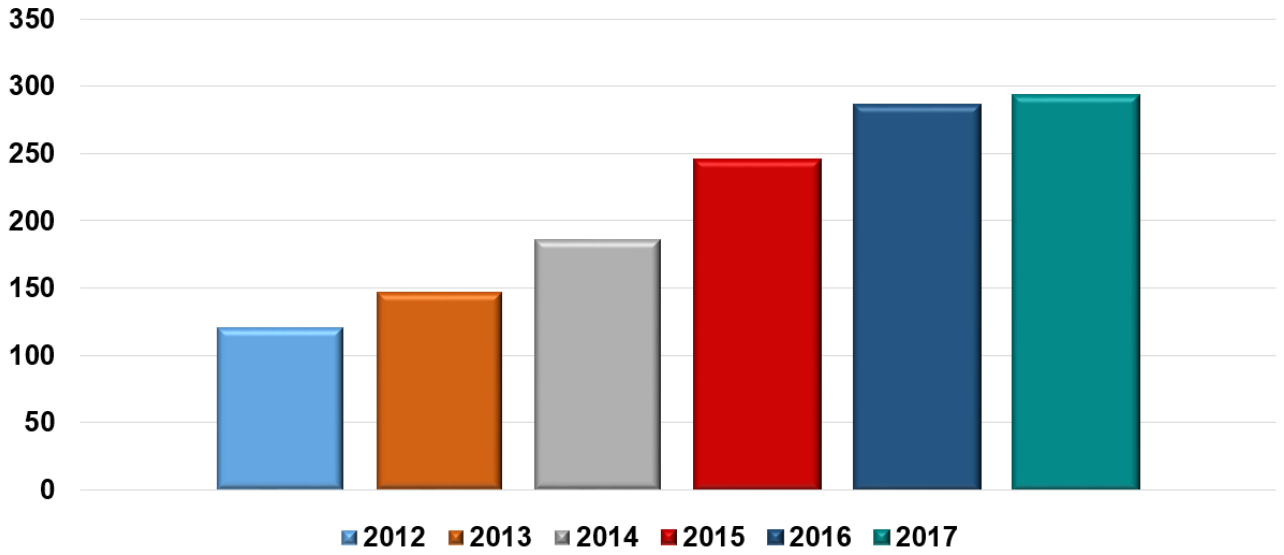
Since 2013, the Government of Georgia has laid the foundation for public health and welfare oriented health policy. Last years the state budget allocations for the health sector substantially increased (in 2012 - 450 million GEL; in 2017 - 1092 million GEL).

State expenditure on health, as a share of the GDP is growing annually (in 2012 - 1.7%, in 2017 – 3%), although, this share is still lower than in the Western Europe (EU15) - 8%, EU (EU28) – 7.3%, and the average for European 53 countries – 5.7%.

In 2014-2017, the State spending on health per capita substantially increased: in 2014 - 186 GEL, in 2017 - 293 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 (Figure 3.8).

Figure 3.8 State spending on health per capita, Georgia



Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

In 2012-2017, the sources of healthcare financing were distributed as follows: State (in 2012 - 21%; in 2017 - 38%), private (in 2012 - 77%; in 2017 - 60%), international aid and grants (in 2012 - 2.3%; in 2017 - 1.7%).

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 GEL) has not been 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 55% (in 2017), mainly due to the lower cost of hospitalization, which is a direct consequence of the universal healthcare program.

Table 3.16 Healthcare expenditures, Georgia

Health expenditure	2012	2013	2014	2015	2016	2017
GDP, mln GEL	26167.3	26847.4	29150.5	31755.6	34028.5	37846.6
Total expenditure on health, mln GEL	2190.5	2254.3	2460.2	2518.7	2860.6	2877.6
Health expenditure, total (% of GDP)	8.4%	8.5%	8.5%	8.5%	8.4%	7.6%
Health expenditure, public, mln GEL	450.3	547.9	693.2	914.0	1063.7	1092.2
Health expenditure, public (% of total health expenditure)	20.6%	24.3%	28.2%	36.3%	37.2%	38.0%
Health expenditure, public (% of GDP)	1.7%	2.0%	2.4%	2.9%	3.1%	2.9%
General government expenditure on health as a percentage of total State budget	5.3%	6.3%	7.2%	8.6%	9.7%	10.0%
Health expenditure, private, mln GEL	1689.7	1655.5	1720.4	1558.9	1750.5	1737.8
Health expenditure, private (% of total health expenditure)	77.1%	73.4%	69.9%	61.9%	61.2%	60.4%
Direct out-of-pocket health expenditure, mln GEL	1608.8	1557.0	1623.4	1443.8	1591.0	1575.5
International aid for healthcare, mln GEL	50.5	50.9	46.5	45.8	46.5	47.5
International aid for healthcare, (% of total health expenditure)	2.3%	2.3%	1.9%	1.8%	1.6%	1.7%
Total expenditures on health per capita, GEL	488	502	660	677	767	772
Total expenditures on health per capita, USD	295	302	374	298	324	308
Total expenditures on health per capita, international dollars	571	601	772	792	898	903
Public health expenditure per capita, GEL	100	122	186	246	358	293
Public health expenditure per capita, USD	61	73	105	108	121	117
Public health expenditure per capita, international dollars	117	146	218	288	335	343
Out-of-pocket expenditure on health per capita, GEL	376	369	462	419	470	466
Out-of-pocket expenditure on health per capita, USD	228	222	261	185	198	186
Out-of-pocket expenditure on health per capita, international dollars	440	441	540	490	549	545
International aid for health per capita, GEL	11	11	12	12	12	13
International aid for health per capita, USD	7	7	7	5	5	5
International aid per capita on health, international dollars	13	14	15	14	15	15

Source: Ministry of internally displaced persons from the occupied territories, labour, health and social affairs of Georgia

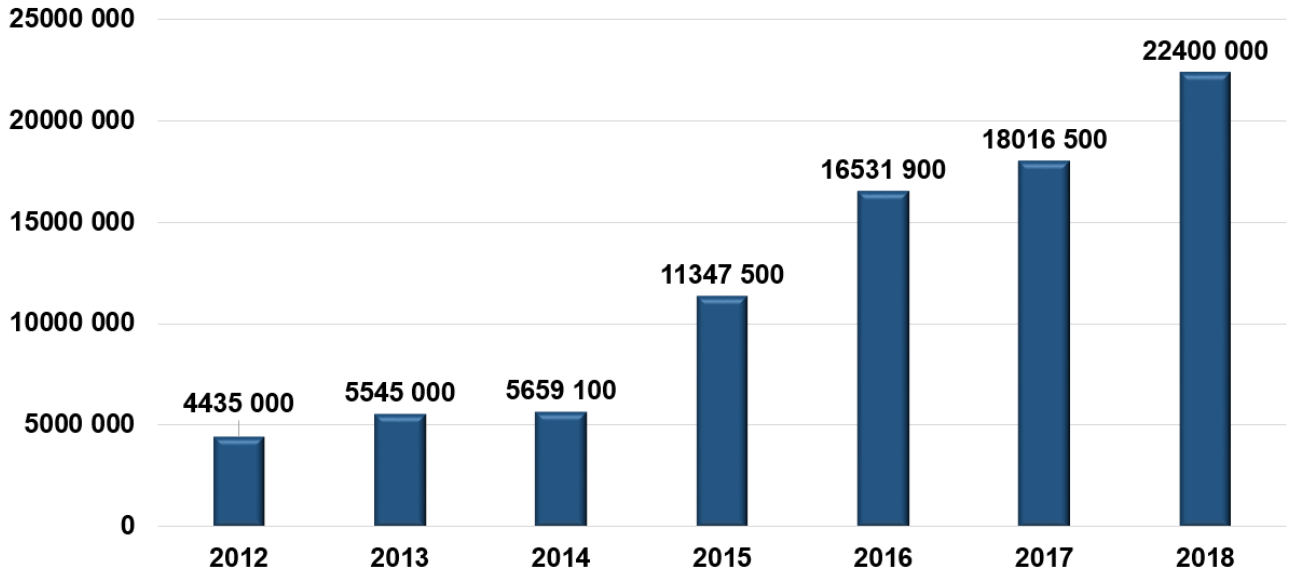
CHAPTER 4.

Immunization

Immunization and Vaccination

Immunization is a top public health priority from the point of view of the Government of Georgia. This is clearly profed by a significant increase of funds allocated to the immunization program (4 million GEL in 2012 and 22,400 million GEL in 2018) (Figure 4.1).

Figure 4.1 Budget of the immunization program (in GEL)



Source:NCDC

All vaccines included in the national immunization schedule are free of charge for the population. The State purchases vaccines, which are prequalified by the World Health Organization to guarantee that only high quality and safe vaccines are used for immunization of the population.

Vaccines against the following 12 diseases are currently included in the immunization schedule in the country: tuberculosis, hepatitis B, diphtheria, measles, tetanus, poliomielitis, measles, mumps, rubella, Hib (Hemophilus influenza), Rota virus, pneumococcal infection.

Last years, 5 new vaccines have been added to the immunization schedule: Rota virus vaccine - in 2013, PCV10 – at the end of 2014 (supported by GAVI), IPV (Penta vaccine replaced by Hexavalent vaccine) - in 2015, and the bivalent Polio vaccine (bOPV) - in 2016. Since 2017, HPV vaccination of 9 year old girls has been launched in 4 regions of Georgia (Tuberculosisilisi, Kutaisi, Adjara, Abkhazia). Since August 2019, 10-11-12 year old girls would be vaccinated with HPV. All vaccines included in the national immunization schedule are free of charge for the population. The State purchases vaccines, which are prequalified by the World Health Organization to guarantee that only high quality and safe vaccines are used for immunization of the population.

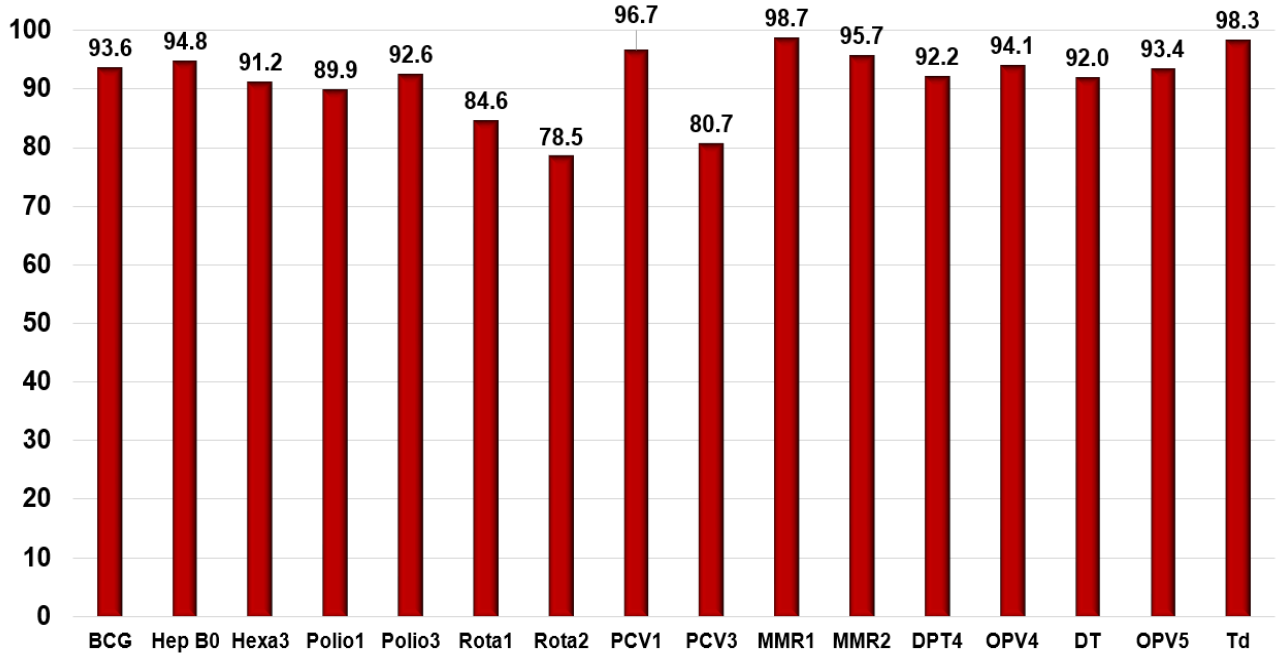
Immunization schedule

Vaccine	Number of doses	Immunization age
BCG	1	Newborn 0-5 days
HepB	1	First12 hours after birth
Hib+DPaT+HepB+IPV	3	2, 3, 4 months
Polio (bOPV)	2	18 months, 5 Year
DPT, DT, Td	3	18 months, 5 Year., 14 Year
MMR	2	12 months, 5 Year
Rota	2	2, 3 months
PCV	3	2, 3, 12 months

Source:NCDC

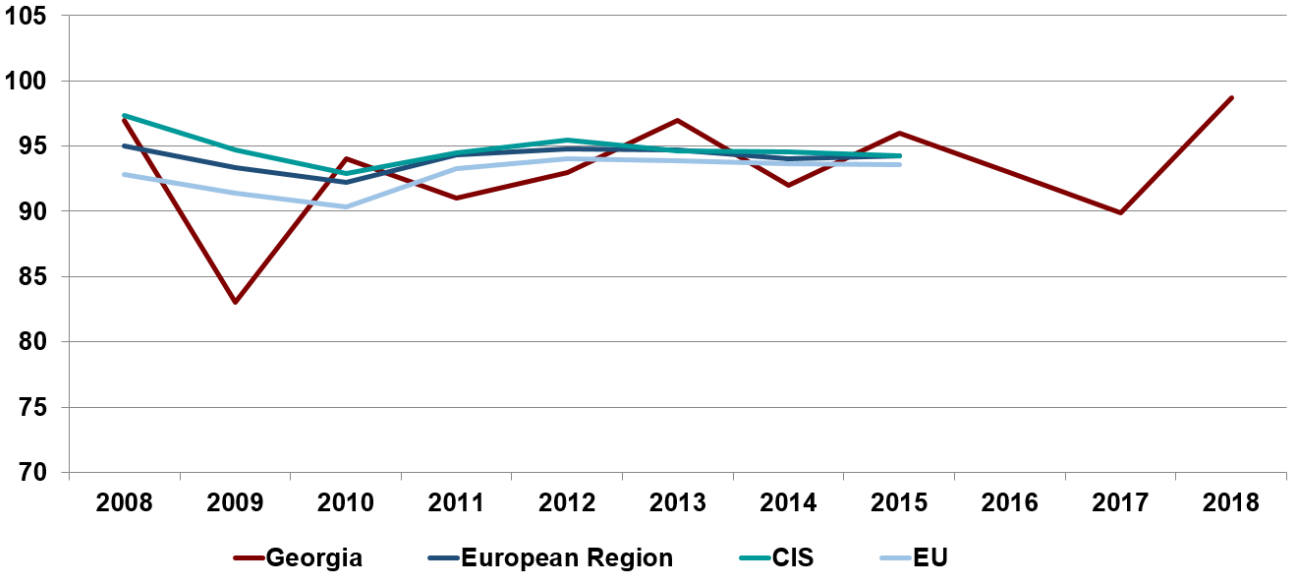
In 2018, immunization coverage rates are significantly higher than in previous yesr, especially Hep B0 (93.6% - in 2017, 96.4% - in 2018), MMR1 (95.5% - in 2017, 98.7% in 2018), MMR2 (89.9% - in 2017, in 2018 - 95.7%), Td (76.0% - in 2017, 88.3% - in 2018) (Figure 4.2).

Figure 4.2 Immunization coverage rates (%), Georgia, 2018



Source: NCDC

Figure 4.3 Percent of children aged 1 year vaccinated against measles



Source: WHO HFA DB, NCDC

Table 4.1 Data on vaccination and immunization, Georgia, 2018

Vaccine	Age at immunization	The number of vaccinated according to the calendar	Coverage (%)
BCG–1	0 – 5 days	47290	93,6
Viral Hepatitis B-0	0 – 12 hours	47891	94.8%
DPT+HIB+HEPB/DPT+HIB+HEPB+ IPV/DPT1	2 months– till 11 months 29 days	48583	98.9%
DPT+HIB+HEPB/DPT+HIB+HEPB+ IPV/DPT3	4 months – till 11 months 29 days	45515	92.6%
DPT– 4	18 – 24 months	44547	92.2%
POLIO– 1	2 months– till 11 months 29 days	48597	98.9%
POLIO– 3	4 months– till 11 months 29 days	45520	92.6%
OPV– 4	18 – 24 months	45616	94.1%
OPV – 5	5 years – 5 years 11 months 29 days	51327	93.4%
MMR – 1	12 – 24 months	50302	98.7%
MMR – 2	5 years – 5 years 11 months 29 days	52576	95.7%
ROTAVIRUS -1	2 months	41589	84.6%
ROTAVIRUS -2	3 months	38578	78.5%
DT	5 years – 5 years 11 months 29 days	50523	92.0%
PNEUMOCOCCUS - 1	2 months– till 11 months 29 days	47505	96.7%
PNEUMOCOCCUS - 2	2 months– till 11 months 29 days	45892	93.4%
PNEUMOCOCCUS - 3	12 – 24 months	41144	80.7%
TD	14 years	34052	88.4%

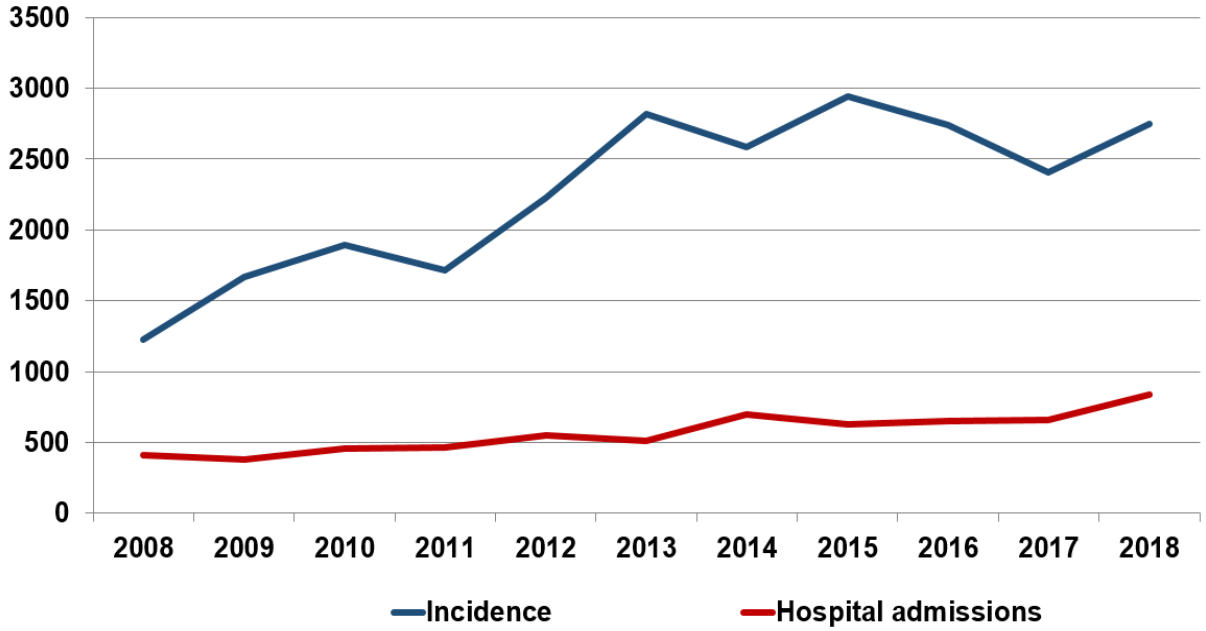
CHAPTER 5.

Population Health Status

Communicable diseases

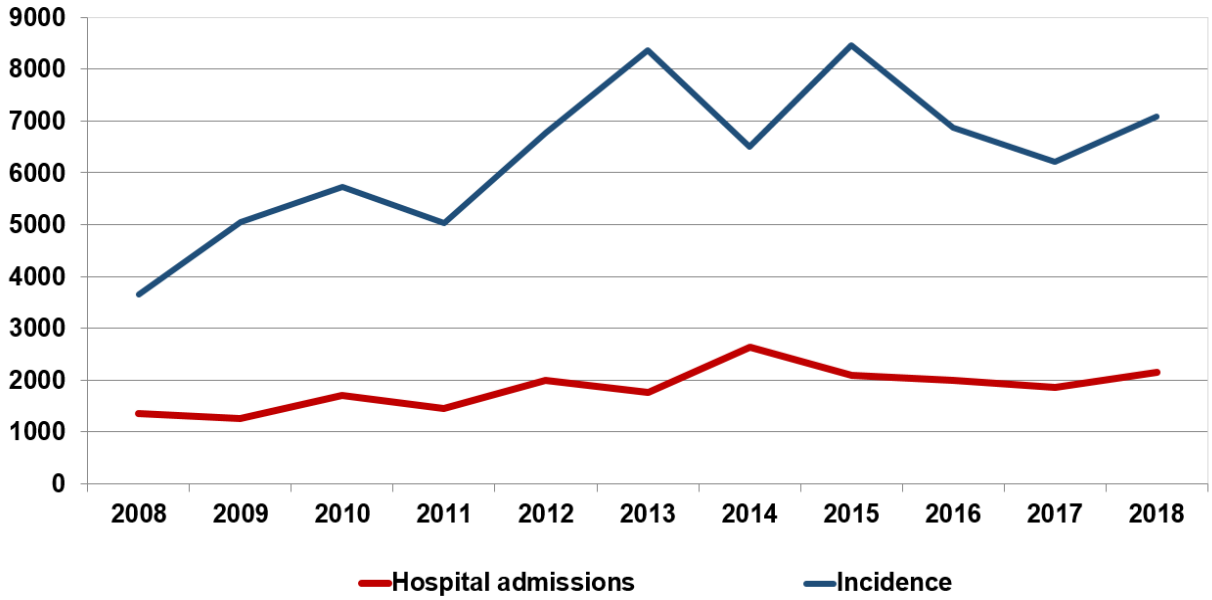
In 2018, incidence and hospitalisation rate of infectious and parasitic diseases slightly increased in the total population and in children (Figures 5.1, 5.2).

Figure 5.1 Infectious and parasitic diseases, incidence and hospital admission rates per 100000 population, Georgia



Source: NCDC

Figure 5.2 Infectious and parasitic diseases, incidence and hospital admission rates in children (rates per 100000 children), Georgia



Source: NCDC

Table 5.1 Certain infectious and parasitic diseases, incidence per 100000 population, Georgia

	All ages		Children aged under-15	
	Total number	**Incidence rate**	**Total number**	**Incidence rate**
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
2018	**102424**	**2748.6**	**53089**	**7081.5**

During the reporting period, intestinal infections had the largest share in the structure of hospital admissions of children. In particular, the share of such infections in hospital admissions in children aged under-15 was 54.6%, in infants it was 55.0%.

Table 5.2 Certain infectious and parasitic deseases, hospital discharges, all ages, Georgia

	2017			2018		
	Number of hospital discharges	**Including deaths**	**Case fatality rate (%)**	**Number of hospital discharges**	**Including deaths**	**Case fatality rate (%)**
Certain infectious and parasitic diseases	**24621**	**303**	**1.2**	**31152**	**344**	**1.1**
Including:						
Intestinal infections	11849	8	0.1	14075	19	0.1
Respiratory tuberculosis	1507	8	0.5	1563	23	1.5
Meningococcal infection	19	2	10.5	15	2	13.3
Septicaemia	783	178	22.7	1093	181	16.6
Viral hepatitis	1302	46	3.5	1870	57	3.0
Human immunodeficiency virus (HIV) disease	750	23	3.1	900	29	3.2

Table 5.3 Certain infectious and parasitic deseases, hospital discharges, children aged under-15, Georgia

	2017				2018			
	Number of hospital discharges		**Including infants**		**Number of hospital discharges**		**Including infants**	
	Total	**Case fatality rate (%)**	**Total**	**Case fatality rate (%)**	**Total**	**Case fatality rate (%)**	**Total**	**Case fatality rate (%)**
Certain infectious and parasitic diseases	**13725**	**0.4**	**3053**	**1.8**	**16814**	**0.1**	**3635**	**0.2**
Including:								
Intestinal infections	7759	0.0	1973	0.1	9192	0.03	2024	0.0
Respiratory tuberculosis	64	0.0	3	0.0	61	0.0	2	0.0
Meningococcal infection	19	10.5	4	25.0	12	8.3	5	0.0

Table 5.4 Notifiable diseases, incidence per 100000 population, Georgia, 2018

	All ages		Children	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Diphtheria	0	0.0	0	0.0
Whooping cough	558	15.0	485	64.7
Tetanus	7	0.2	1	0.1
Acute flaccid paralysis / poliomyelitis	7	0.2	7	0.9
Measles	2199	59.0	828	110.4
Rubella	0	0.0	0	0.0
Mumps	31	0.8	26	3.5
Acute viral hepatitis A	2	0.1	0	0.0
Acute viral hepatitis B	57	1.5	0	0.0
Chronic viral hepatitis B	1546	41.5	0	0.0
Viral hepatitis C	8571	230.0	17	2.3
Other viral hepatitis	48	1.3	2	0.3
Other salmonella infections	302	8.1	102	13.6
Shigellosis	589	16.2	517	69.0
Enterohaemorrhagic escherichiosis	63	1.7	19	2.5
Other bacterial foodborne intoxications	36826	988.2	14349	1914.0
Including botulism	14	0.4	0	0.0
Diarrhoea and gastroenteritis of presumed infectious origin	18604	499.2	11963	1595.7
Tularemia	0	0.0	0	0.0
Anthrax	25	0.7	1	0.1
Brucellosis	175	4.7	24	3.2
Lyme disease (Borreliosis)	400	10.7	81	10.8
Pox viral infections	34	0.9	1	0.1
Rickettsioses	4	0.2	0	0.0
Rabies	2	0.1	0	0.0
Hemorrhagic fevers of presumed viral origin	13	0.3	1	0.1
Hantavirus infection	26	0.7	3	0.4
Crimea-Congo fewer	12	0.3	0	0.0
Leptospirosis	203	5.5	7	0.9
Scarlet fever	1979	53.1	1876	250.2
Chiken pox	10196	273.6	8774	1170.3
Viral meningitis	20	0.5	13	1.7
Bacterial meningitis	107	2.9	28	3.7
Meningococcaemia	14	0.4	12	1.6
Meningitis caused by N. meningitidis	2	0.1	1	0.1
S. pneumonae infection	3	0.1	1	0.1
Meningitis caused by S. pneumonae	6	0.2	4	0.5
Meningitis caused by M. tuberculosis	43	1.2	0	0.0
Post-vaccination unusual reactions and complications	12	0.3	7	0.9
Nosocomial infections of the urinary tract	48	1.3	3	0.4
Nosocomial pneumonia	384	10.3	16	2.1
Sepsis	36	1.0	13	1.7
Surgical wound infection	63	1.7	5	0.7
Leishmaniosis	51	1.4	34	4.5
Echinococcosis	71	1.9	4	0.5
Malaria	0	0.0	0	0.0
Trichinellosis	4	0.1	0	0.0
Amebiasis	56	1.5	14	1.9
Fascioliasis	16	0.4	2	0.3
Mushroom poisoning	90	2.4	16	2.1
Poisonous reptile bite	134	3.6	22	2.9

Pulmonary and extrapulmonary tuberculosis

In Georgia, during last years, according to the World Health Organization estimates and data of local institutions, there is a trend of decrease of tuberculosis morbidity, although, indicators are high, compared to the European region and the EU countries.

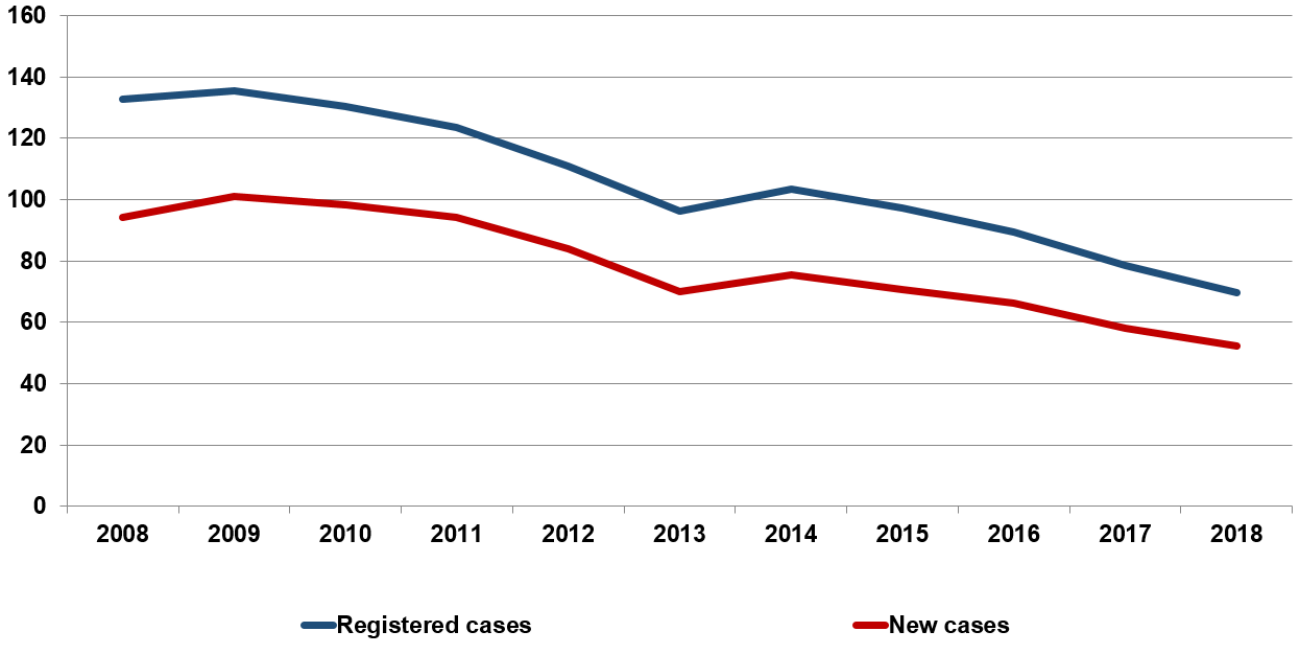
In 2018, there were 2590 cases of tuberculosis registered, including 2320 new cases and relapses.

Table 5.5 Tuberculosis morbidity rates per 100000 population, Georgia

	All forms of tuberculosis				Pulmonary tuberculosis			
	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
2018	**1944**	**52.2**	**2320**	**62.3**	**1527**	**40.9**	**1863**	**50.0**

The prevalence of all forms of tuberculosis was 69.5 per 100,000 population, incidence (considering new and relapsed cases) - 62.3, this is by 10% lower compared to the previous year (Figure 5.3)

Figure 5.3 Tuberculosis morbidity rates per 100000 population, Georgia



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

Table 5.6 Tuberculosis morbidity rates per 100000 population, Georgia

	All forms of tuberculosis		Pulmonary tuberculosis	
	Number of registered cases	Number of registered cases	Number of registered cases	Number of registered cases
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
2018	**2590**	**69.5**	**2118**	**56.8**

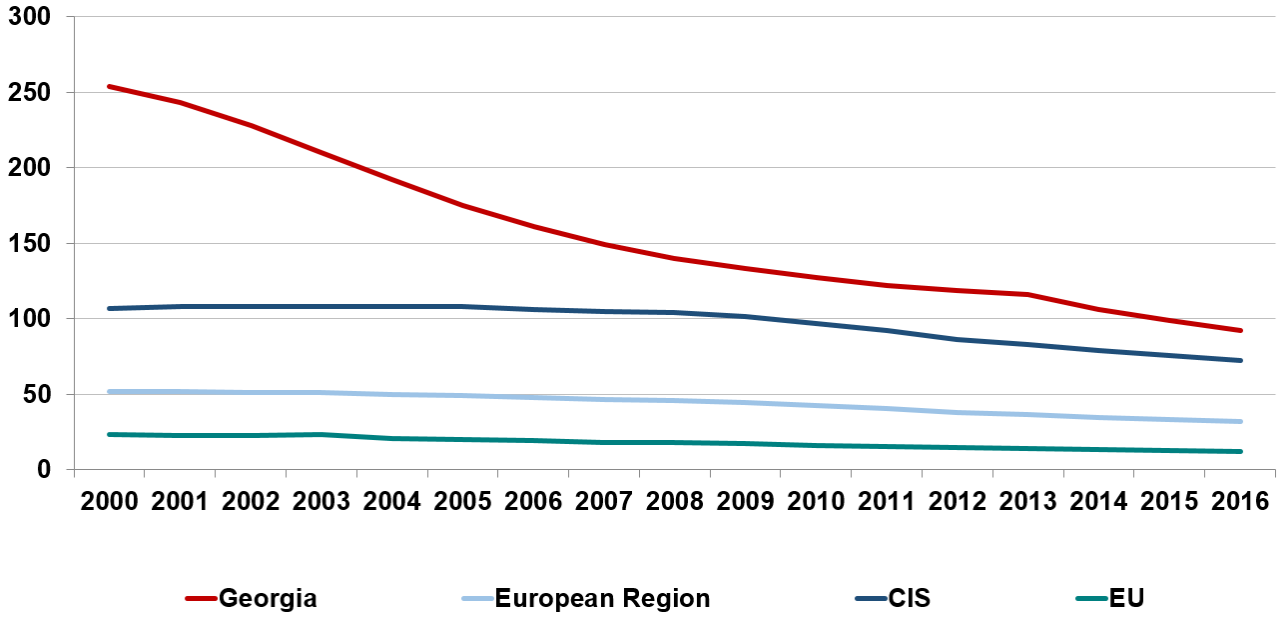
Table 5.7 Number of registered cases of extra pulmonary tuberculosis by localization, Georgia

	2015		2016		2017		2018	
	Total number	Rate per 100000 population	Total number	Rate per 100000 population	Total number	Rate per 100000 population	Total number	Rate per 100000 population
Cases of extra pulmonary tuberculosis	**694**	**18.7**	**620**	**16.7**	**551**	**14.7**	**472**	**12.7**
Tuberculosis meningitis	50	1.3	61	1.6	49	1.3	45	1.2
Bone and joint tuberculosis	118	3.2	105	2.8	99	2.7	71	1.9
Urogenital tuberculosis	102	2.7	75	2.0	49	1.3	63	1.7
Tuberculosis pleurisy	233	6.3	182	4.9	169	4.5	163	4.4
Tuberculosis of lymph nodes	191	5.1	197	5.3	185	4.9	130	1.4

In 2018, about 2.0% of new tuberculosis cases and relapses are reported by the penitentiary system (2.8%- in 2017). In 2018, the share of pulmonary tuberculosis was 78.6% of the new cases of all forms tuberculosis.

In Georgia, tuberculosis incidence, despite of the decline, significantly exceeds the European region and the EU countries' tuberculosis rates (Figure 5.4).

Figure 5.4 Tuberculosis incidence, WHO estimates



Source: WHO HFA DB

In Georgia, according to the *Washington Institute for Health Metrics and Evaluation* (*IHME*) projections, decline of tuberculosis incidence is expected (Figure 5.5).

Figure 5.5 Tuberculosis incidence rate per 100000 population, Georgia

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

The “successful treatment” of the new cases of pulmonary BK+ tuberculosis repersents a good assessment characteristic of the tuberculosis control and management. In 2005, “successful treatment” of new cases of pulmonary BK+ tuberculosis showed only 64.1%. In 2014 and 2015, this indicator increased up to 81% (cohort of 2013), in 2017 – 85% (cohort of 2016). In 2018 (cohort of 2017) according to the preliminary data, this percent is 82%, the final data will be available at the beginning of 2020.

Table 5.8 Results of treatment of new cases of smear positive pulmonary tuberculosis, registered 12 months ago, Georgia

	2011	2012	2013	2014	2015	2016	2017	2018
Number of registered cases	**2143**	**2028**	**1647**	**1332**	**1003**	**782**	**725**	**604**
% of total:								
Recovered	67.0	68.3	65.6	64.1	73.0	77.1	77.3	77
Completed treatment	9.5	7.7	8.8	7.1	7.9	6.0	6.6	5
Unsuccessful treatment	1.9	3.1	4.3	3.8	4.6	4.6	3.7	6
Died	2.9	2.3	2.0	3.2	4.2	4.3	3.4	4
Interrupted treatment	6.7	5.1	5.5	6.6	7.7	6.5	6.7	5
Not evaluated	1.4	1.2	2.3	2.9	2.7	1.4	2.0	3

The share of extensively resistant tuberculosis (XDR-tuberculosis) of multi resistant tuberculosis (MDR-tuberculosis) cases is 10%. This has got a growing tendency, in 2017 - 15%, in 2018 -18%.

The share of HIV co-infection of new MDR cases is 7%. The shares of new and relapsed RR/XDR cases constituted 10.4% and 23.0% of the total number of tuberculosis cases correspondingly.

Access to the first and the second line drugs is universal in the country. New tuberculosis drugs (Delamanid and Bedaquiline) are available within the tuberculosis State program.

In 2018, according to the National Office of Statistics, tuberculosis as the primary cause of death was mentioned in 92 cases, the tuberculosis death rate was 2.5 per 100000 population (2017 - 1.9).

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 2018, in Georgia, 672 new cases of HIV were registered (incidence per 100000 population – 18.0).

In 2018, in the frame of HIV / AIDS of the Global Fund State Program, 188142 tests (in 2017 - 77 800 tests) were conducted, including 3315 tests for children.

Last years, in the frame of different state programs (Maternal and Child health, Safe blood, HIV / AIDS 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.

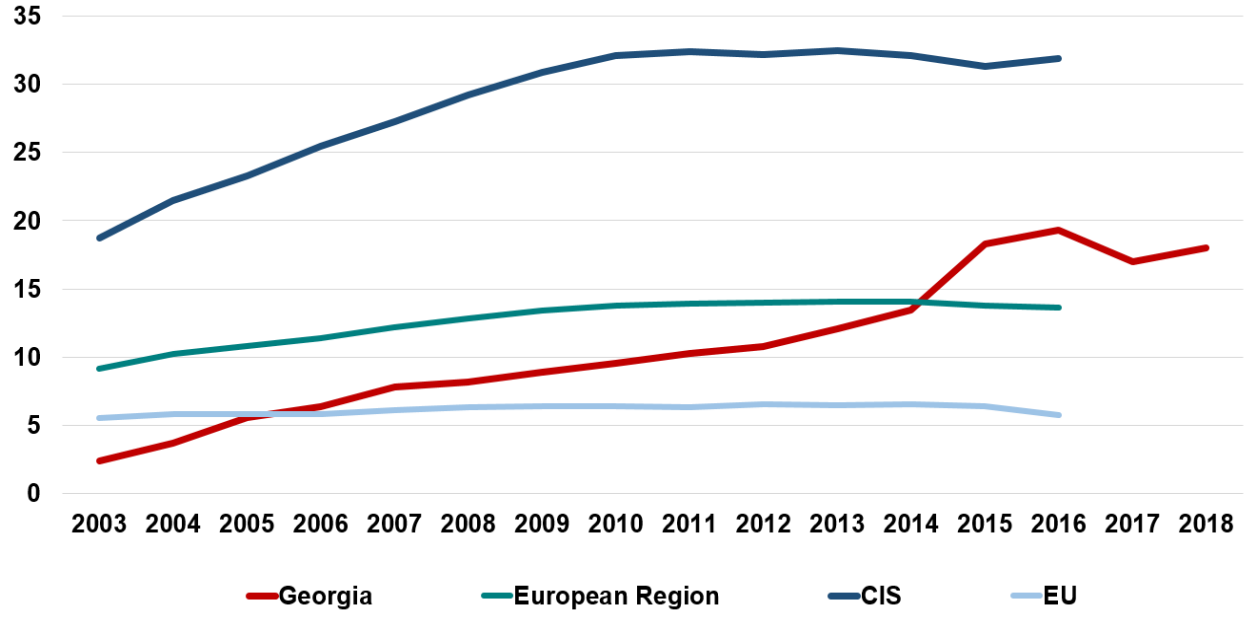
The United Nation’s program on HIV/AIDS 90-90-90 is a set of goals (by 2020, 90% of people, who are HIV infected, will be diagnosed, 90% of people, who are diagnosed, will be on antiretroviral treatment, and 90% of those, who receive antiretroviral therapy, will be virally suppressed (viral suppression is when a person’s viral load, or the amount of virus in an HIV-positive person’s blood, is reduced to an undetectable level). The country holds important positions on the second and third targets, but is lagging behind the first 90. Specifically, in 2018, 40.6% of new HIV cases are diagnosed with AIDS.

Georgia, compared to other countries of the region, has high level of achievement of the UN's second and third 90 goals - rates of HIV infection inclusion and achievement of viral suppression.

The Government and the Global Fund provide universal access to antiretroviral drugs for AIDS patients (including the population of Abkhazia).

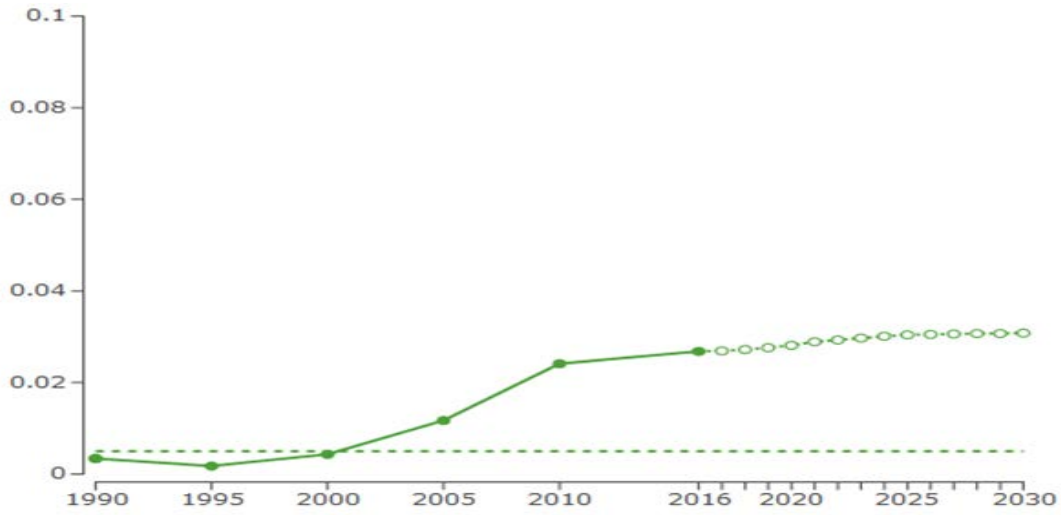
Georgia's antiretroviral treatment program is recognized as one of the best in Eastern Europe and Central Asia.The program is characterized by a high volume, sustainability, high quality of services, provided throughout the country. Universal access of HIV / AIDS patients to antiretroviral drugs, is 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, significantly improves the treatment outcomes and promotes HIV / AIDS proliferation in the country (Figure 5.6, 5.7).

Figure 5.6 HIV incidence per 100000 population



Source: WHO HFA DB

Figure 5.7 HIV incidence per 100000 population, Georgia



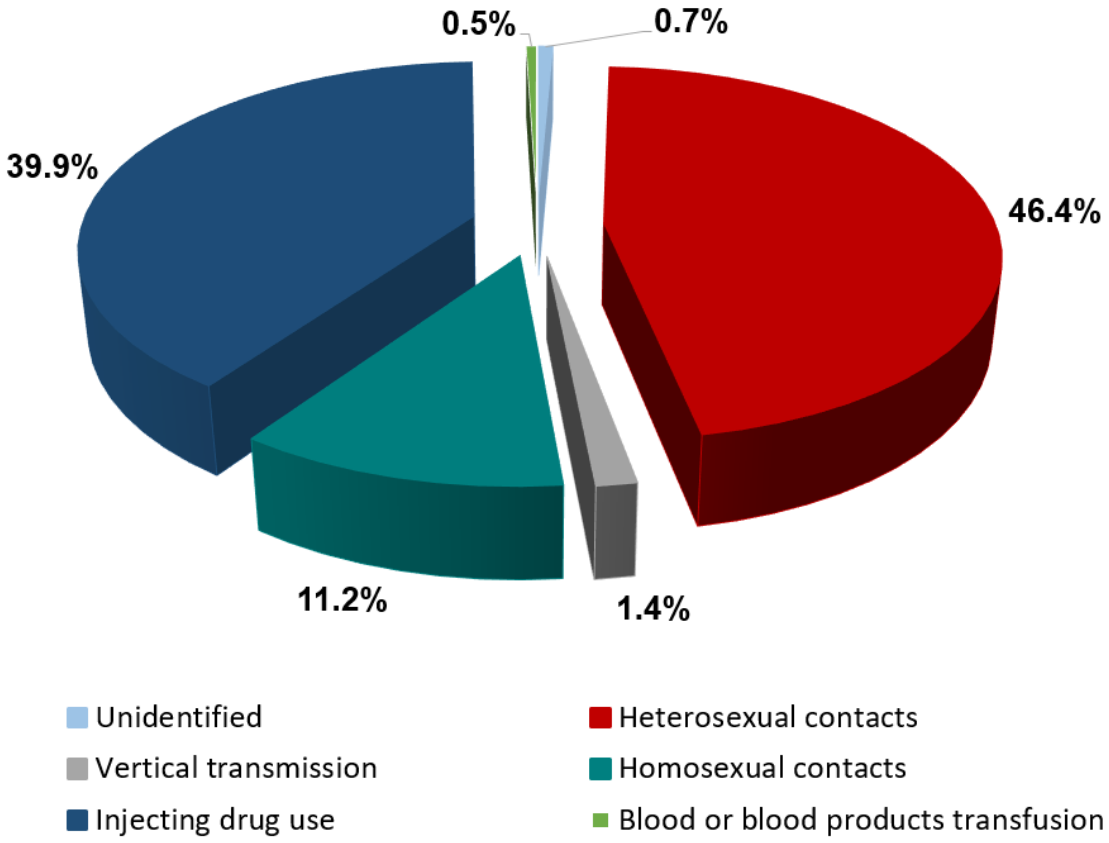
Source: http://www.thelancet.com/lancet/visualisations/gbd-SDGs

Table 5.9 HIV, new cases by mode of transmission (in %), Georgia

Mode of transmission	2017	2018
Injecting drug use	23.5	16.2
Heterosexual contacts	54.0	62.8
Homosexual contacts	20.6	19.5
Vertical transmission	0.5	0.00
Blood or blood products transfusion	0.8	0.9
Unidentified	0.6	0.6

Source: Center for infectious pathology, AIDS and clinical immunology

Figure 5.8 New cases of HIV infection, by modes of transmission (%), Georgia, 2018



Source: Center for infectious pathology, AIDS and clinical immunology

Table 5.10 New cases of HIV infection, Georgia

	1990	2000	2010	2015	2016	2017	2018
All ages	**0**	**2.0**	**6.7**	**15.1**	**19.3**	**16.9**	**18.0**
In population aged 15-24	0	1.6	2.8	9.1	14.5	14.1	25.4

Table 5.11 New cases of HIV infection, incidence by sex, Georgia

	2016		2017		2018	
	Total	**Incidence per 100000 population**	**Total**	**Incidence per 100000 population**	**Total**	**Incidence per 100000 population**
Male	558	31.3	499	27.9	513	28.6
Female	161	8.3	132	6.8	159	8.2
Both sexes	**719**	**19.3**	**631**	**16.9**	**672**	18.0

Table 5.12 New cases of HIV infection by modes of transmission, Georgia

	2016		2017		2018	
	Number	**%**	**Number**	**%**	**Number**	**%**
Injecting drug use	218	30.3	148	23.5	109	16.2
Heterosexual contacts	370	51.5	341	54.0	422	62.8
Homosexual contacts	121	16.8	130	20.6	131	19.5
Blood or blood products transfusion	2	0.3	5	0.8	0	0.00
Vertical transmission	4	0.6	3	0.5	6	0.9
Unidentified	4	0.6	4	0.6	4	0.6
Total	**719**	**100.0**	**631**	**100.0**	**672**	**100.0**

Table 5.13 Case fatality of HIV-infected patients by causes of death, Georgia

	2016		2017		2018	
	Number of deaths	**%**	**Number of deaths**	**%**	**Number of deaths**	**%**
HIV related	81	63.3	77	55.4	74	54.8
Non-HIV deaths	37	28.9	25	18.0	33	24.4
Unknown	10	7.8	37	26.6	28	20.7
Total	**128**	**100.0**	**139**	**100.0**	**135**	**100.0**

In Georgia (first among countries of the South Caucasus), a pilot program of preventive antiviral treatment (PrEP) of the MSM population, which started in 2017, successfully continued in 2018. The program allows to avoid getting of HIV infection for people with high risk by implementing an antiviral preventive treatment. It is planned to enlarge a geographical access to the program and to involve other high-risk populations.

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, estimated national seroprevalence of hepatitis C is 7.7% and the prevalence of active disease is 5.4%. The study was conducted by the National Center for Disease Control and Public Health (NCDC) and the US Centers for Disease Control and Prevention (CDC) in May-August 2015.

Progress of the Hepatitis C elimination program

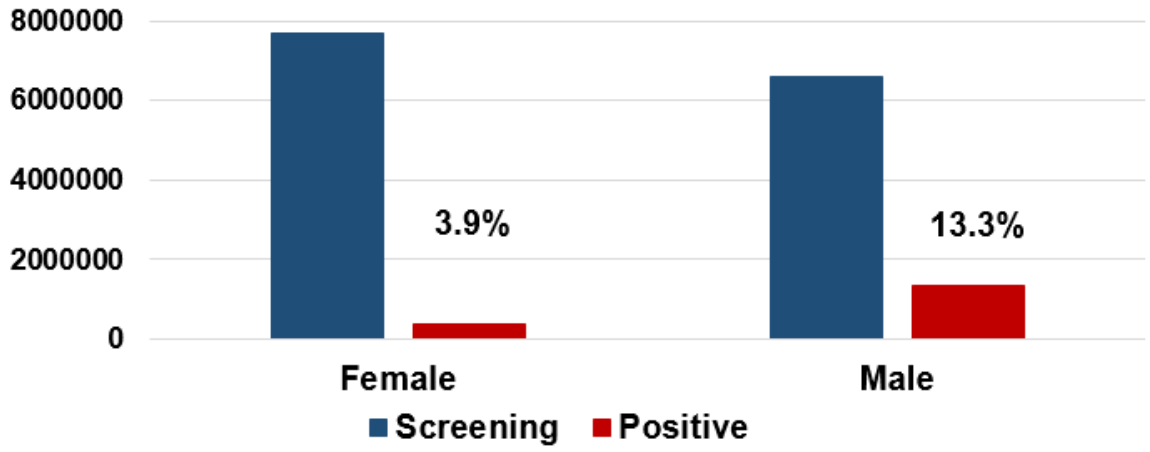
- The Government of Georgia, with support of CDC and other international partners showed a strong political will to fight against Hepatitis C. In 2015, State Program for Hepatitis C Elimination was launched.
- Last few years, the Government of Georgia substantially strengthened efforts to fight against 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 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.
- Traditionally, a special session was held at the EASL International Liver Congress in Paris to discuss the progress of the current elimination program in the country.
- On February 11-13, 2019, the World Health Organization held its first regional consultation on viral hepatitis in the WHO European Region - "Achievements on the Elimination Pathway", to review the countries' progress and challenges and share experiences in the process of tackling the spread of viral hepatitis.At the International Liver Congress in 2019, Georgia was granted the status of the world's first "Center of Excellence in Viral Hepatitis Elimination"

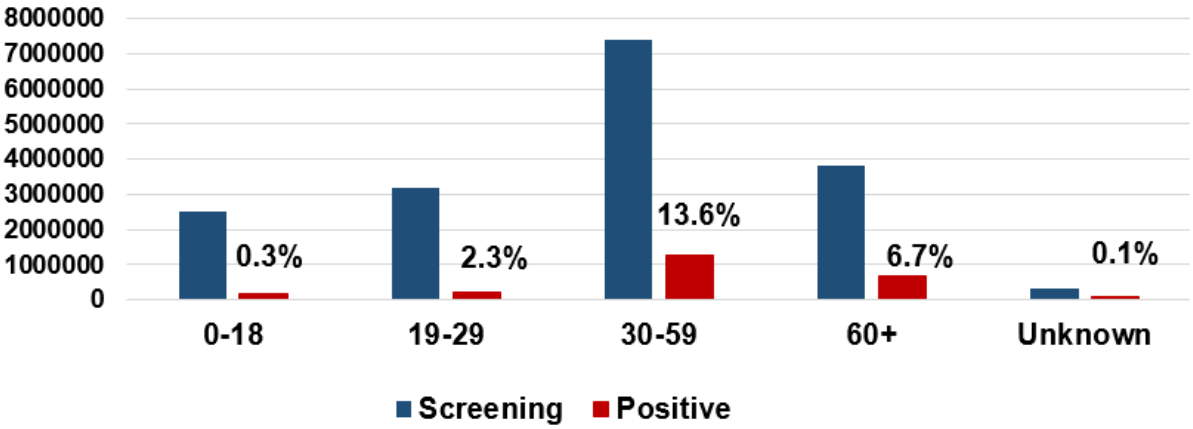
By June 30, 2019, more than 2.8 million conducted screening tests were registred in the module, this covers more than 1.7 million screened individuals, with a positive rate of 7.82% (Figure 5.9, 5.10).

Figure 5.9 Number of population covered by screening, by sex and result of testing



Source: NCDC

Figure 5.10 Number of population covered by screening, by age and result of testing



Source: NCDC

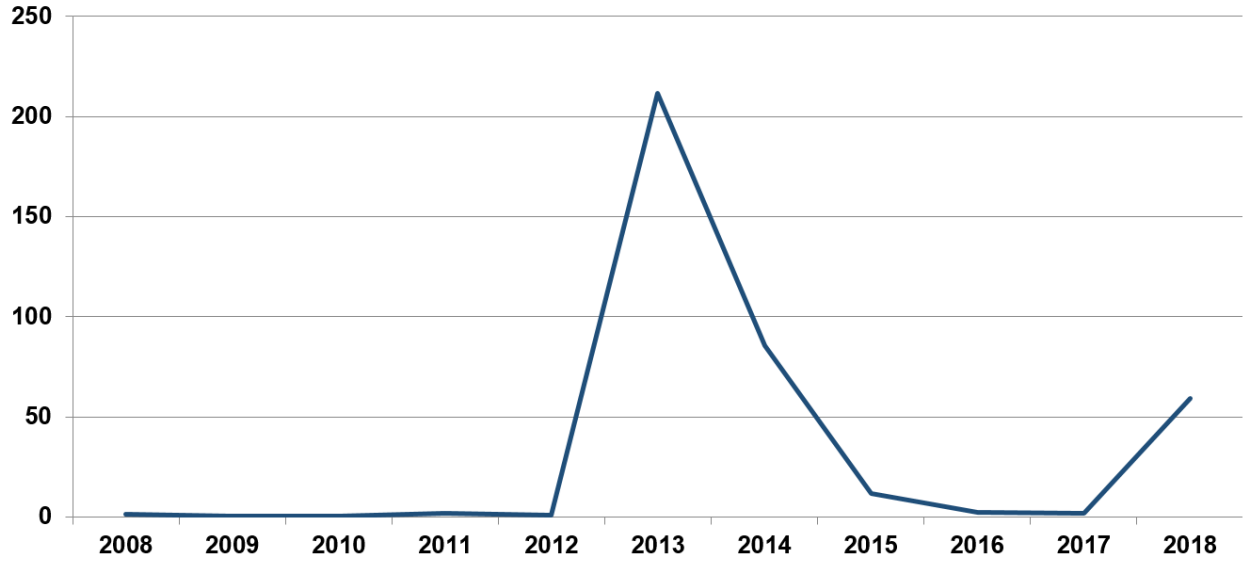
42 centers across the country (including one in the penitential system) offer to beneficiaries of the elimination program diagnostics and treatment services. Since the start of the program (April 2015), till June 30, 2019, 52053 patients have completed treatment. The cure rate is 98.1%.

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.

In 2018, there was a significant increase of new cases (2017 - 94; 2018 - 2199) and consequently increasing of incidence (2017- 1.68, 2018 - 59.01) (Figure 5.11).

Figure 5.11 Measles, incidence per 100000 population

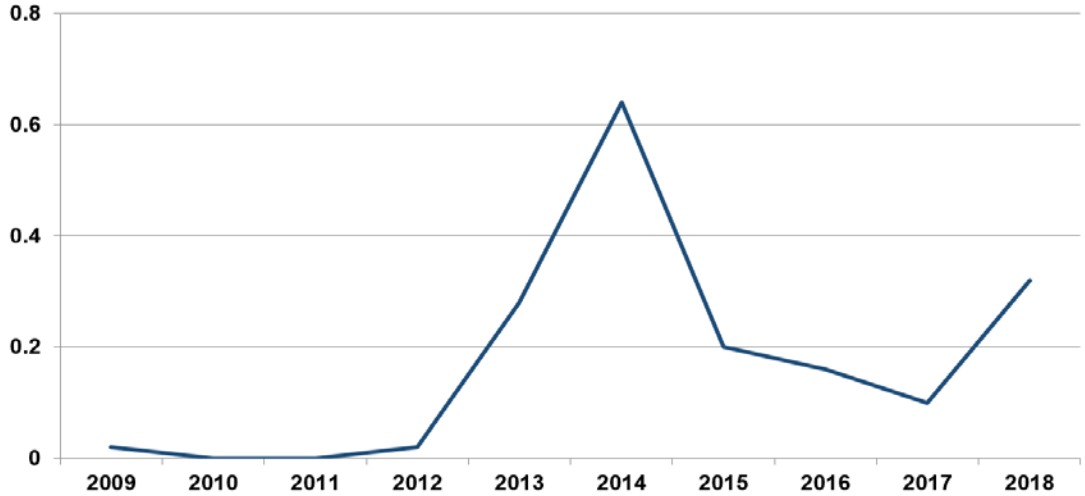


Source: NCDC

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). In 2018, 12 cases of Crimean-Congo fever were registred (Figure 5.12).

Figure 5.12 Crimean-Congo fever, incidence per 100000 population, Georgia



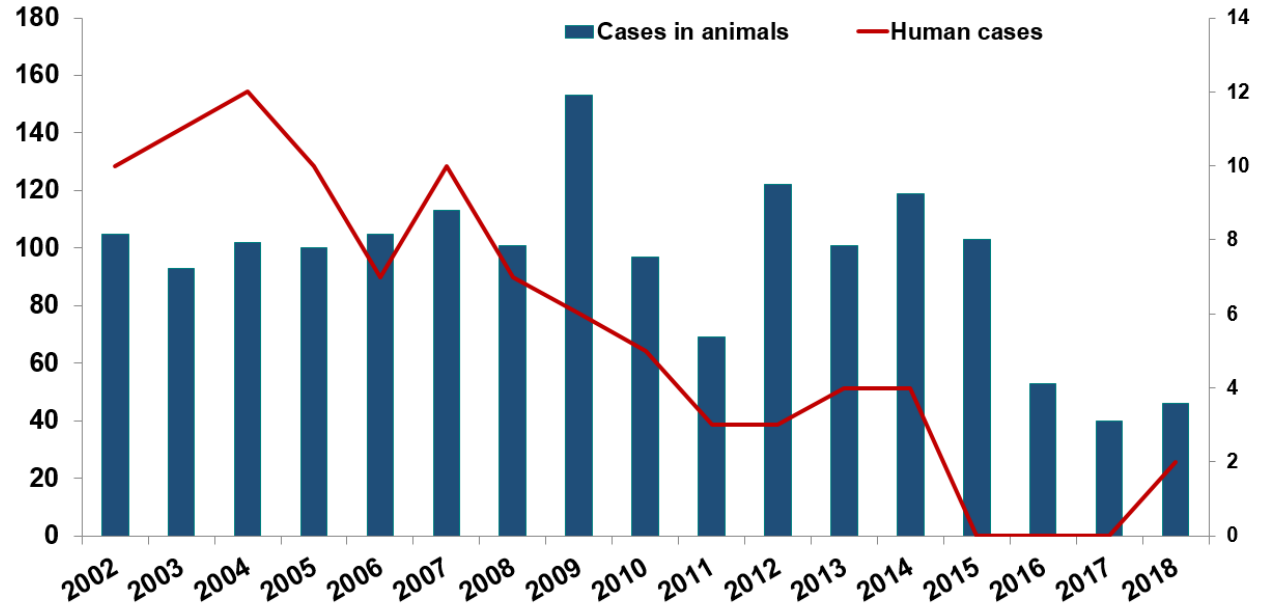
Source: NCDC

Rabies

In Georgia, during ten years (1997-2006) there were 96 cases of rabies registered, during following years (2007-2014) more 42 cases were identified. The annual maximum number of cases of rabies in humans (21 cases) was recorded in 1996.

Anti-rabies vaccine is administered to approximately 35,000-49,000 people per year. Continious provision of the anti-rabies serum (immunoglobulin) and vaccines created a good background to reach the zero incidence of rabies rate in humans in 2015. In 2016-2017, this sustained. In 2018, after three years of zero incidence, 2 cases of rabies were reported (Figure 5.13).

Figure 5.13 Number of cases of rabies, Georgia



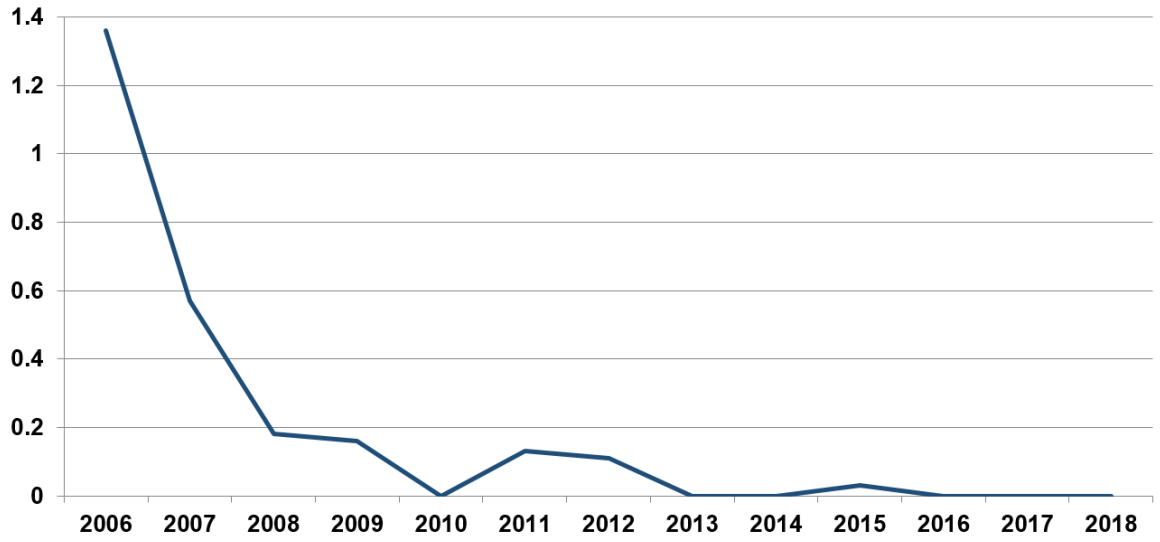
Source: NCDC

Malaria

Since 2002, malaria incidence has been substantially reduced, reaching zero point in 2013 – 2014. In 2018, surveillance was conducted on 11 suspected cases, of which malaria was confirmed in 9 cases (all imported). Among the confirmed cases, there were 3 foreign nationals and 6 Georgian nationals, which worked outside the country.

In 2018, 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 9261030 m^2 of external and internal territories (in 2017 – 9000000 m^2, in 2016 – 7500000 m^2) (Figure 5.14).

Figure 5.14 Malaria incidence per 100000 population, Georgia



Source: NCDC

Sexually transmitted infections

Last years, in Georgia, an increase of the number of cases of sexually transmitted infections is registered. The most prevalent infections are trichomoniasis, chlamydia and syphilis, followed by genital herpes and gonorrhea.

Table 5.14 Sexually transmitted infections, incidence, Georgia

	2016		2017		2018	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Syphilis	1349	36.3	1244	33.4	1243	33.4
Gonococcal infection	923	24.8	798	21.4	765	20.5
Chlamydia infection	2507	67.4	2446	65.6	2084	55.9
Trichomoniasis	6880	185.0	5933	159.1	5137	137.8

Table 5.15 Sexually transmitted infections, distribution of new cases according to age and sex, Georgia, 2018

	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	773	43.2	0	0	18	16.4	239	95.0	251	95.9	265	34.1
	F	470	24.3	2	1.5	5	5.1	109	45.6	174	66.2	180	18.4
Gonococcal infection	M	580	32.4	0	0	37	33.7	361	143.5	137	52.4	45	5.8
	F	185	9.6	0	0	1	1.0	88	36.8	66	25.1	30	3.1
Chlamydia infection	M	614	34.3	0	0	29	26.4	279	110.9	226	86.4	80	10.3
	F	1470	76.0	0	0	57	58.5	765	320.2	501	190.6	147	15.0
Trichomoniasis	M	1207	67.4	1	0.7	28	25.5	588	233.7	392	149.8	198	25.5
	F	3930	20.3	46	34.1	221	226.9	1906	797.8	1162	442.0	595	60.8

Noncommunicable Diseases

Noncommunicable diseases bring the most of the burden of disease in Georgia and have a great impact on the most productive years of life. Noncommunicable diseases affect not only health, but also the country's sustainable development.

Effective prevention and control of noncommunicable diseases requires access to accurate and reliable information, monitoring and identification of health indicators, monitoring and evaluation of interventions.

Georgia has adopted the WHO STEPS methodology for effective control of noncommunicable diseases. In 2010 and 2016 STEPS surveys were carried out with technical and financial assistance of the WHO European office and WHO Headquarters. That gave a unique opportunity for comparison the data with other countries, but also to monitor and evaluate noncommunicable diseases and their risk factors in Georgia. These are just the first steps towards establishing a sustainable surveillance system that has improved the capacity at the national level and gave better health data and better opportunities for effective prevention and control of noncommunicable diseases and improve health of citizens.

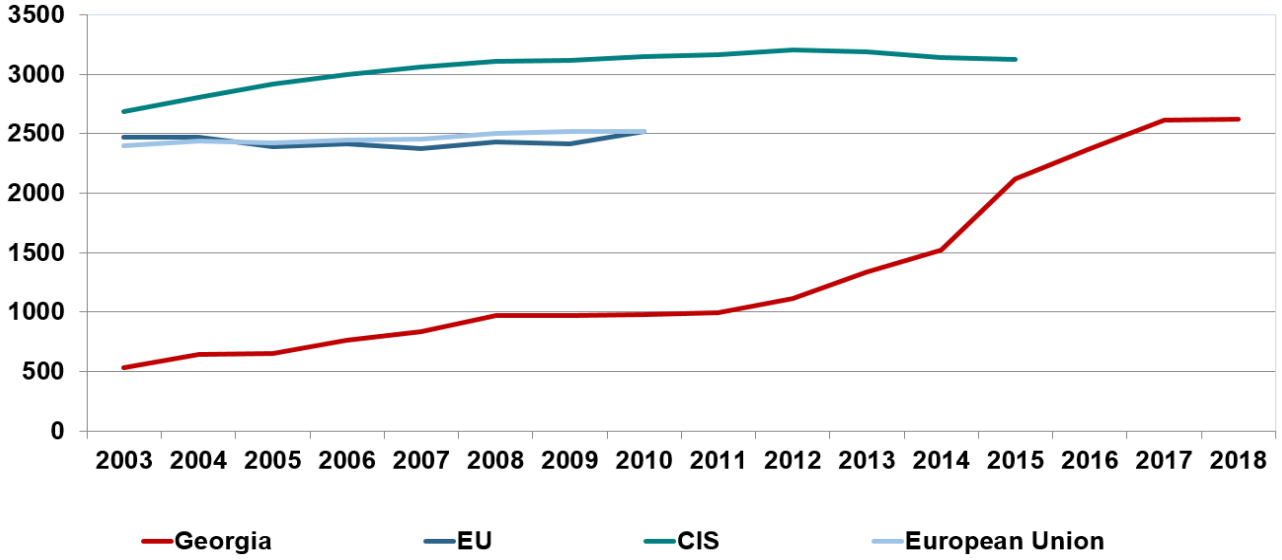
Since 2017, the Government has launched a program for socially vulnerable population, which considered provision of drugs for chronic noncommunicable diseases (ischemic heart disease, hypertension, heart failure, asthma, diabetes type 2, and thyroid gland diseases) treatment.

Diseases of the circulatory system

Diseases of the circulatory system constitute 15.3% of all registered and 7.4% of all new cases of diseases registered in the country. Hypertension, ischaemic heart diseases, and cerebrovascular diseases have high morbidity and mortality.

In 2000–2018, in Georgia, the prevalence of diseases of circulatory system had an increasing trend (Figure 5.15).

Figure 5.15 The circulatory system diseases, hospital discharges 100000 population

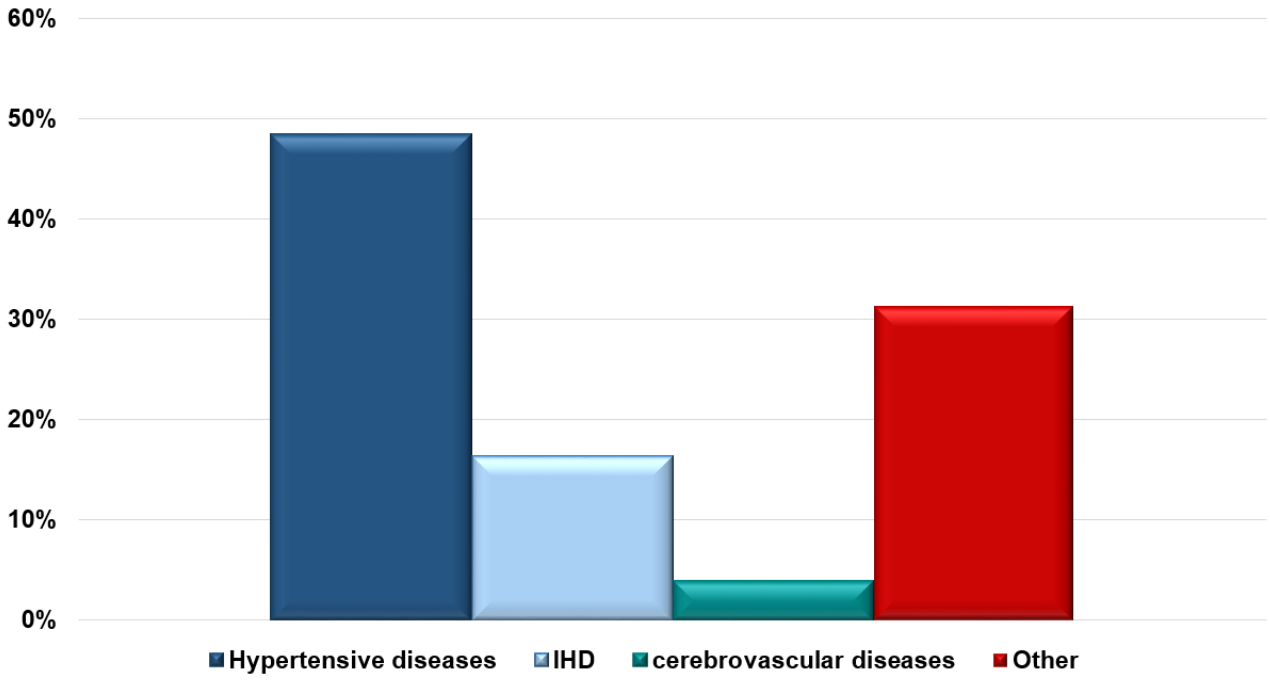


Source: WHO HFA DB; NCDC

Table 5.16 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	429932	10950.6	184729	4955.2	879	119.0	1555	210.4
2018	**408233**	**10954.7**	**147979**	**3970.9**	**993**	**133.0**	**2077**	**277.0**

Figure 5.16 Diseases of the circulatory system, registered cases structure (%), Georgia, 2018



Source: NCDC

Table 5.17 Circulatory system diseases according to certain groups of diseases, Georgia, 2018

	Registered cases by the end of the year				New cases			
	All ages		In children		All ages		In children	
	Number	%	Number	%	Number	%	Number	%
Diseases of the circulatory system	**408233**	**100**	**993**	**100**	**147979**	**100**	**2077**	**100**
Including:								
Acute rheumatic fever	1870	0.5	91	9.2	3447	2.3	335	16.1
Chronic rheumatic heart diseases	6844	1.7	152	15.3	2753	1.9	27	1.3
Hypertensive diseases	264496	64.8	13	1.3	71725	48.5	37	1.8
Ischaemic heart diseases	70671	17.3	0	0.0	24238	16.4	0	0.0
Pulmonary heart disease and diseases of pulmonary circulation	1272	0.3	0	0.0	796	0.5	0	0.0
Cerebrovascular diseases	11530	2.8	3	0.3	5902	4.0	45	2.2
Diseases of arteries, arterioles and capillaries	6512	1.6	0	0.0	5156	3.5	0	0.0
Other diseases of the circulatory system	27490	6.7	225	24.7	16803	11.4	277	13.3

Hypertension

The share of hypertension constitutes about 64.8% of all cardiovascular diseases registred by the end of the year in Georgia (2018). 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%.

Cerebrovascular diseases

Cerebrovascular diseases occupied the third place among diseases of the circulatory system.

Ischaemic heart diseases

Ischaemic heart diseases constitute about 16.3% of all new cases of diseases of the circulatory system: angina pectoris – 4.9%; acute myocardial infarction – 2.2%, other acute ischaemic diseases – 1.5%.

Table 5.18 Ischaemic heart diseases, distribution by certain groups of diseases, Georgia, 2018

	New cases	
	Number	%
Ischaemic heart diseases	**24238**	**100**
Including:		
Angina pectoris	7322	30.2
Acute myocardial infarction	3211	13.2
Other acute Ischaemic heart diseases	2228	9.2

Table 5.19 Rheumatic diseases, morbidity rates, Georgia, 2018

	New cases	Incidence per 100000 population
Rheumatic heart diseases	**6200**	**166.4**
Acute rheumatic fever	3447	92.5
Including rheumatic fever with heart involvement	432	11.6
Chronic rheumatic heart diseases	2753	73.9

Endocrine, nutritional and metabolic diseases

The share of endocrine system diseases is quite high in the noncommunicable diseases structure, especially diabetes and thyroid disease have got high morbidity rates.

Table 5.20 Endocrine, nutritional and metabolic diseases, 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	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	1001.8
2018	**183487**	**4923.8**	**83135**	**2230.9**	**5660**	**755.0**	**5485**	**731.6**

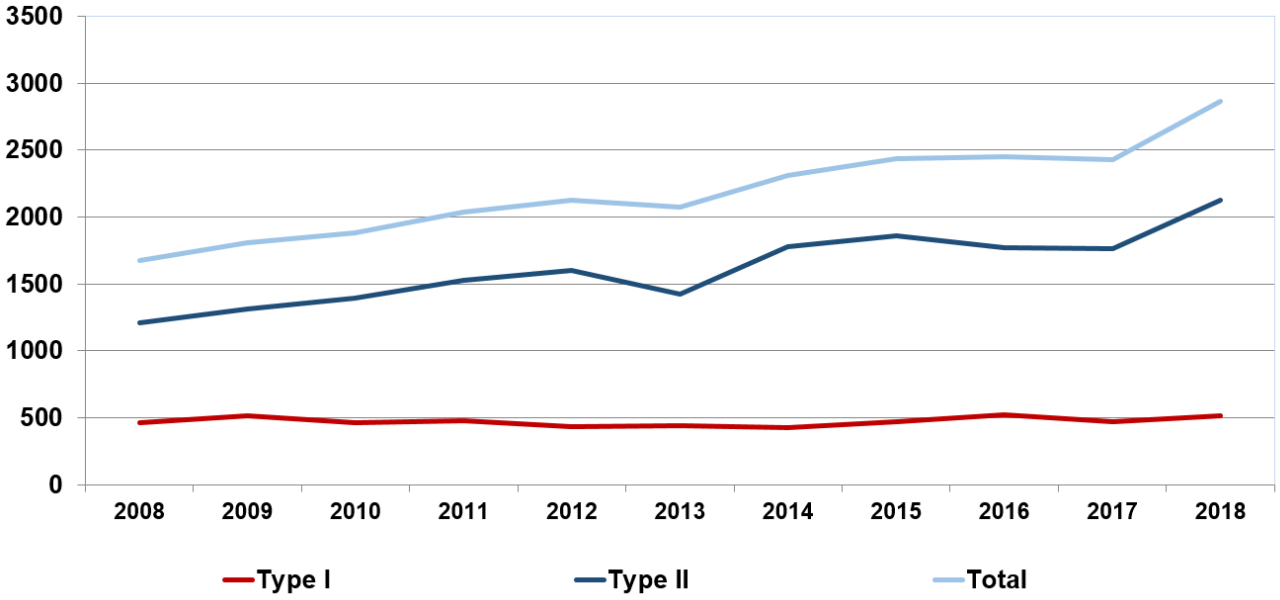
Table 5.21 Endocrine, nutritional and metabolic diseases, Georgia

	2017				2018			
	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	**183093**	**4911.3**	**87855**	**2356.6**	**183487**	**4923.8**	**83135**	**2230.9**
Including:								
Sub clinical iodine-deficiency hypothyroidism and other hypothyroidism	34648	929.4	6008	161.2	35357	939.7	22998	611.2
Thyrotoxicosis	9628	258.3	6063	162.6	8261	219.6	5217	138.7
Thyrotoxicosis (hyperthyroidism)	7140	191.5	3575	95.9	6329	168.2	3130	83.2
Diabetes mellitus type I	17567	471.2	2776	74.5	14277	379.5	2518	66.9
Diabetes mellitus type II	65721	1762.9	12931	346.9	63271	1681.6	11752	312.3

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 2018, 1.0% of new cases of diabetes type 1 were registered in children aged under-15. There were only 3 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 5.17).

Figure 5.17 Diabetes Mellitus, prevalence by type, Georgia



Source: NCDC

Table 5.22 Diabetes Mellitus, all ages, Georgia

New cases	2017		2018	
	Total number	Incidence per 100000 population	Total number	Incidence per 100000 population
Diabetes mellitus	**21822**	**585.4**	**19054**	**506.4**
Diabetes mellitus type I	*2776*	74.5	2518	66.9
Diabetes mellitus type II	12931	346.9	11752	312.3
Number of patients enrolled by the end of the year	**Total number**	**Prevalence per 100000 children**	**Total number**	**Prevalence per 100000 children**
Diabetes mellitus	**90599**	**2430.2**	**86709**	**2304.6**
Diabetes mellitus type I	17567	471.2	14277	379.5
Diabetes mellitus type II	65721	1762.9	63271	1681.6

Table 5.23 Diabetes Mellitus, children aged under-15, Georgia

New cases	2017		2018	
	Total number	Incidence per 100000 children	Total number	Incidence per 100000 children
Diabetes mellitus	**171**	**23.1**	**236**	**31.5**
Diabetes mellitus type I	126	17.1	193	25.7
Diabetes mellitus type II	33	4.5	3	0.4
Number of patients enrolled by the end of the year	**Total number**	**Prevalence per 100000 children**	**Total number**	**Prevalence per 100000 children**
Diabetes mellitus	**410**	**55.5**	**464**	**61,9**
Diabetes mellitus type I	267	36.1	369	49,2
Diabetes mellitus type II	65	8.8	11	1.5

Diseases of the respiratory system

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.

Table 5.24 Diseases of the respiratory 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	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
2018	**714425**	**19171.2**	**641365**	**17210.7**	**300097**	**40027.9**	**288774**	**38517.6**

In 2018, chronic obstructive pulmonary diseases (COPD) constituted 75.9% of all registered cases of lower respiratory chronic diseases. Tobacco smoke (including passive smoking) and vaping are the main risk factors for chronic pulmonary diseases. Other risk factors are: ambient and indoor air pollution, occupational dust and chemicals.

Table 5.25 Diseases of the respiratory system by certain groups of diseases, Georgia, 2018

	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	**19171.2**	**17210.7**	**40027.9**	**38517.6**
Including:				
Acute upper respiratory infections	10694.8	10632.2	27699.8	27635.3
Pneumonia	1189.1	1186.9	1832.2	1832.0
Other lower respiratory infections	2786.6	2549.1	5262.4	4872.9
Other diseases of upper respiratory tract	2137.3	1395.9	2981.7	2071.2
Including allergic rhinitis	413.4	180.9	429.0	238.0
Chronic lower respiratory diseases	1314.3	459.0	370.4	232.6
Including: chronic and not specified bronchitis	740.4	292.3	281.2	204.1
emphysema	29.7	7.5	0.7	0.0
asthma and status asthmaticus	316.5	83.1	81.5	26.3
other chronic obstructive pulmonary disease	218.1	74.3	6.3	2.0
bronchiectasis	9.7	1.8	0.8	0.3
Lung diseases due to external agents	30.5	27.3	2.5	2.5
Other respiratory diseases principally affecting the interstitium	15.4	6.0	1.9	1.3
Suppurative and necrotic conditions of the lower respiratory tract	2.3	0.9	0.5	0.5
Other diseases of the respiratory system	112.7	86.5	86.0	80.4

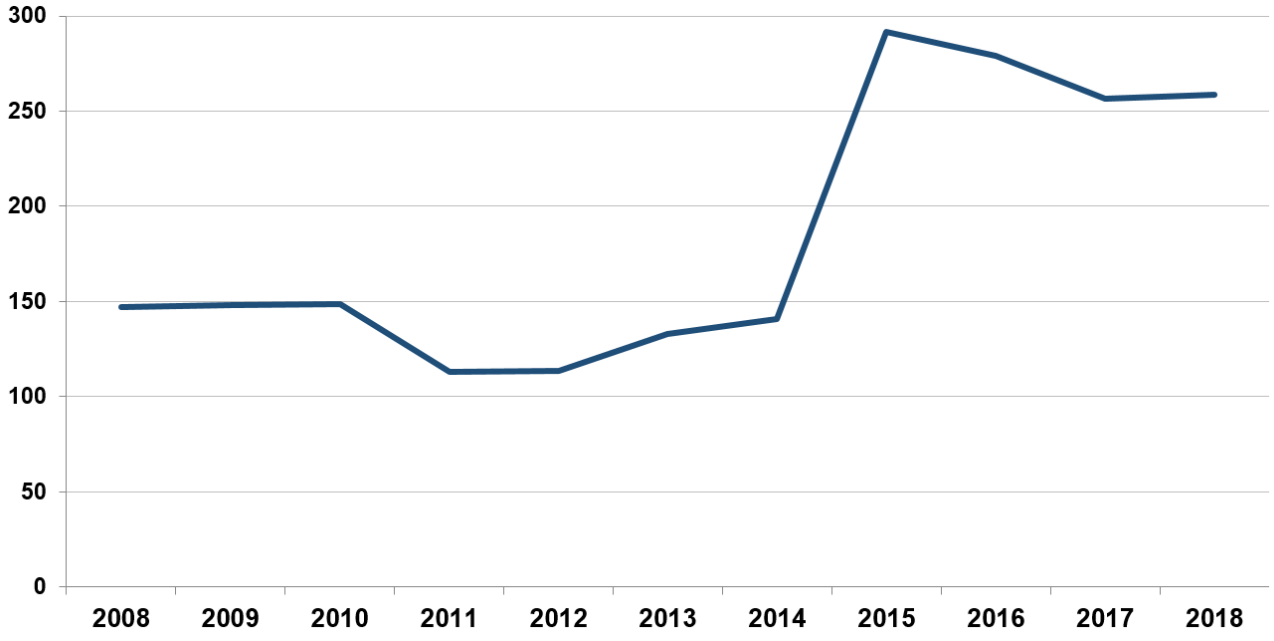
Malignant neoplasms[5]

Population cancer registry was established in 2015 in order to improve cancer registration and surveillance.

In 2016-2017, according to the registry, the number of new cases declined, although, in 2018, this number slightly increased. This could be explained by gaps existed during the implementation of the new accounting system: within the first year a certain number of "old" cases possibly were registered as new and the number of incident cases was artificially increased. Also a completeness of reporting must be evaluated. This makes necessary a development and implementation of a mechanism for monitoring and evaluation of the effectiveness of the reporting system.

According to the PCR data, 10881 new cases of malignant neoplasms, including non-melanoma skin cancers and cancers in situ, were registered in 2015 (incidence rate per 100 000 population – 291.9). In 2018, 9635 new cases of cancer were registered (incidence rate per 100 000 population – 258.6) (Figure 5.18).

Figure 5.18 Malignant neoplasms, incidence per 100000 population, Georgia



Source: NCDC

Table 5.26 Malignant neoplasms, incidence rates, Georgia

	Number of new cases	Incidence per 100000 population
2015	10881	291.9
2016	10404	279.1
2017	9562	256.6
2018	9635	258.5

[5] *According to the Cancer Registry database downloaded on 09.07.2019*

In 2018, 56.8% of all new cases were registered in females and 43.2% in men.

In 2018, 70.0% of all cancers are registered in the working age population (30 - 70 years), about 26.3% of cases at the age of 70 years and more; 0.7% of all cancer are registered in children under-15; 0.6% of cases, in adolescents (15 – 20 years of age) (Figure 5.19).

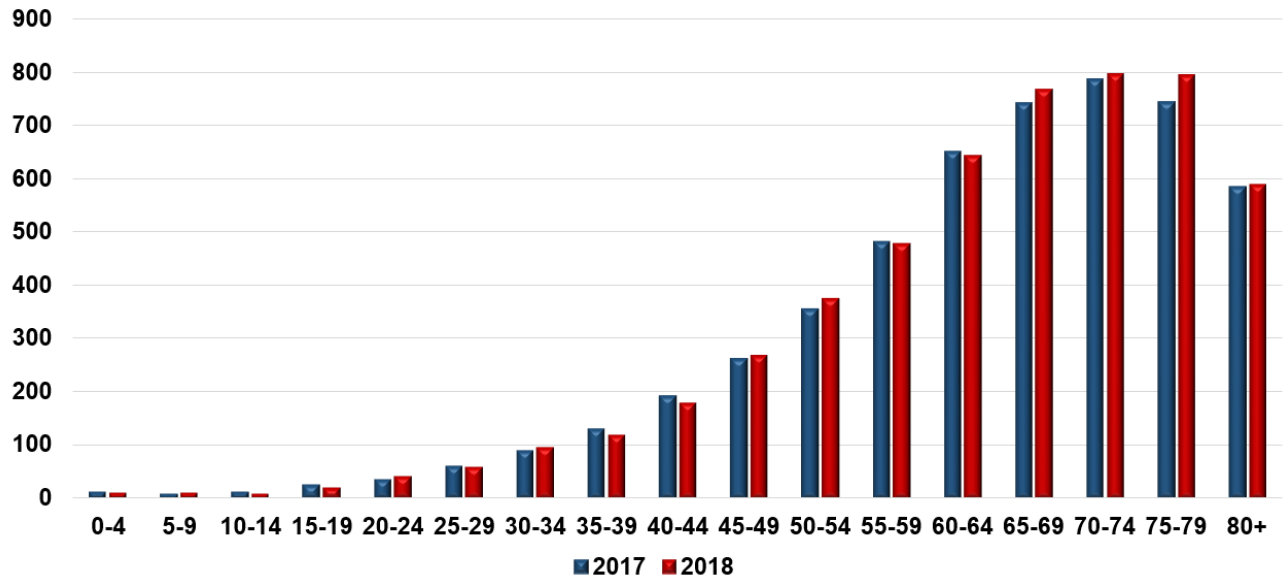
Table 5.27 Five most common sites of cancer in women, Georgia, 2018

Site	Number of new cases	Share of all new cases registered in women (%)
Breast	1603	29.3
Thyroid gland	934	17.0
Colorectal	332	6.1
Cervix uteri	328	6.0
Corpus uteri	276	5.0

Table 5.28 Five most common sites of cancer in men, Georgia, 2018

Site	Number of new cases	Share of all new cases registered in women (%)
Trachea, bronchus, lung	580	13.9
Prostate	460	11.1
Bladder	405	9.7
Colorectal	373	9.0
Larynx	230	5.5

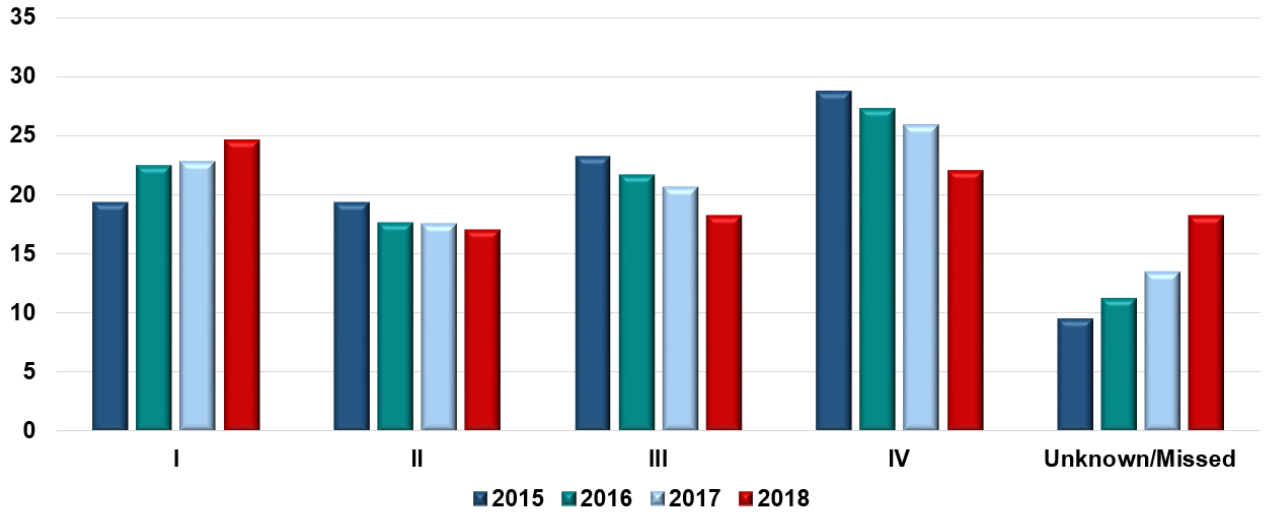
Figure 5.19 Cancer, age-specific incidence rate, all sites, both sexes, Georgia



Source: NCDC

According to the data of the Cancer registry in 2015-2018 period 40.0% of all cancers are revealed at the I and II stages (in 2018 - 41.5%). The share of new cases revealed at the III and IV stages is still high (2015 – 51.9%, 2016 – 48.8%, 2017 – 46.4% და 2018 – 40.2%) (Figure 5.20).

Figure 5.20 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.

Since 2016, the state has been providing Herceptin delivery in HER-2 positive early aggressive breast cancer patients. The program aims to provide financial access to early diagnosis and treatment of aggressive breast cancer. According to the noncommunicable disease risk factor survey (STEPS-2016), only 23.9% of women aged 30-49 have undergone cervical cancer screening.

Table 5.29 Malignant neoplasms, new cases according to the site, Georgia

Site of cancer	Number of new cases			
	2015	2016	2017	2018
Lip, oral cavity organs and pharynx	240	240	218	223
Digestive system	1798	1668	1550	1492
Respiratory system and chest cavity organs	1222	1124	1068	957
Bone and articular cartilage	60	48	43	100
Malignant melanoma of skin	111	119	90	68
Other malignant neoplasms of skin	808	681	580	675
Mesothelium and soft tissue	172	126	124	105
Breast	1939	1813	1688	1624
Female genital organs	1095	1054	925	909
Male genital organs	692	540	500	560
Urinary System	808	815	828	807
Eye, brain and other parts of the central nervous system	254	266	229	201
Thyroid and other endocrine glands	725	901	921	1102
Uncertain, secondary and unspecified sites	299	287	219	284
Lymphoid, hematopoietic and related tissues	558	589	535	507
In situ	100	133	44	21
Total	**10881**	**10404**	**9562**	**9635**

Table 5.30 Malignant neoplasms, new cases in children by site, Georgia

Site of cancer	Number of new cases			
	2015	2016	2017	2018
Lymphoid, hematopoietic and related tissues	47	47	38	31
Eye, brain and other parts of the central nervous system	21	21	14	12
Uncertain, secondary and unspecified sites	5	3	0	6
Thyroid and other endocrine glands	6	7	7	3
Urinary System	5	7	4	3
Mesothelium and soft tissue	5	4	4	3
Lip, oral cavity and pharynx	1	0	0	3
Male genital organs	0	1	0	2
Bone and articular cartilage	7	4	5	2
Female genital organs	0	1	1	1
Respiratory system and chest cavity organs	0	0	0	1
Digestive system	0	1	2	1
Total	**97**	**96**	**75**	**68**

Table 5.31 Malignant neoplasms, new cases by stages in %, Georgia

Stage	2015	2016	2017	2018
I	19.3	22.4	22.7	24.5
II	19.3	17.6	17.5	17.0
III	23.2	21. 6	20.6	18.2
IV	28.7	27.2	25.8	22.0
Unknown/ NA	9.5	11.2	13.4	18.2

Blood and blood-forming system diseases

In 2018, in Georgia, 30716 cases of blood and blood-forming system diseases (prevalence - 824.2) were registered by outpatient-clinics, including 9821 cases in children (prevalence - 1310.0).

The number of new cases has declined in the general population and, also, in children (incidence rates - 492.5 and 882.6, correspondingly) (in 2017 - 541.0 and 1070.9 correspondingly). In children 67.4% of registered blood and blood-forming diseases, were incident cases.

Table 5.32 Diseases of blood and blood-forming organs, Georgia

	All ages				Children under-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
2018	**30716**	**824.2**	**18354**	**492.5**	**9821**	**1310.0**	**6617**	**882.6**

In 2018, there are 24967 registered patients with anemia in Georgia (81.3% of registered cases of diseases of blood and blood -forming organs; prevalence - 670.0), including 9821 children (prevalence - 1310.0), that is 32.8% of all registered cases of anemia.

Table 5.33 Anemia, Georgia

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number of registered cases	**20979**	**18545**	**23245**	**22220**	**26173**	**31499**	**29087**	**28555**	**24967**
Prevalence rate per 100000 population	554.0	493.7	623.4	597.7	703.7	845.5	780.3	766.0	670.0
Total number of new cases	**15902**	**13734**	**17334**	**16007**	**17428**	**22893**	**19706**	**17971**	**14882**
Incidence rate per 100000 population	419.9	365.6	464.9	430.6	468.6	614.5	528.7	482.1	399.4

Table 5.34 Anemia in children Under-15, Georgia

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number of registered cases	**11146**	**10339**	**10888**	**10513**	**11391**	**12186**	**10032**	**10347**	**9821**
Prevalence rate per 100000 children	1626.6	1512.2	1597.0	1538.4	1641.2	1713.9	1381.7	1400.3	1310.0
Total number of new cases	**9472**	**8450**	**8505**	**8257**	**8691**	**9364**	**7595**	**7617**	**6617**
Incidence rate per 100000 children	1382.3	1235.9	1247.5	1208.2	1252.2	1317.0	1046.1	1030.8	882.6

Mental disorders[6]

In 2018, by the end of the year 76508 cases of mental and behavioral disorders were registered by outpatient-clinics of Georgia (prevalence - 2053.1), this number included 3217 cases in children (prevalence - 429.1). There were 4859 new cases of mental and behavioral disorders registered, including 779 cases in children (incidence - 130.4 and 103.9, correspondingly).

Table 5.35 Mental and behavioral disorders, morbidity rates, Georgia

	All ages				Children under-15			
	Number of cases registered by the end	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 children	Number of new cases	Incidence per 100000 children
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
2018	**76508**	**2053.1**	**4859**	**130.4**	**3217**	**429.1**	**779**	**103.9**

[6] *Data collected from mental health dispensaries*

Table 5.36 Mental and behavioural disorders by sex and age, Georgia 2018

	Total	Including				Including women
		0-14	15-19	20-24	25 +	
Mental and behavioural disorders	**4859**	**779**	**326**	**432**	**3322**	**2209**
Including:						
Organic, including symptomatic, mental disorders	793	0	8	25	760	379
Mental and behavioural disorders due to psychoactive substances use	297	0	2	22	273	15
Schizophrenia, schizotypal and delusional disorders	1151	3	77	124	947	536
Including schizophrenia	381	1	15	35	330	153
Mood (affective) disorders	434		27	42	365	278
Neurotic, stress-related and somatoform disorders	888	30	61	136	661	556
Behavioural syndromes associated with physiological disturbances and physical factors	27	0	1	4	22	12
Disorders of adult personality and behaviour	89	0	0	24	65	34
Mental retardation	899	511	114	49	225	306
Disorders of psychological development	55	46	3	2	4	6
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	226	189	33	4	0	87

Diseases of the nervous system

In 2018, in Georgia, there were 151315 cases of the nervous system diseases registered (prevalence - 4060.5), including 58139 new cases (incidence - 1560.5). Last years the tendency for increase of the number of new cases was broken off in 2018. The number of new cases and incidence declined in the general population and in children. In 2017, 61130 new cases, including 8446 in children, were registered, in 2018 – 58139 and 7966, correspondingly.

Table 5.37 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 children	Number of registered cases	Prevalence per 100000 children
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
2018	**151315**	**4060.5**	**58139**	**1560.5**	**14411**	**1922.2**	**7966**	**1062.5**

Table 5.38 Diseases of the nervous system, certain groups of diseases, Georgia

	2017				2018			
	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	**154472**	**4143.6**	**61130**	**1639.8**	**151315**	**4060.5**	**58139**	**1560.5**
Including:								
Inflammatory diseases of the central nervous system	4558	122.3	1687	45.3	4819	129.3	2371	63.6
Systemic atrophies primarily affecting the central nervous system	2876	77.1	1079	28.9	3264	87.6	1626	43.6
Extrapyramidal and movement disorders	15736	422.1	4005	107.4	14334	384.6	3204	86.0
Other degenerative and demyelinating diseases of the nervous system	4203	112.7	1398	37.5	3438	92.3	1120	30.1
Episodic and paroxysmal disorders	48441	1299.4	19347	519.0	48366	1297.9	18021	483.6
Including: Epilepsy and status epilepticus	14048	376.8	4180	112.1	10959	294.1	1839	49.3
Disorders of the peripheral nervous system	49923	1339.1	19347	519.0	45994	1234.2	17521	470.2
Cerebral palsy and other paralytic syndromes	7993	214.4	4180	112.1	6652	178.5	1748	46.9

Diseases of the eye and adnexa

In 2018, 114724 (including 779 in children) new cases of the eye and adnexa diseases were registered by outpatient-clinics of Georgia, incidence per 100000 population - 3078.6, incidence in children - 4036.4.

Table 5.39 Diseases of the eye and adnexa, Georgia

	All ages				In children			
	Number of registered cases	Prevalence per 100000 population	Number of new cases	Incidence per 100000 population	Number of registered cases	Prevalence per 100000 population	Number of registered cases	Prevalence per 100000 population
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
2018	**261296**	**7011.7**	**114724**	**3078.6**	**49154**	**6556.3**	**30262**	**4036.4**

The share of lens disorders (cataract) accounts for 17.1% of the total number of cases of diseases of eye and adnexa, glaucoma - 6.5%. Disorders of refraction and accomodation constitute about 42% of new cases of diseases of the eye and adnexa.

Table 5.40 Diseases of the eye and adnexa by certain groups of diseases, all ages, Georgia

	2017				2018			
	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	**244936**	**6570.2**	**125672**	**3371.0**	**261296**	**7011,7**	**114724**	**3078,6**
Including:								
Disorders of lens (cataract)	57707	1547.9	22205	595.6	58255	1563.2	19645	527.2
Glaucoma	24343	653.0	5969	160.1	25588	686.6	7500	201.3
Disorders of refraction and accommodation	102373	2746.1	61882	1659.9	104844	2813.4	48325	1296.8

In children, almost 61% of new cases are caused by accommodation and refractive disorders.

Table 5.41 Diseases of the eye and adnexa, certain groups of diseases, children under-15, Georgia

	2017				2018			
	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	**41382**	**5600.5**	**32877**	**4449.5**	**49154**	**6556.3**	**30262**	**4036.4**
Including:								
Disorders of lens (cataract)	432	58.5	44	6.0	159	21.2	33	4.4
Glaucoma	211	28.6	32	4.3	48	6.4	16	2.1
Disorders of refraction and accommodation	28125	3806.3	23542	3186.1	29639	3953.3	18357	2448.5

Diseases of the ear and mastoid process

In 2018, there were 55241 new cases of diseases of ear and mastoid process registered by the outpatient-clinics of Georgia, incidence per 100000 population - 1482.4, including 24590 cases in children, incidence per 100000 children - 3279.9.

Table 5.42 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
2018	**91613**	**2458.4**	**55241**	**1482.4**	**32553**	**4342.0**	**24590**	**3279.9**

Table 5.43 Diseases of the ear and mastoid process, all ages, Georgia, 2017-2018

	2017				2018			
	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	**87283**	**2341.3**	**59082**	**1584.8**	**91613**	**2458.4**	**55241**	**1482.4**
Including:								
Otitis media	33595	901.2	23195	622.2	36755	986.3	25334	679.8

Congenital malformations, deformations and chromosomal abnormalities

In 2018, in Georgia, 6275 cases of congenital malformations were registered, prevalence per 100000 population -168.4, including 252 cases in children (prevalence per 100000 children – 67.8).

The prevalence rates in the general population and in children have decreased, compared to 2008 (general prevalence in 2008 - 188.4, in 2018 - 168.4, in children: in 2008 - 887.8, in 2018 - 548.7).

Table 5.44 Congenital malformations, deformations and chromosomal abnormalities, 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	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
2018	**6275**	**168.4**	**2527**	**67.8**	**4114**	**548.7**	**1565**	**208.7**

Table 5.4 Congenital malformations, deformations and chromosomal abnormalities, children under-5, prevalence per 100000 children, Georgia, 2018

	Children under-5		Including infants	
	New cases	Prevalence per 100000 children	New cases	Prevalence per 100000 infants
Congenital malformations, deformations and chromosomal abnormalities	**2260**	**812.4**	**1518**	**2853.4**
Including:				
Congenital malformations of the nervous system	**170**	**61.1**	**68**	**127.8**
*Including: A*nencephaly and similar malformations	6	2.2	0	0.0
Congenital hydrocephalus	30	10.8	14	26.3
Spina bifida	9	3.2	5	9.4
Congenital malformations of the circulatory system	**813**	**292.2**	**533**	**1001.9**
Including: Congenital malformations of cardiac chambers and connections	69	24.8	30	56.4
Congenital malformations of cardiac septa	250	89.9	124	233.1
Congenital malformations of pulmonary and tricuspid valves	26	9.3	19	35.7
Congenital malformations of aortic and mitral valves	27	9.7	10	18.8
Other congenital malformations of heart	21	7.5	8	15.0
Congenital malformations of the respiratory system	**10**	**3.6**	**4**	**7.5**
Cleft lip and cleft palate	**15**	**5.4**	**4**	**7.5**
Congenital absence, atresia and stenosis of large intestine	**3**	**1.1**	**2**	**3.8**
Congenital malformations of genital organs	**116**	**41.7**	**43**	**80.8**
Congenital malformations of the urinary system	**41**	**14.7**	**15**	**28.2**
Including: Congenital hydro*nephrosis*	9	3.2	3	5.6
Congenital malformations and deformations of the musculoskeletal system	**901**	**323.9**	**765**	**1438.0**
Including: osteogenesis imperfecta	21	7.5	9	16.9
Down syndrome	**94**	**33.8**	**31**	**58.3**

Table 5.45 Congenital malformations, deformations and chromosomal abnormalities in children under-5, Georgia, 2018

	Children under-5		Including infants	
	New cases	Incidence per 100000 children	New cases	Incidence per 100000 infants
Total	**4162**	**1496.0**	**1534**	**2883.5**
Including				
Congenital malformations of the nervous system	3666	1317.8	1369	2573.3
Including: Anencephaly and similar malformations	9	3.2	1	1.9
Congenital hydrocephalus	30	10.8	11	20.7
Spina bifida	12	4.3	4	7.5
Congenital malformations of the circulatory system	0	0.0	0	0.0
Including: Congenital malformations of cardiac chambers and connections	0	0.0	0	0.0
Congenital malformations of cardiac septa	0	0.0	0	0.0
Congenital malformations of pulmonary valves	2291	823.5	890	1672.9
Congenital malformations of aortic and mitral valves	155	55.7	20	37.6
Congenital malformations of great arteries	220	79.1	13	24.4
Other congenital malformations of the circulatory system	36	12.9	2	3.8
Congenital malformations of respiratory system	16	5.8	2	3.8
Cleft lip and cleft palate	16	5.8	0	0.0
Atresia of oesophagus	1	0.4	0	0.0
Congenital absence, atresia and stenosis of large intestine	1	0.4	0	0.0
Congenital malformations of genital organs	861	309.5	446	838.3
Congenital malformations of the urinary system	1	0.4	1	1.9
Including congenital hydronephrosis	0	0.0	0	0.0
Congenital malformations of the musculoskeletal system	7	2.5	5	9.4
Including osteogenesis imperfecta	204	73.3	42	78.9

Diseases of the digestive system

In 2018, 349905 new cases of the digestive system diseases were registered by the outpatient-clinics of Georgia, incidence per 100000 population - 9389.5, including 47036 cases in children, incidence per 100000 children - 6273.8.

Table 5.47 Diseases of the digestive system

	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	198957	5169.8	92400	2401.0	24501	3566.1	16901	2459.9
2009	280680	7358.4	166087	4354.2	25164	3678.2	19030	2781.6
2010	261977	6918.4	151848	4010.0	23718	3461.3	17296	2524.1
2011	422928	11258.7	224583	5978.6	35827	5240.0	26372	3857.1
2012	446472	11973.4	280122	7512.2	45094	6614.4	35439	5198.2
2013	427396	11496.3	292362	7864.1	46291	6773.7	35520	5197.6
2014	570337	15334.1	349591	9399.1	53277	7676.1	39853	5742.0
2015	632547	16979.9	376021	10093.8	76030	10693.1	53677	7549.3
2016	559566	15011.8	342762	9195.5	74614	10276.7	58565	8066.2
2017	495203	13283.3	267788	7183.1	50095	6779.5	39396	5331.6
2018	**715983**	**19213.0**	**349905**	**9389.5**	**74217**	**9899.3**	**47036**	**6273.8**

Table 5.48 Diseases of the digestive system

	New cases	Incidence per 100000 population	Including in children	
			New cases	Incidence per 100000 children
Diseases of the digestive system	**349905**	**9389.5**	**47036**	**6273.8**
Including:				
Diseases of oral cavity, salivary glands and jaw	252036	6763.3	36585	4879.8
Diseases of oesophagus, stomach and duodenum	29042	779.3	2277	303.7
Including: gastric and duodenal peptic ulcers	5825	156.3	80	10.7
gastritis and duodenitis				
Liver diseases	15678	420.7	1393	185.8
Disorders of gallbladder, biliary tract and pancreas	5252	140.9	4	0.5
Including: cholelithiasis and cholecystitis	17629	473.1	695	92.7
acute pancreatitis and other disorders of pancreas	12110	325.0	547	73.0

Table 5.49 Diseases of the digestive system, hospital discharges, Georgia, 2018

	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	**41303**	**888**	**2.1**	**4029**	**5**	**0.12**
Diseases of oral cavity, salivary glands and jaw	2301	1	0.0	264	0	0.0
Gastric and duodenal, peptic ulcers	4508	137	3.0	52	0	0.0
Gastritis and duodenitis	157	6	3.8	24	0	0.0
Diseases of appendix	7947	7	0.1	2101	0	0.0
Hernia	8238	20	0.2	971	0	0.0
Diseases of peritoneum	860	111	12.9	18	0	0.0
Diseases of liver	1250	239	19.1	30	2	6.7
Cholecystitis, cholelithiasis and other disorders of biliary tract	7711	52	0.7	22	0	0.0

Diseases of the genitourinary system

In 2018, 129653 new cases of the genitourinary system diseases were registered by the outpatient clinics of Georgia, incidence per 100000 population -3479.2, including 5256 cases in children, incidence per 100000 children - 701.1.

Table 5.50 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
2018	**242483**	**6506.9**	**129653**	**3479.2**	**7933**	**1058.1**	**5256**	**701.1**

Table 5.51 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	**242483**	**6506.9**	**129653**	**3479.2**
Glomerulonephritis, nephritic and nephritic syndromes	6723	180.4	3496	93.8
Chronic tubulo-interstitial nephritis (kidney infections)	4837	129.8	1756	47.1
Renal failure	4969	133.3	2346	63.0
Urolithiasis	37517	1006.7	15795	423.9
Diseases of male genital organs	39562	2208.7	18864	1053.1
Including: Hyperplasia of prostate	18460	1030.6	7210	402.5
Inflammatory diseases of prostate	11319	631.9	5681	317.2
Male infertility	2259	206.7	1715	156.9
Diseases of female genital organs	98686	5099.2	55933	2890.1
Including: Salpingitis, oophoritis	13941	720.3	8144	420.8
Endometriosis	6283	324.6	3846	198.7
Erosion and ectropion of cervix uteri	8561	442.4	5263	271.9
Disorders of menstruation	20304	2412.9	13360	1587.7
Menopausal and other perimenopausal disorders	12888	1531.6	5565	661.3
Female infertility	6821	810.6	2551	303.2

Table 5.51 Diseases of the genitourinary system, hospital discharges, Georgia, 2018

	All ages			Children under-15	
	Number of hospital discharges, all ages	Including deaths		Number of hospital discharges	
		Total	Case fatality rate (%)	Total	Case fatality rate (%)
Total	**24043**	**270**	**1.1**	**2418**	**0.0**
Including:					
Glomerulonephritis, nephritic and nephritic syndromes	416	1	0.2	270	0.0
Chronic tubulo-interstitial nephritis (kidney infections)	2471	11	0.4	199	0.0
Urolithiasis	2552	5	0.2	42	0.0
Prostate disorders	1539	5	0.3	0	0.0

Injury, poisoning and certain other consequences of external causes

In 2018, 119577 cases of injury, poisoning and certain other consequences of external causes were registered (prevalence rate - 3208.8), including 113374 new cases (incidence per 100000 population - 3042.3).

Table 5.53 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 children	Number of registered cases	Prevalence per 100000 children
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
2018	**119577**	**3208.8**	**113374**	**3042.3**	**24108**	**3215.6**	**23193**	**3093.6**

Among new cases of injuries, poisoning and some other consequences of external causes, 1/5 (20.1%) belongs to children's injury.

In general population and in children, a high incidence is registered in diagnosis blocs of "poisoning by drugs, medicaments and biological substances", "toxic effects of substances chiefly nonmedical as to source", and "other external factors"

These disorders accounts for about 50% of the class of "injury, poisoning and some other consequences of external causes"; in children aged under-15, this percent is about 69%.

Share of the group of diagnosis "superficial injury, open wound, injury of blood vessels" is about 18.6% in general population, and 21.2% in children.

Table 5.54 Injury, poisoning and certain other consequences of external causes, incidence rates and case distribution, Georgia, 2018

	All ages			Children under-15		
	New cases	Incidence per 100000 population	New cases	New cases	Incidence per 100000 children	New cases
Total	**113374**	**3042.3**	**100**	**23193**	**3093.6**	**100**
Including						
Fracture of skull and facial bones, neck, ribs, sternum and spine	3760	100.9	3.3	473	63.1	2.0
Intracranial injury	915	24.6	0.8	108	14.4	0.5
Injuries to upper and lower limbs	12187	327.0	10.7	1215	162.1	5.2
Dislocation, sprain and strain of joints and ligaments	9308	249.8	8.2	1095	146.1	4.7
Injuries to the thorax, intra-abdominal and pelvic organs	1171	31.4	1.0	111	14.8	0.5
Wounds, injuries of blood vessels, superficial injuries	21097	566.1	18.6	4909	654.8	21.2
Injuries of nerves and spinal cord	714	19.2	0.6	109	14.5	0.5
Burns and corrosions	1255	33.7	1.1	300	40.0	1.3
Poisoning by drugs, medicaments and biological substances, toxic effects of substances chiefly nonmedical as to source	30798	826.4	27.2	8186	1091.9	35.3
Including: Poisoning by drugs, medicaments and biological substances	891	23.9	0.8	399	53.2	1.7
Toxic effects of substances chiefly nonmedical as to source	26370	707.6	23.3	7643	1019.4	33.0

CHAPTER 6

Maternal and Child Health

Maternal and Child Health[7]

Table 6.1. Births according to the National Statistics Office of Georgia, maternal and child mortality, Georgia[8]

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number of live births	63377	62585	58014	57031	57878	60635	59249	56569	53293	51138
Total number of stillbirths	665	682	554	647	549	637	589	558	506	436
Total number of infant deaths (at the age under-1)	872	741	634	617	608	578	507	507	512	416
Total number of early neonatal deaths (at the age 0-6 days)	558	410	349	373	387	205	211	231	238	166
Total number of late neonatal deaths (at the age 7-28 days)	214	186	139	151	97	139	152	125	124	88
Total number of post neonatal deaths (at the age 29-365 days)	100	145	146	93	124	137	162	151	150	162
Total number of under five deaths	949	830	691	705	692	559	605	604	594	499
Total number of maternal deaths	33	12	16	13	16	19	19	13	7	14
Stillbirth rate per 1000 births	10.7	10.9	9.5	11.2	9.4	10.5	9.8	9.8	9.4	8.5
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	3.2
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	1.7
Perinatal mortality rate per 1000 births	19.7	17.4	15.6	17.7	16.1	13.8	13.4	13.8	13.8	11.7
Infant mortality rate per 1000 live births	14.1	12.0	11.0	10.8	10.5	9.5	8.6	9.0	9.6	8.1
Under-5 mortality rate per 1000 live births	15.4	13.4	12.0	12.4	12.0	9.3	10.2	10.7	11.1	9.8
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	27.4

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

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

[7] *According to the „Electronic Module for Pregnant and Newborn Health Surveillance"*
[8] *Since 2014, reconciled data of the MOLHSA and GEOSTAT*

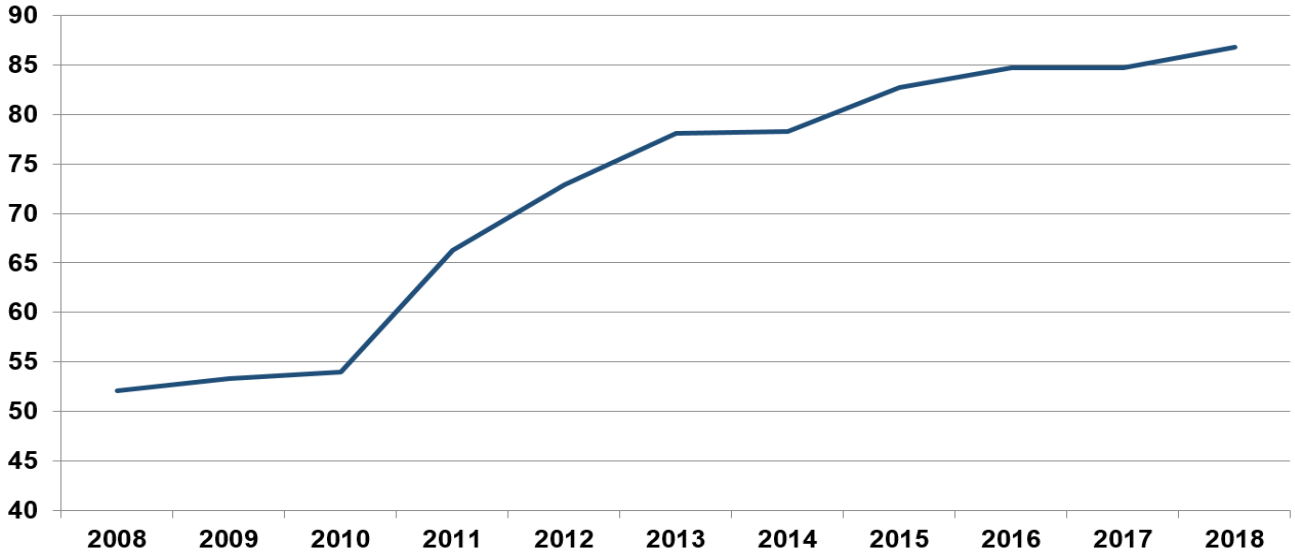
Table 6.2. Indicators of Reproductive Health, Georgia

	2017	2018
Timely initiation of antenatal care	84.7%	86.8%
Coverage with at least 4 antenatal care visits	76.3%	80.8%
Number of deliveries	52660	50468
Term deliveries	86.8%	92.1%
Normal vaginal deliveries	52.4%	55.4%
Pathological deliveries (including caesarean sections)	47.6%	44.6%
Adolescents pregnancy rate	36.2	24.2
Proportion of births attended by skilled health personnel	99.9%	99.9%

Source: NCDC

In 2018, according to the data collected from women consultancy centers, 64845 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 6.1).

Figure 6.1 Share of pregnant women (%) initiating antenatal care during the 1st trimester, Georgia



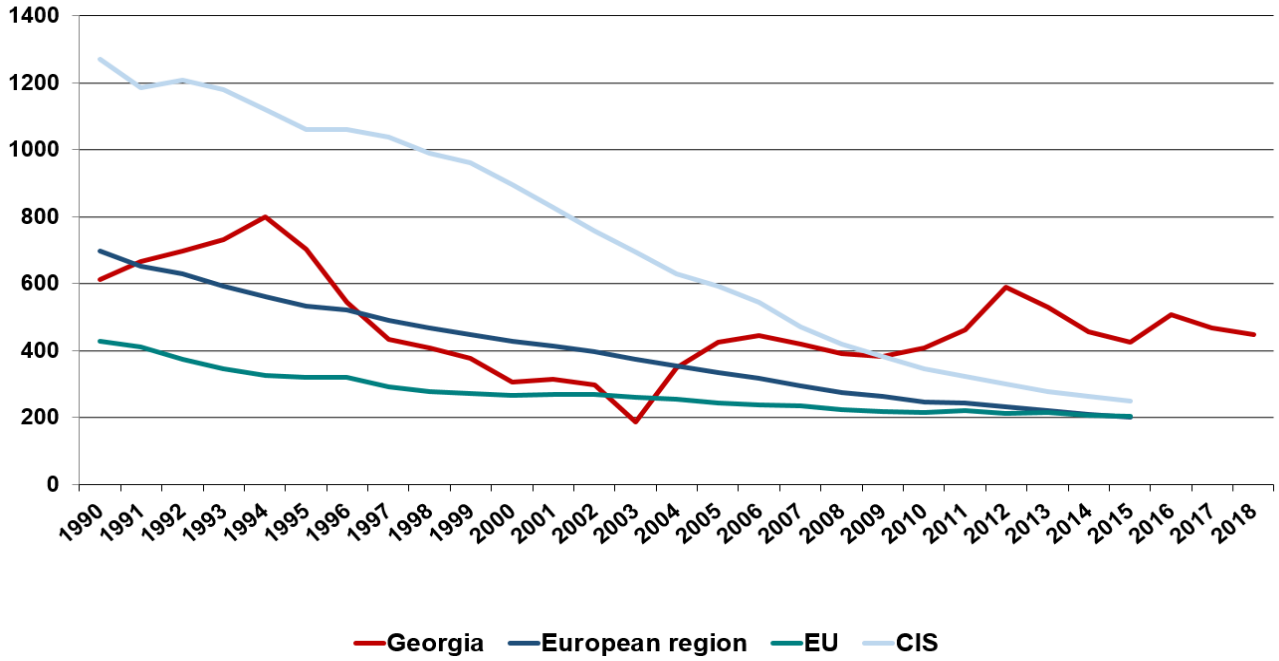
Source: NCDC

88.1% of pregnant women were tested for hepatitis C, 90% - for syphilis, 87.8% - for HIV, and 88.2% - for hepatitis B.

Abortions

In 2018, 22733 abortions were registered (444.5 per 1000 live births) (Figure 6.2), of which, induced abortions constituted 61.9%. Compared with the previous year, the total number of abortions decreased by 9% (Figure 6.2).

Figure 6.2 Induced abortion ratio per 1000 live births



Source: NCDC; WHO HFA DB

Table 6.3 Abortions, Georgia

	Number of live births	Abortions		Abortion ratio per 1000 LB
		Total	Including mini abortions	
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
2018	**51 138**	**22733**	**8297**	**444.5**

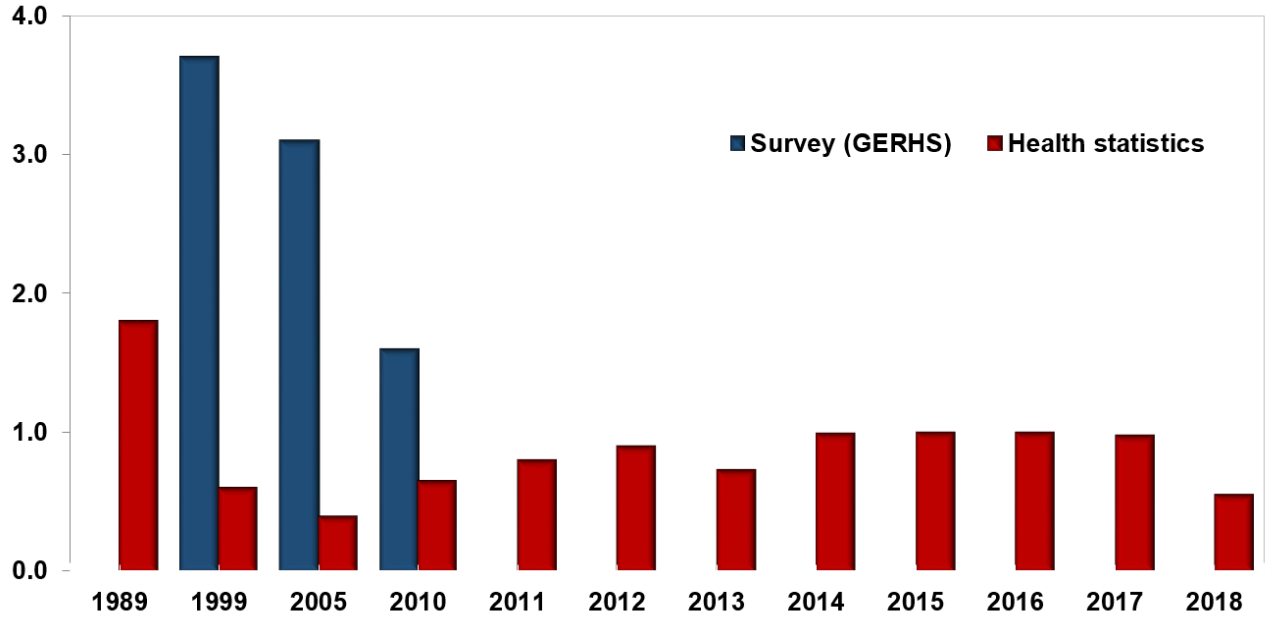
It is noteable that the share of abortions in women under-20 declined and reached 2.2% of the total number of abortions.

Table 6.4 Abortions by age groups, Georgia, 2018

	All ages	Age groups						
		< 15	15-19	20-29	30-34	35-39	40-44	≥ 45
Total number	**22733**	**0**	**510**	**9733**	**6114**	**4304**	**1889**	**183**
Total number per 1000 women	***27.0***	***0.0***	***5.2***	***40.7***	***45.0***	***33.9***	***15.5***	***1.5***
				Including (numbers):				
Miscarriages	22733	0	510	9733	6114	4304	1889	183
Induced:	14066	0	249	6022	3856	2707	1155	77
Under-12 week of gestation	8667	0	261	3711	2258	1597	734	106
Including mini (Under-5 weeks)	13612	0	232	5813	3746	2622	1123	76
During 12-22 weeks of gestation (according medical or social reason)	2211	0	37	922	587	461	189	15
First prégnance aborted	**446**	**0**	**17**	**207**	**107**	**83**	**31**	**1**

The total induced abortion rate (TIAR) is stable (fluctuates around 1) (Figure 6.3). The most high Induced abortion age-specific rates were registered in 20-29 and 30-34 age groups.

Figure 6.3 Total induced abortion rate (TIAR), Georgia



Source: NCDC

In 2018, the most common method of performing induced abortions was medication and its share is higher compare to the previous year.

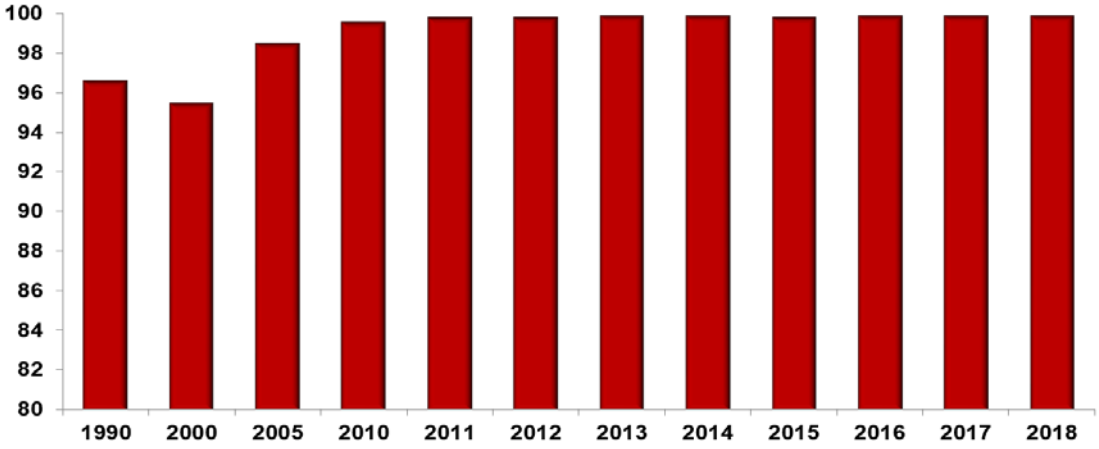
Table 6.5 Methods of induced abortions, Georgia

	2012	2013	2014	2015	2016	2017	2018
Total number of induced abortions	39225	37018	33464	32428	28720	24937	22733
Methods of abortion (%):							
D&C	49.2	41.3	37.9	41.2	41.6	22.8	21.5
Vacuum aspiration	40.6	41.3	39.1	28.3	30.9	40.4	36.4
Medication induced	10.2	17.4	23.0	30.5	27.5	36.8	38.9

Delivery

In 2018, there were 50468 deliveries registered. Last years, the share of deliveries in health institutions, reached the maximum value and stayed unchanged (Figure 6.4).

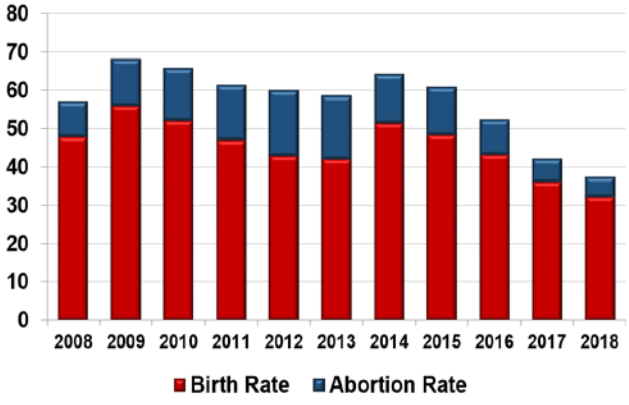
Figure 6.4 Rate of childbirth in health centers, assisted by qualified medical personnel (%), Georgia

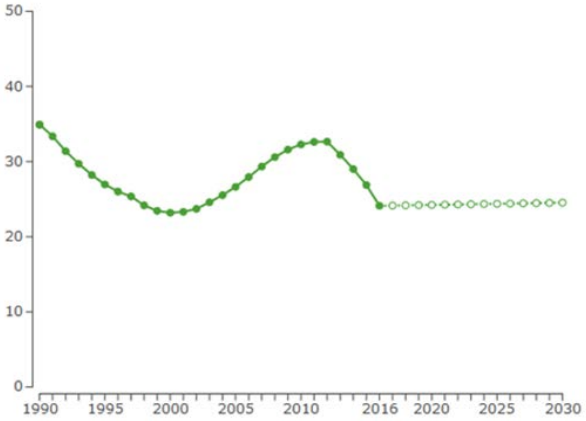


Source: NCDC

In 2018, according to the National Statistics Office of Georgia, birth rate of women aged under 20 reduced and reached 24.2 (Figure 6.5).

Figure 6.5 Adolescent pregnancy rate (rate per 1000 women aged 15-19





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

Table 6.6 Adolescent pregnancy rate, Georgia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Adolescent pregnancy rate	48.0	56.1	52.2	47.1	43.0	42.2	51.5	48.4	43.4	36.2	32.3

Source: National Statistics Office of Georgia

In 2018, 19.6% of deliveries were complicated by premature rupture of membranes, perineal laceration, 13.4% - by confirmed or suspected anomalies of pelvic organs. The share of the intrapartum and postpartum hemorrhage, eclampsia and pre-eclampsia, and sepsis were as follows: 2.5%, 2.4% and 0.2%, respectively.

According to the UNFPA 2019 report named “The power of choice, reproductive rights and the demographic transition”, some reproductive health indicators for Georgia look as follows:

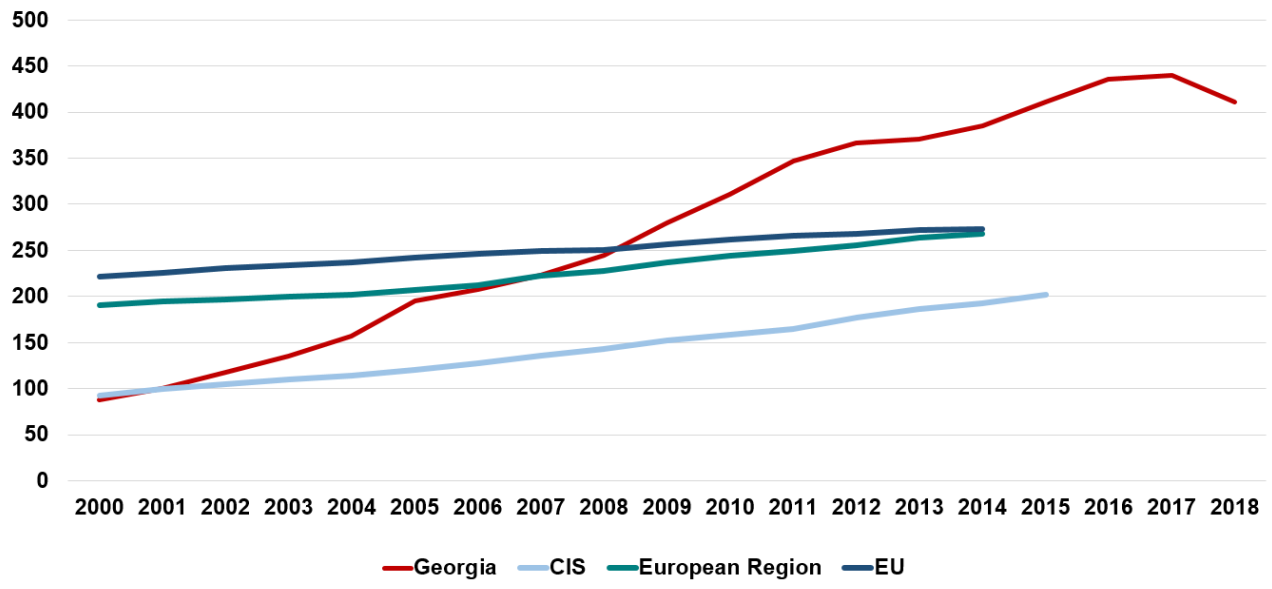
Reproductive Health live births)	Maternal mortality (death ratio per 100 000 live births), 2015		36
	Range of MMR uncertainty (UI 80%), 2015 estimate	Lower	28
		Upper	47
	Birth attended by skilled health personnel, %, 2006-2017		100
	Adolescent birth rate per 1000 girls aged 15-19, 2006-2017		44
	Contraceptive prevalence rate, women aged 15 – 19, 2019	Any method	55
		Modern method	41
	Unmet need for family planning, women aged 15 – 49, 2019		15
	Proportion of demand satisfied with modern methods,, 2019		58

Source: https://www.unfpa.org/sites/default/files/pub-pdf/UNFPA_PUB_2019_EN_State_of_World_Population.pdf

Caesarean sections

Since 2000, the share of caesarean section deliveries has increased 4.3-fold and in 2017, this share reached 44.7%. in 2018, the share caesarean section deliveries has been reduced and equaled 41.6% (Figure 6.6).

Figure 6.6 Caesarean sections (ratio per 1000 live births)



Source: NCDC, WHO HFA DB

Table 6.7 Caesarean sections structure, Georgia

	2017			2018		
	Total	Rate per 1000 LB	% of the total	Total	Rate per 1000 LB	% of the total
Total	**23471**	**440.4**	**100%**	**21044**	**411.5**	**100%**
Including:						
Elective caesarean section	6936	130.1	29.6	6455	126.2	30.7
Urgent caesarean sections	16535	310.3	70.4	14589	285.3	69.3

Live births

In 2018, according to the National Statistics Office, in Georgia, 51,138 live births were registered.

According to healthcare providers' data, 6.6% of live born babies were underweighted, and 7.7% of babies weighted more than 4000 gr.

Table 6.8 Live births according to the birth weight (according to the „Electronic Module for Pregnant and Newborn Health Surveillance"), Georgia, 2018

	<499	500 - 999	1000 - 1499	1500-2499	2500-3999	> 4000	Total
Number of live births	**14**	**490**	**2822**	**29534**	**17372**	**515**	**50747**
% from the total number of live births	0.0	1.0	5.6	58.2	34.2	1.0	100.0

Table 6.9 Breastfeeding, data collected from maternity hospitals, Georgia

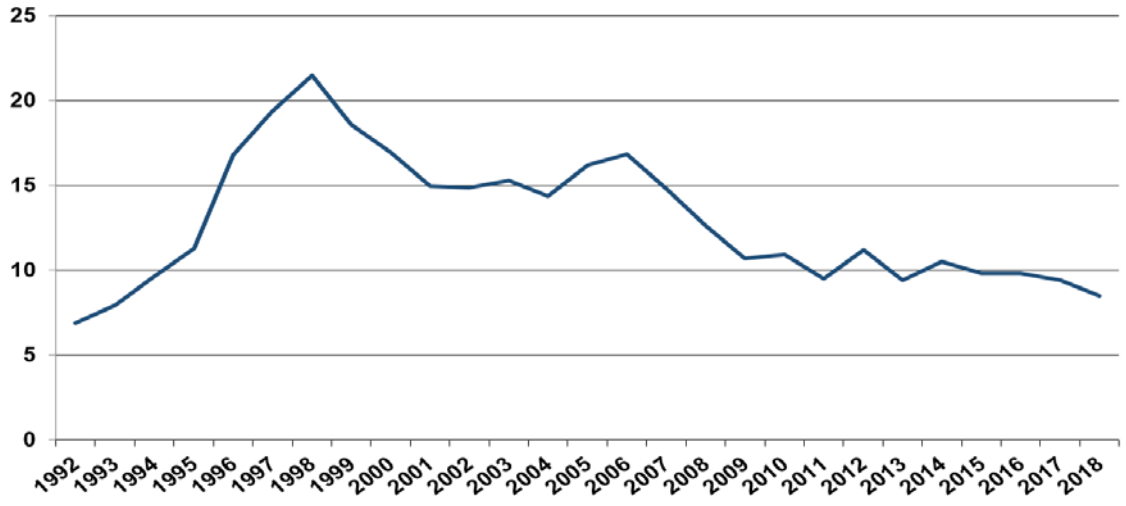
	2017		2018	
	Total number of breastfed infants	% of total number of live births	Total number of breastfed infants	% of total number of live births
Breastfeeding initiated during the first hour after birth	40692	76.2	41244	81.3
Total number of the breastfed newborns	50121	93.8	46972	92.6

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.

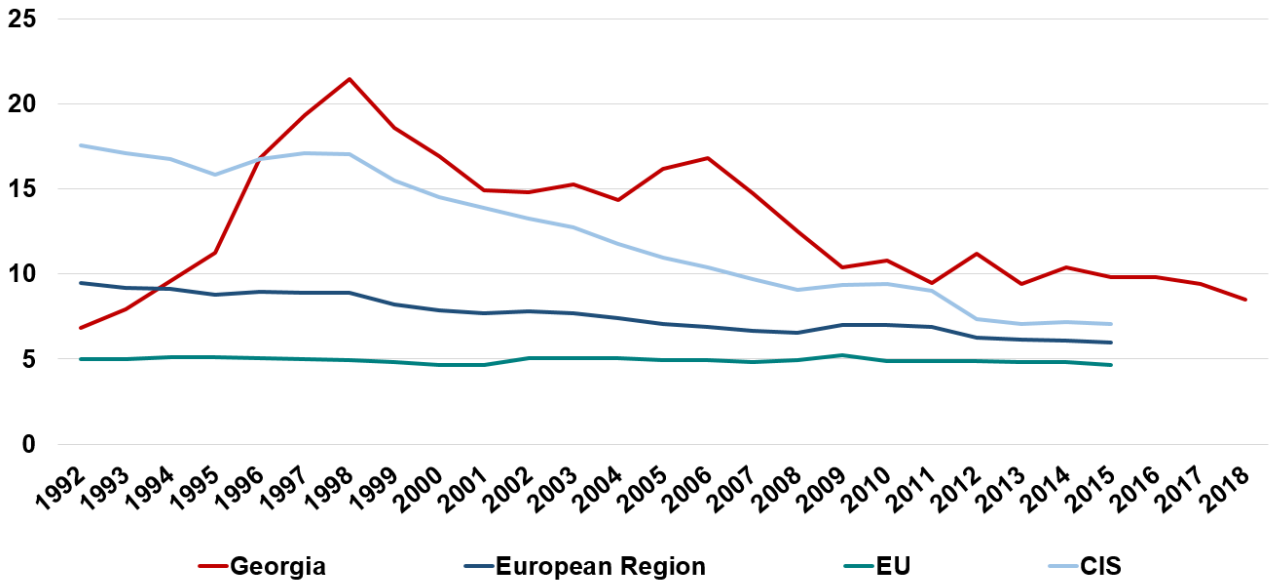
In 2018, stillbirths number accounted to 436 cases, stillbirth rate was 8.5 per 1000 births (according to the last available data, stillbirth rate was 9.3 in the CIS countries; and 5.3 in the EU) (Figure 6.7, 6.8).

Figure 6.7 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 6.8 Stillbirth rate per 1000 births



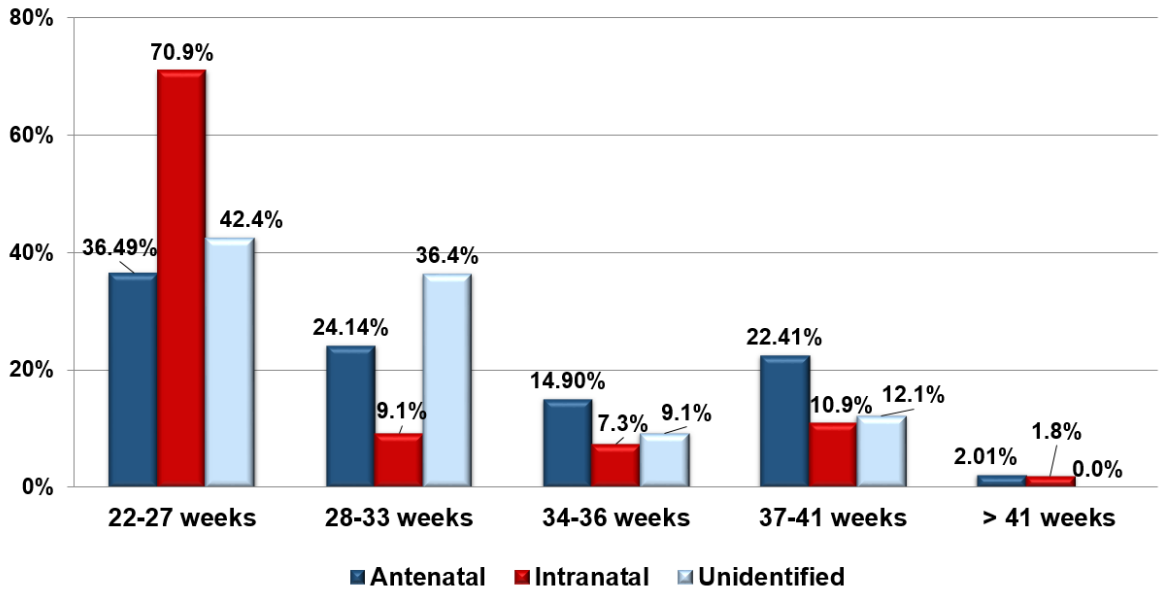
Source: WHO HFA DB

In 2018, cases of stillbirth were analysed using the „Electronic Module for Pregnant and Newborn Health Surveillance". The results show that 79.8% of stillbirths happened in the antenatal period, 12.6% - in the intra-natal period. Although, in 7.7% of all cases determination of the time of the foetal death was impossible using the available medical records.

36.5% of antenatal stillbirths, happened on 22-27 week of gestation, 24.1% - on 28-33 week, 14.9% and 22.4% - on 34-36 and 37-41 weeks respectively.

70.9% of intra-natal stillbirths (12.6% of total) occurred on 22-27 week of gestation, 9.1% - on 28-33 week, and 7.3% - on 34-36 week (Figure 6.9).

Figure 6.9 Stillbirths by gestational age, Georgia, 2018



Source: NCDC

Table 6.10 Stillbirths according to the birth weight (according to the „Electronic Module for Pregnant and Newborn Health Surveillance"), Georgia, 2018

	<499	500 - 999	1000 - 1499	1500-2499	2500-3999	> 4000	Total
Number of stillbirths	**63**	**195**	**78**	**80**	**17**	**3**	**436**
% from the total number of stillbirths	14.4	44.7	17.9	18.3	3.9	0.7	100.0

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 2018, 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 2018, there were 20 maternal deaths registered (due to direct and indirect causes), including 14 early deaths (during pregnancy or within 42 days from pregnancy termination). Maternal mortality ratio is 27.4 per 100 000 live births.

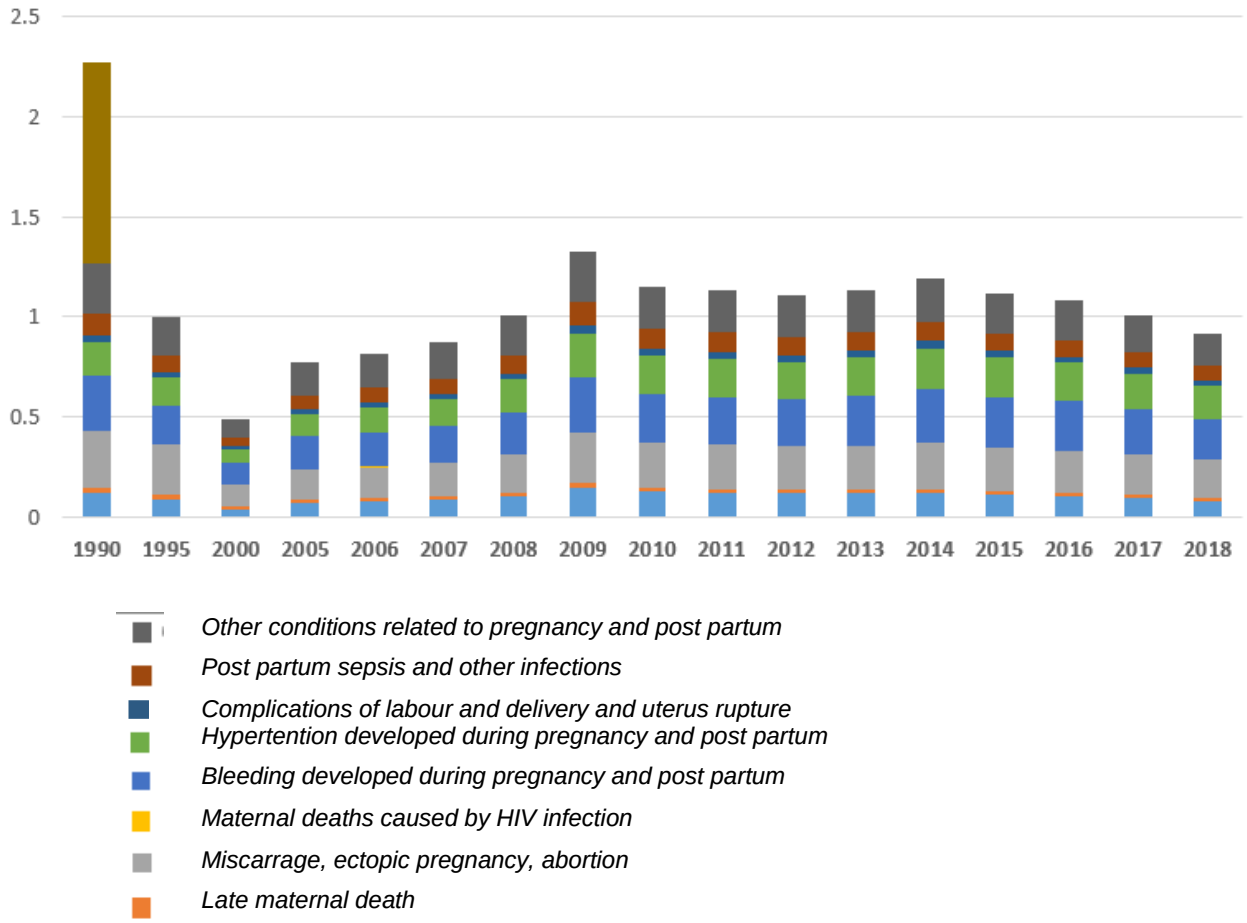
It is essential, that more that a half of maternal deaths were due to direct causes (13 cases): 2 cases (15.3%) caused by intrapartum and postpartum haemorrhage, 4 cases (30.7%) – by preeclampsy, 2 cases (15.3%) – by obstetric thromboembolism, 1 case (7.6%) – by pulmonary edema, 1 case (7.6%) – by undetermined death, 1 case (7.6%) – by rupture of uterus, 1 case (7.6%) – by post abortion bleeding (Figure 6.10).

Among indirect causes (7 cases) the following conditions are presented: 1 case (14.2%) of influenza, 1 case (14.2%) of subarachnoid hemorrhage, 1 case (14.2%) of thromboembolism, 1case (14.2%) of acute respiratory failure, 2 cases (28.5%) of aneurysm and 1 case (14.2%) of breast cancer.

Two cases (14.2%) of early maternal deaths happened after a vaginal delivery, 9 cases (64.2%) - after caesarean section, 1 case (7.1%) – after abortion, 2 women (14.2%) died in the course of pregnancy.

In the late maternal mortality structure there are 2 cases (66%) of post vaginal delivery death, and 2 cases (34%) of post caesarean section death (Figure 6.10).

Figure 6.10 Maternal mortality by underlying cause of death of death, Georgia



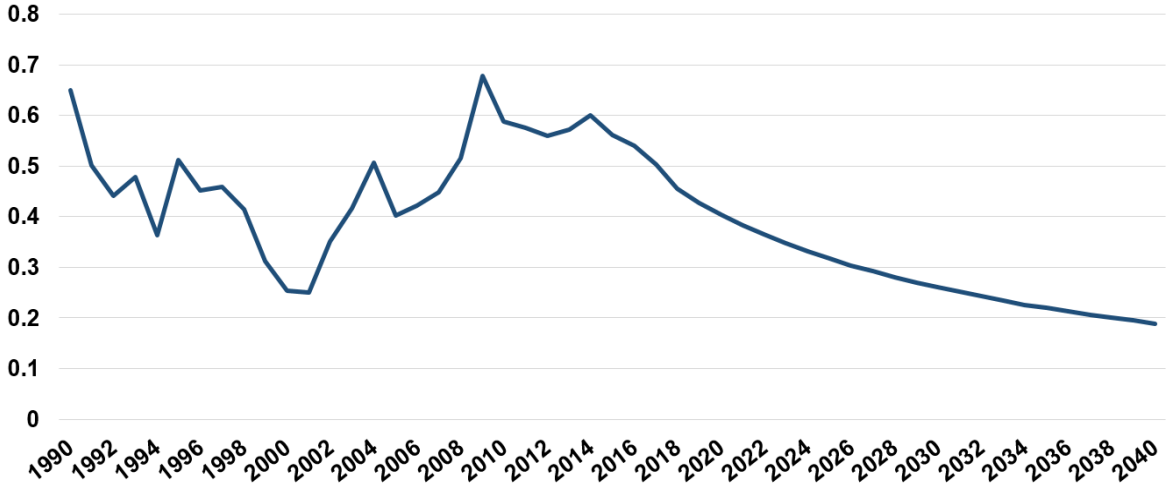
Source: https://vizhub.healthdata.org/gbd-foresight/

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) (Figure 6.11, 6.12).

Table 6.11 Maternal mortality ratio per 100 000 live births, Georgia

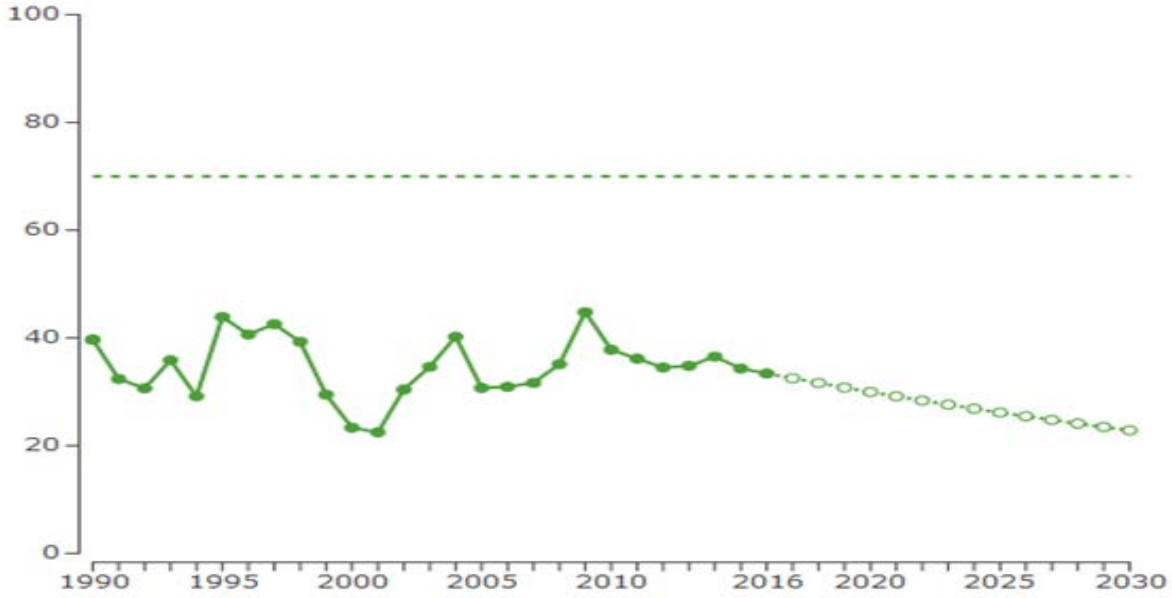
Source	1990	1995	2000	2005	2006	2010	2012	2015	2016	2017	2018
Official statistics	41.5	53.1	47.8	23.9	23.0	21.7	32.2	32.2	23.0	13.1	27.4
MMEIG_2015	34	35	37	37	-	40	-	36	-	-	-
GBD	41.5	-	30.7	-	-	-	-	42.3	-	-	-
RAMOS	-	-	-	-	44	-	26	-	-	-	-

Figure 6.11 Maternal mortality projection, age-specific rate per 100 000 women of reproductive age, Georgia



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

Figure 6.12 Maternal mortality rate per 100 000 LB, Georgia



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

Child morbidity

Table 6.12 Incidence of diseases in newborns, Georgia, 2018

	Number of cases	Incidence rate per 1000 LB
Total	**11191**	**218.8**
Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	16	0.3
Disorders related to length of gestation and fatal growth	3864	75.6
Birth trauma	133	2.6
Respiratory and cardiovascular disorders specific to the perinatal period	3292	64.4
Infections specific to the perinatal period	1428	27.9
Haemorrhagic and haematological disorders of foetus and newborn	853	16.7
Transitory endocrine and metabolic disorders specific to foetus and newborn	49	1.0
Digestive system disorders of foetus and newborn	29	0.6
Conditions involving the integument and temperature regulation of foetus and newborn	35	0.7
Other disorders originating in the perinatal period	492	9.6
Congenital malformations of the nervous system	21	0.4
Congenital malformations of eye, ear, face and neck	1	0.0
Congenital malformations of the circulatory system	176	3.4
Congenital malformations of the respiratory system	4	0.1
Cleft lip and cleft palate	15	0.3
Other congenital malformations of the digestive system	62	1.2
Congenital malformations of genital organs	94	1.8
Congenital malformations of the urinary system	18	0.4
Congenital malformations and deformations of the musculoskeletal system	79	1.5
Other congenital malformations	12	0.2
Chromosomal abnormalities, not elsewhere classified	6	0.1
Other	21	0.4

In 2018, in Georgia, 76603 new cases of diseases were registered in infants (in 2017 – 81158), incidence rate per 1000 infants – 1439.9 (in 2017 – 1481.0). A share of respiratory system diseases in infant morbidity was 57.7% (in 2017 – 61.9%), a share of infectious and parasitic diseases – 6.04% (in 2017 - 3.8%).

Table 6.13 Morbidity of infants (most common causes), 2018

	Incidence per 1000 infants
Diseases of the respiratory system	831.4
Diseasesof the ear and mastoid process	120.1
Infectious and parasitic diseases	83.8
Diseases of eye and adnexa	65.3
Diseases of skin and subcutaneous tissue	51.4
Certain conditions originating in the perinatal period	40.3

In 2018, hospital services were provided to children 24546 aged under-1 (in 2017 - 24563), among the causes of hospitalization a share of the respiratory system diseases was 41.0% (in 2017 – 45.1%), a share of certain conditions originating in the perinatal period – 27.9% (in 2017 – 28.1%), a share of infectious and parasitic diseases – 14.8% (in 2017 – 12.4%).

Table 6. 14 Hospital discharges of infants, Georgia, 2018

	Number of cases	Case fatality rate (%)
Total	**24546**	**1.4**
Including:		
Certain infectious and parasitic diseases	3635	0.2
Neoplasms	511	1.2
Diseases of blood and blood-forming organs	80	1.3
Endocrine, nutritional and metabolic diseases	19	0.0
Mental and behavioral disorders	190	2.1
Diseases of the nervous system	104	0.0
Diseases of the eye and adnexa	8	0.0
Diseases of the ear and mastoid process	133	7.5
Diseases of the circulatory system	10064	0.2
Diseases of the respiratory system	418	1.2
Diseases of the digestive system	76	0.0
Diseases of the skin and subcutaneous tissue	49	0.0
Diseases of the musculoskeletal system and connective tissue	493	0.0
Diseases of the genitourinary system	6847	3.7
Certain conditions originating in the perinatal period	770	4.8
Congenital malformations, deformations and chromosomal abnormalities	1065	0.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	300	0.3
Injury, poisoning and certain other consequences of external causes	26	0.0

In 2018, in Georgia, there were registered 297925 new cases of diseases in children aged under-5 (in 2017 – 258403), incidence per 1000 children – 1070.9 (in 2017 – 935.2).

In the structure of incidence in children aged under-5, a share of the respiratory system diseases was 58.6% (in 2017 - 64.7%), a share of infectious and parasitic diseases – 11.4% (in 2017 - 9.6%).

Table 6.15 Incidence of diseases in children aged under-5 (most common causes), 2018

	Incidence per 1000 children aged under-5
Diseases of the respiratory system	627.3
Infectious and parasitic diseases	122.3
Diseasesof the ear and mastoid process	73.1
Diseases of eye and adnexa	62.5
Diseases of skin and subcutaneous tissue	35.8
Injury, poisoning and certain other consequencences of external causes	26.7

During the reporting period, hospital servisies were provided to 62206 children aged under-5 (in 2017 – 59846), of which the respiratory system diseases were registered in 48.7% (in 2017 – 52.1%); infectious and parasitic diseases – 19.1% (in 2017 – 16.8%), injury, poisoning and certain other consequences of external causes – 26.7%, certain conditions originating in the perinatal period – in 11% (in 2017 – 11.6%).

Table 6.16 Hospital discharges, children aged under-5, Georgia, 2018

	Number of hospital discharges	Case fatality rate (%)
Total	**62206**	**0.6**
Including:		
Certain infectious and parasitic diseases	11864	0.1
Neoplasms	631	1.3
Diseases of blood and blood-forming organs	293	0.3
Endocrine, nutritional and metabolic diseases	79	1.3
Mental and behavioral disorders	1	0.0
Diseases of the nervous system	543	2.2
Diseases of the eye and adnexa	269	0.4
Diseases of the ear and mastoid process	68	0.0
Diseases of the circulatory system	156	9.0
Diseases of the respiratory system	30292	0.1
Diseases of the digestive system	1203	0.4
Diseases of the skin and subcutaneous tissue	262	0.0
Diseases of the musculoskeletal system and connective tissue	211	0.0
Diseases of the genitourinary system	1359	0.1
Certain conditions originating in the perinatal period	6869	3.8
Congenital malformations, deformations and chromosomal abnormalities	1549	2.5
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3953	0.3
Injury, poisoning and certain other consequences of external causes	2489	0.2
Factors, influencing health status	115	0.9

According to 2018 data, collected from out-patient facilities, 525563 new cases of all diseases were registered in children aged under-15 (in 2017 – 536512), incidence per 1000 children - 70103.1 (in 2017 - 72 609.5).

The highest incidence rate was registered in the class of the respiratory system diseases – 38517.6 (in 2017 – 41378.5), in this class high incidence was registered in the group of acute upper respiratory infectious (rate – 27635.3), pneumonia (11832.0), and other acute lower respiratory infectious (4872.9).

Table 6.17 Incidence of diseases in children aged under-15, (most common causes), 2018

Cause of incidence	Incidence per 100000
Diseases of the respiratory system	38517.6
Certain infectious and parasitic diseases	7081.5
Diseases of the digestive system	6273.8
Certain conditions originating in the perinatal period	4593.2
Diseases of the eye and adnexa	4036.4
Diseases of the ear and mastoid process	3279.9
Injury, poisoning and certain other consequences of external causes	3093.6

During the reporting period, hospital servisies were provided to 94629 children aged under-15 (in 2017 – 94629).

Hospital discharge rate per 100000 children was high in the classes of the respiratory system diseases, infectious and parasitic diseases, conditions, originating in the perinatal period, and onjury, poisoning and certain other cosequencies of external causes.

Table 6.18 Hospital discharges by the ICD10 chapters, children aged under-15, Georgia, 2018

	Number of hospital discharges	Case fatality rate (%)
Total	**98192**	**0.5**
Including:		
Certain infectious and parasitic diseases	16814	0.1
Neoplasms	1167	1.5
Diseases of blood and blood-forming organs	620	0.2
Endocrine, nutritional and metabolic diseases	545	0.2
Mental and behavioral disorders	105	0.0
Diseases of the nervous system	953	1.8
Diseases of the eye and adnexa	596	0.0
Diseases of the ear and mastoid process	175	0.0
Diseases of the circulatory system	248	7.3
Diseases of the respiratory system	48192	0.1
Diseases of the digestive system	4028	0.1
Diseases of the skin and subcutaneous tissue	571	0.0
Diseases of the musculoskeletal system and connective tissue	646	0.0
Diseases of the genitourinary system	2416	0.0
Pregnancy, childbirth and the puerperium	22	0.0
Certain conditions originating in the perinatal period	6862	3.8
Congenital malformations, deformations and chromosomal abnormalities	2191	1.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5896	0.0
Injury, poisoning and certain other consequences of external causes	5723	0.2
Factors influencing health status and contact with health services	422	0.2

Child mortality

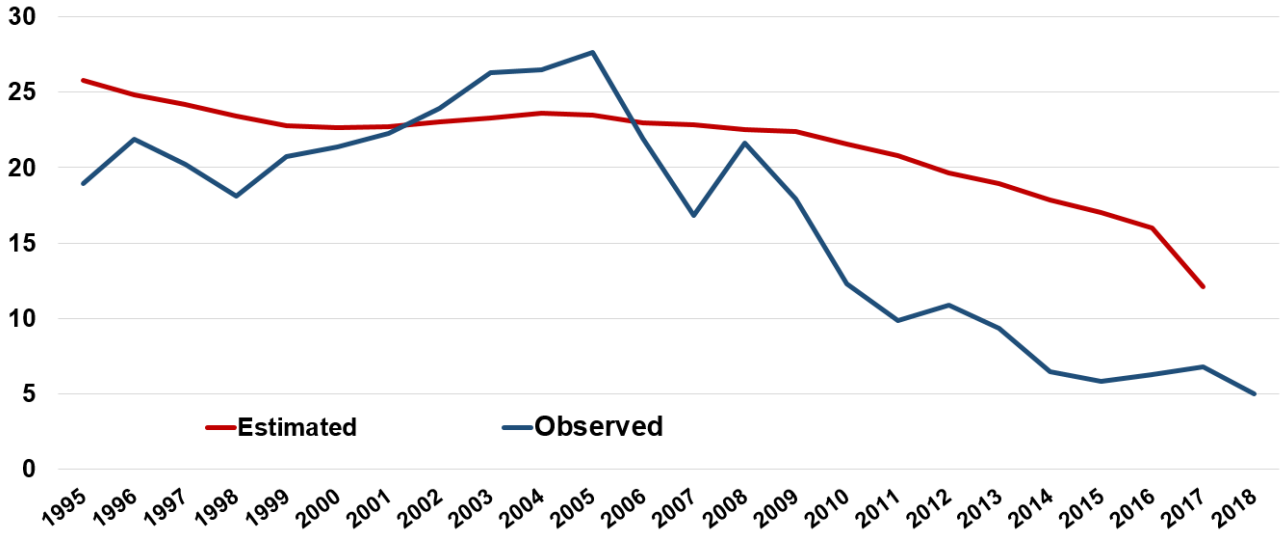
According to the World Health Organisation global data, the share of neonatal death in Under-5 mortality equalled 45%. In Georgia, in 2018, a share of neonatal death in under-5 mortality was 50.9% (in 2017 – 58.9) (Figure 6.13).

Table 6.19 Neonatal and perinatal deaths, Georgia

Year	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
2018	**5.0**	**3.2**	**1.7**	**11.7**

Source:National Statistics Office of Georgia

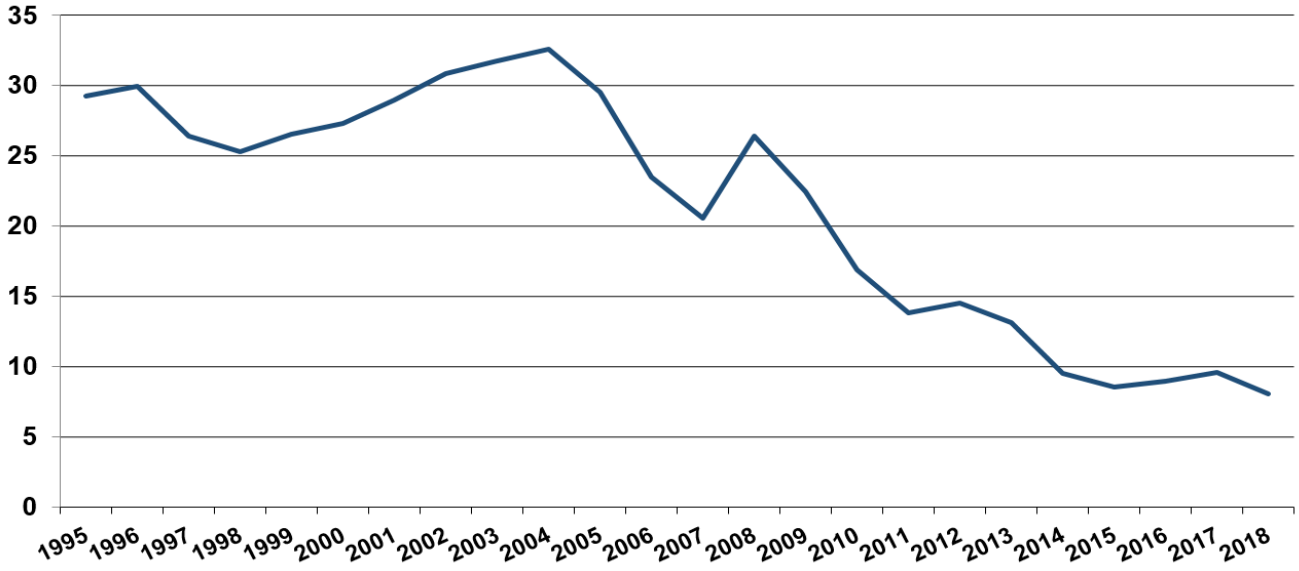
Figure 6.13 Neonatal mortality rate per 1000 live births, Georgia



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

According to the WHO global data, almost 75% of under-5 deaths occurred in infants. In 2018, in Georgia, this share, according to the NCDC and the NSO data, constituted 83.4% (in 2017 – 83.9%). According to all sources, the infant mortality is declining (Figure 6.14).

Figure 6.14 Infant mortality rate per 1000 live births, Georgia



Source: National Statistics Office of Georgia

Table 6.20 Infant mortality rate per 1000 LB, Georgia

Source	2000	2005	2010	2012	2013	2014	2015	2016	2017	2018
NSO	27.3	29.5	16.9	14.6	13.2	9.5	8.6	9.0	9.6	8.1
IGME	30.9	21.7	14.6	12.6	11.7	11.3	10.6	10.5	10	-
GERHS	41.6	21.1	14.1	-	-	-	-	-	-	-

In 2018, a share of conditions originating in the perinatal period in the infant mortality structure was 68.5% (in 2017 – 70.1%).

In Georgia, according to the latest available data in the WHO HFA DB, despite of the declining trend, the child mortality in children aged under-5, still is higher than in the European countries, although, it is in the middle position among the countries of the former Soviet Union.

In 2015, 5.8 million children aged under-5 died in the world. This is 52% less compared to 1990. During the same period, the neonatal mortality rate decreased by 42.2% and the stillbirth rate - by 47%. The reduction of mortality in children aged under-5 happened in 58 countries and, correspondingly, they achieved the MDG4 goal. It should be noted, that since 2000, 28 more countries have joined the above mentioned successful countries.

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% (Figure 6.15).

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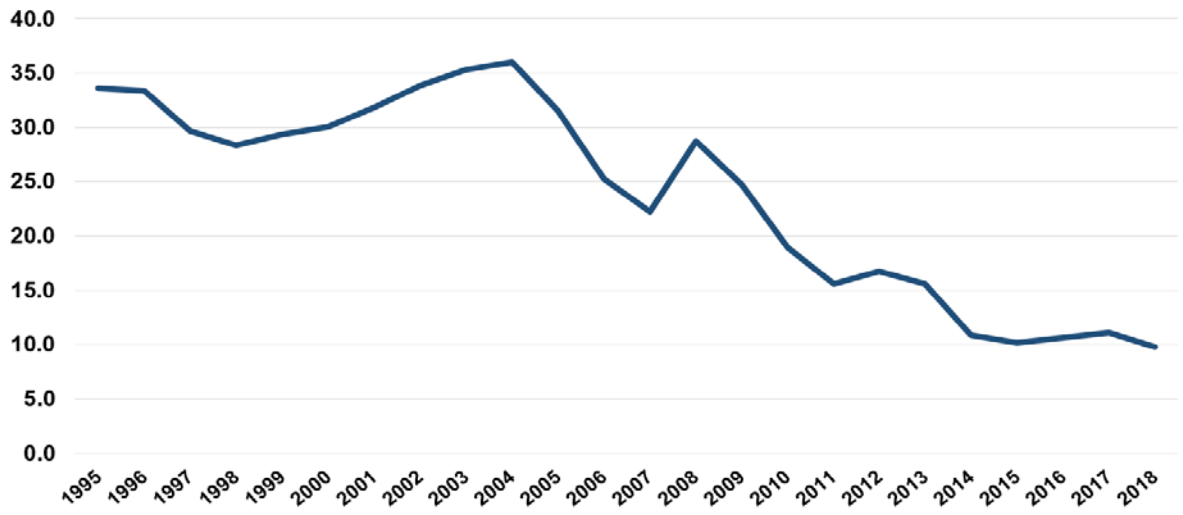
Table 6.21 Under-5 mortality rate per 1000 live births, Georgia

Source	2000	2005	2010	2012	2013	2014	2015	2016	2017	2018
NSO	30.1	31.5	18.9	16.7	15.6	10.9	10.2	10.7	11.1	9.8
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 6.15 Under-5 mortality rate per 1000 live births, Georgia



Source: National Statistics Office of Georgia

Chapter 7.

Risk Factors

Health Behavior in School-Aged Children (HBSC) Study in Georgia, 2018

HBSC is a cross-sectional research study conducted in a collaboration with the World Health Organization (WHO) Regional Office for Europe. HBSC study in Georgia is the only source of information on adolescent health in the country, providing national, international and local data to stakeholders. HBSC provides information on wide-ranging aspects of young people's health and well-being. National wide surveys was conducted the first time in 2018 by the National Center for Disease Control and Public Health of Georgia. The HBSC national wide study is conducted in collaboration with the World Health Organization Regional Office for Europe.

The study population was young students of public and private schools, aged 11, 13 and 15 years**.** These age groups were selected because of important stages of development occurring at these ages. The school-based survey is administered at a national level. A representative sample of pupils from each age group was involved in the study. During spring semester self-administrated questionnaires were completed in the classrooms.

Table 7.1 Composition of the HBSC study sample, 2018

	Age			Total
	11 years old	13 years old	15 years old	
Tbilisi	289	370	331	990
Urban	477	438	478	1393
Rural	625	694	540	1859
Total	1391	1502	1349	4242

Risk Behaviors in Adolescents

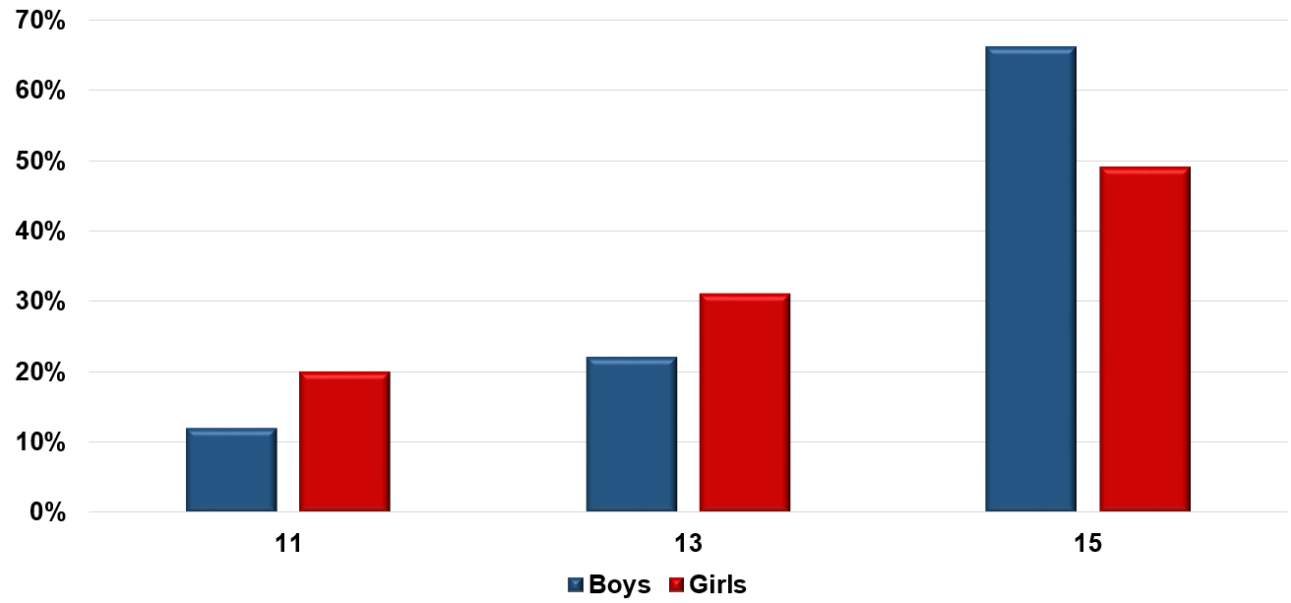
Every tenth of 11 years old adolescent (23% of girl and 19% of boys) have tried smoking during their lifetime, the share of these pupils is increasing with the age.

Table 7.2 Pupils, who tried smoking during their life at least once

	11 years old	13 years old	15 years old
Boys	19%	22%	59%
Girls	23%	28%	48%

As it was expected, from the age of 15, the share of adolescents, who started smoking increased significantly, compared to the younger age groups. 53% of girls and 57% of boys indicated that they started smoking currently (Figure 7.1).

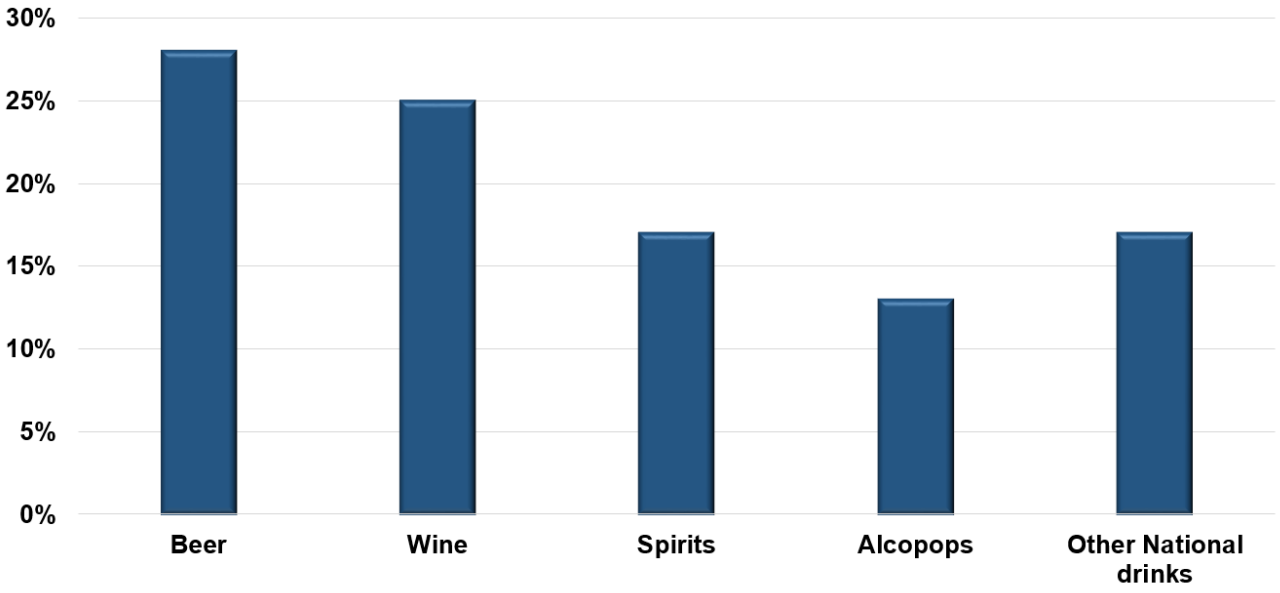
Figure 7.1 Share of adolescents, indicating smoking at least once during last 30 days



Use of psychoactive substances, alcohol

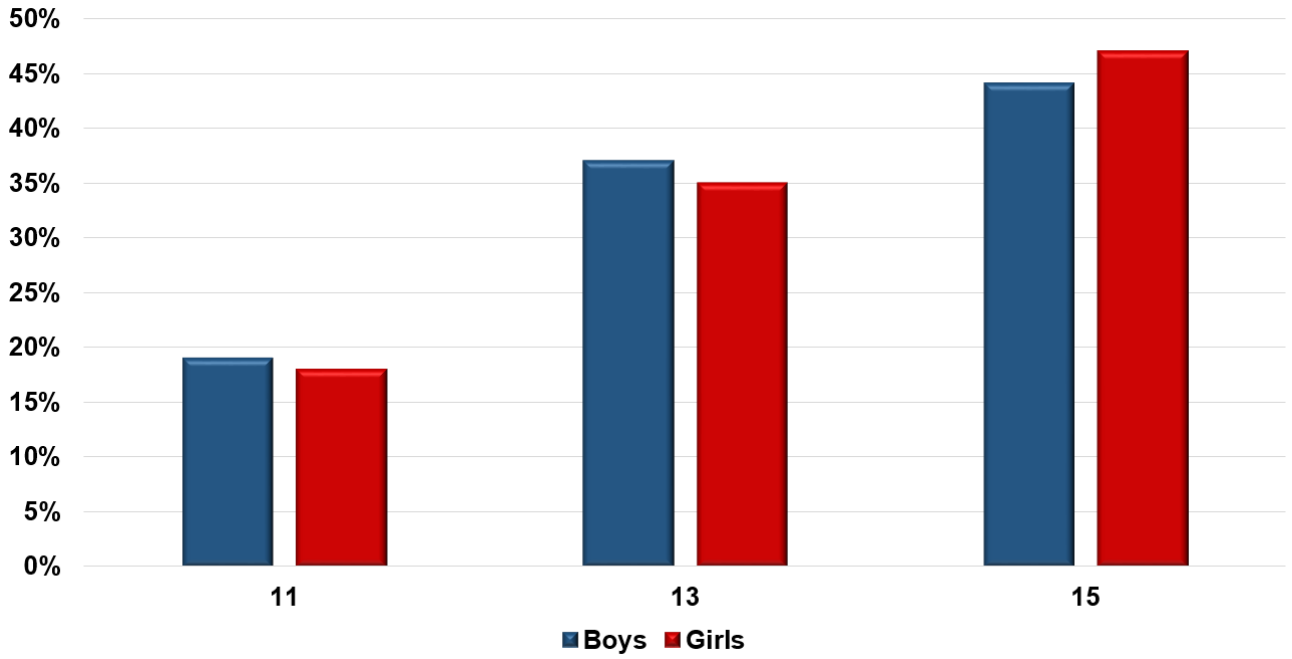
28% of 15-year olds reported that they had tried alcohol at least once during their life time (34% of boys and 23% of girls). Alcohol consumption among 15-year olds is quite significant and noteworthy (Figure 7.2).

Figure 7.2 Alcohol consumption among 15-year olds



Nearly every fifth among 11-year olds and every third among 13-year olds have drunk alcohol at least once during their life. This share is the highest among 15-year olds (Figure 7.3).

Figure 7.3 Share of adolescents who have drunk at least once 2 portions of alcohol during their life



Use of psychoactive substances, cannabis

Only 3% of 15-years old respondents have indicated using cannabis (marijuana, hashish, weed) during their lifetime, and 2.45% have done this recently, during the last month. Boys reported experimenting with cannabis during their lifetime 10 times frequently than girls.

Survey on Lead Prevalence in Children's Blood in Georgia

Nationally representative study measuring blood lead levels (BLL) among children 2-7 years of age was conducted in Georgia in September-December 2018. For that, the BLL study was integrated in Multiple Indicator Cluster Survey (MICS), which is one of the largest household surveys worldwide. The survey field work lasted for three months and collected high quality, internationally comparable data on the situation of families, children and women throughout the country. MICS was implemented in the country by the National Statistics office with technical and financial support from UNICEF, the National Center for Disease Control and Public Health (NCDC) and Italian Institute of Health.

During the study, venous blood samples were collected from 1578 randomly selected children 2-7 years of age across Georgia, providing nationally representative indicators of lead prevalence. Collected blood samples were sent to the laboratory of Italian Institute of Health, one of the leading public health institutions in Europe. These blood samples were analyzed by Inductively Coupled Plasma Mass Spectrometry (ICP MS) that is a gold standard method in lead testing.

Results

There is no known level of lead exposure that is considered safe for human beings. Yet, 5 micrograms per deciliter (µg/dL) of whole venous blood is the reference level at or above which the WHO and U.S. Center for Disease Control recommend public health action be initiated.

Countrywide BLL prevalence at ≥ 5 µg/dL is 41%, between 5 and 10 µg/dL is 25%; and at BLL ≥ 10 µg/dL is 16% among children 2-7 of age (Figures 7.4, 7.5, 7.6, 7.7, 7.8).

Table 7.2. Blood lead level by region

Regions	≥5 µg/dL	≥10 µg/dL
Ajara	85%	50%
Guria	73%	44%
Tbilisi	30%	7%
Imereti	61%	23%
Kakheti	25%	4%
Mtskheta-Mtianeti	20%	6%
Samegrelo and Zemo Svaneti	71%	29%
Samtskhe-Javakheti	32%	12%
Kvemo Kartli	18%	6%
Shida Kartli	21%	4%

Figure 7.4 Shares of lead concentration in blood (%)

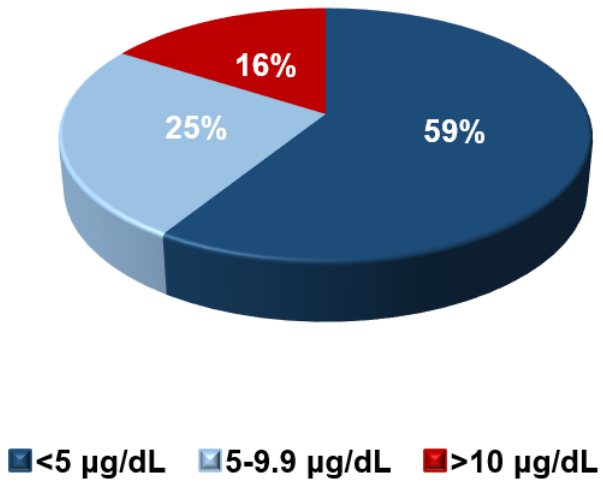


Figure 7.5 Lead concentration (≥5 µg/dL and ≥10 µg/dL) by regions (%)

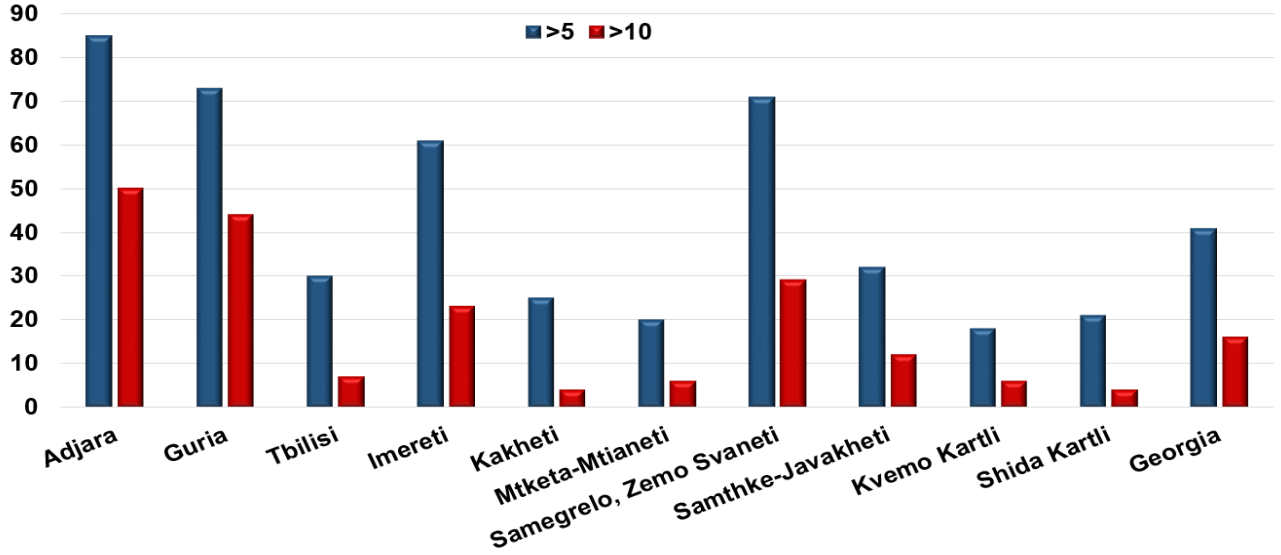


Table 7.6 lead concentration (≥5 µg/dL) by regions (%)

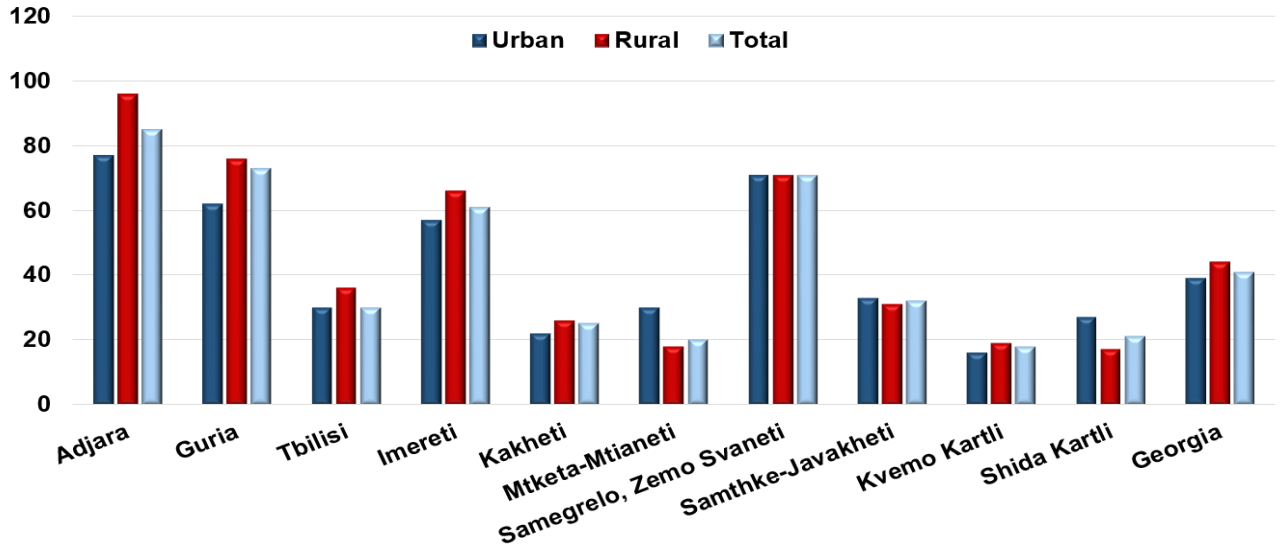


Table 7.7 Average concentration of lead (µg/dL)

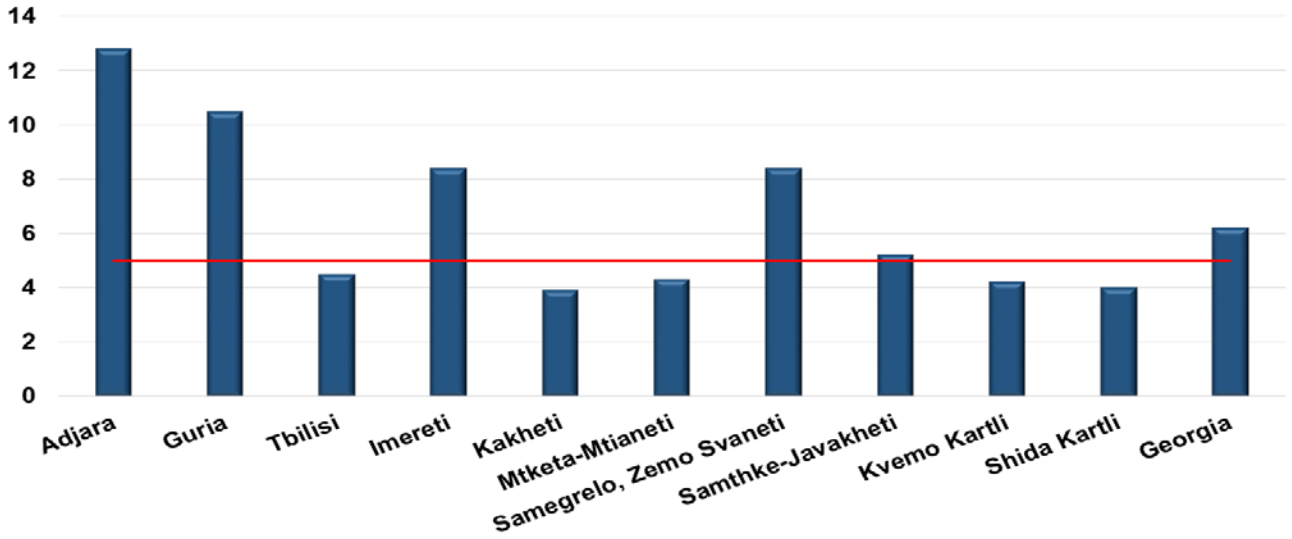
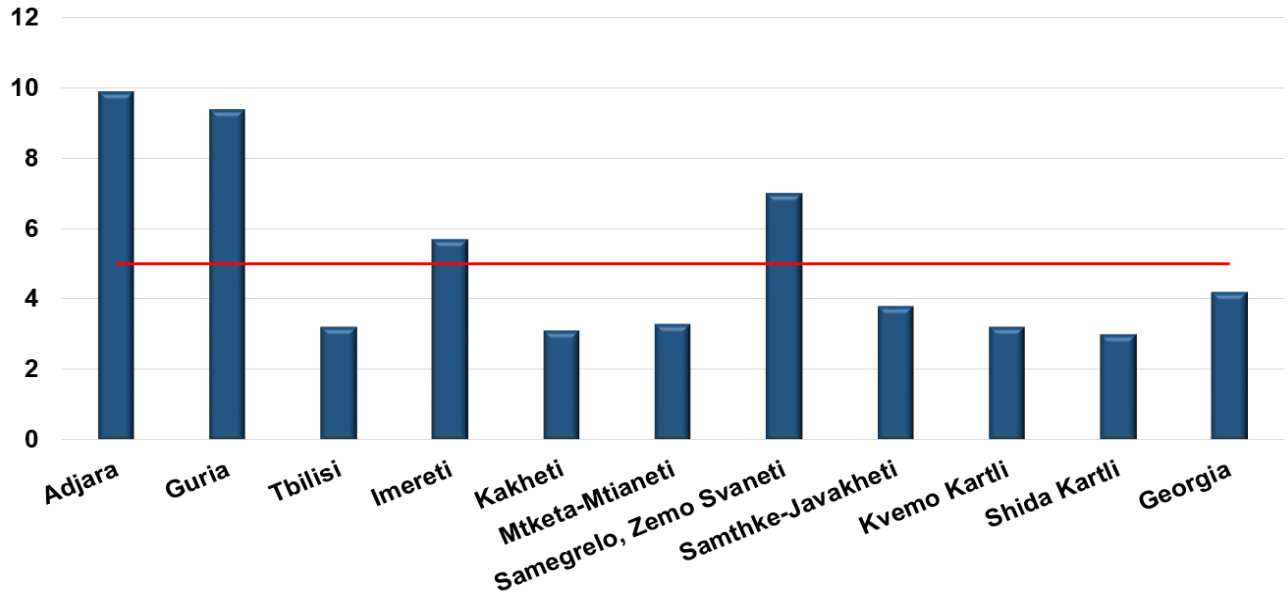


Table 7.8 Median rate of lead contentration (µg/dL)



Childhood Obesity Surveillance Initiative (COSI) Georgia, 2017

Childhood obesity is a major public health problem globally, with the potential to undermine progress towards achieving the SDGs. Prevention is recognized as the only feasible option for curbing the epidemic. Unhealthy diet, malnutrition and sedentary lifestyles are important causes of childhood obesity.

Childhood obesity is a multifactorial disease associated with a wide range of serious health and social consequences including a higher risk of premature death and disability in adulthood. Severe obesity in children is associated with immediate and long-term cardiovascular, metabolic and other negative health outcomes. When comparing overweight children to children with severe obesity, the latter have a much worse cardio-metabolic risk factor profile.

The prevalence of overweight in children is high and represents a serious public health problem in the European region as well. Given that overweight affects a child's mental development, school attendance, education, health, social and economic factors, early detection of obesity and overweight and, if necessary, treatment for obesity is essential.

The given study is the first in Georgia, which investigates the prevalence of severe obesity in school children. Primary public and private school classes were randomly selected from the list of schools provided by Ministry of Education and Science. All children belonging to sampled classes are included in the study. This is a one-stage cluster sampling design with primary school classes considered as clusters. 4143 seven years old pupils participated in the study.

Anthropometric measurements such as height, weight, waist and hip circumferences, were recorded. The pupils were also asked about their physical activity and dietary habits. The school environment data included the number of physical education lessons per week and the opportunities for attending sports activities, as well as information about the foods and

beverages available to the pupils, and health promoting activities and projects organized in the school.

Table 7.3 Sampling

	Boys	Girls	Total
Number of children enrolled in selected schools	2019	2124	4143
Number of measured children	1723	1620	3343
Number of children belonging to target age groups (7-year-olds)	1451	1376	2827
Families participation rate	83%	74%	78%

Nationally representative study was done in spring, 2017. The study found that the prevalence of obesity and overweight was quite high among 7-year-old children nationwide (Figures 7.9, Figure 7.10, 7.11, 7.12).

Figure 7.9 Prevalence of overweighting in 7 year old children, according to the WHO definition

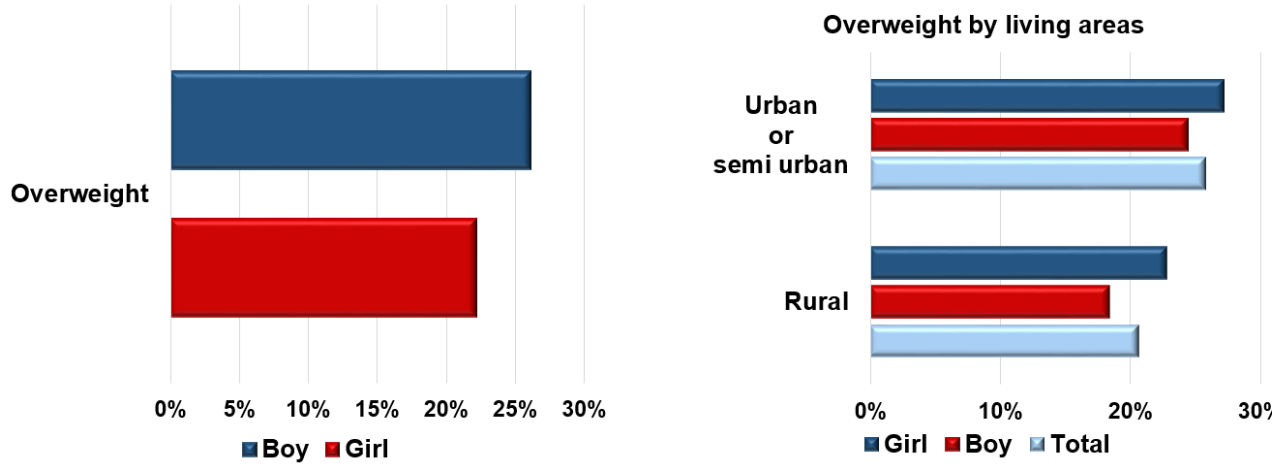


Figure 7.10 Prevalence of overweighting in 7 year old children, according to the WHO definition

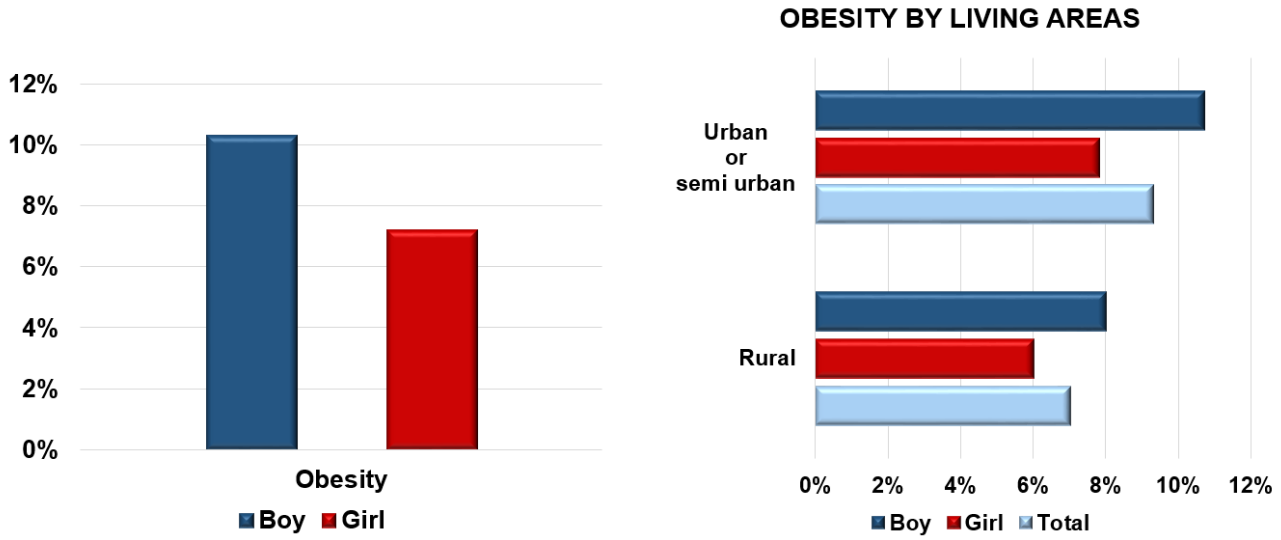


Figure 7.11 Prevalence of underweighting in 7 year old children, according to the WHO definition

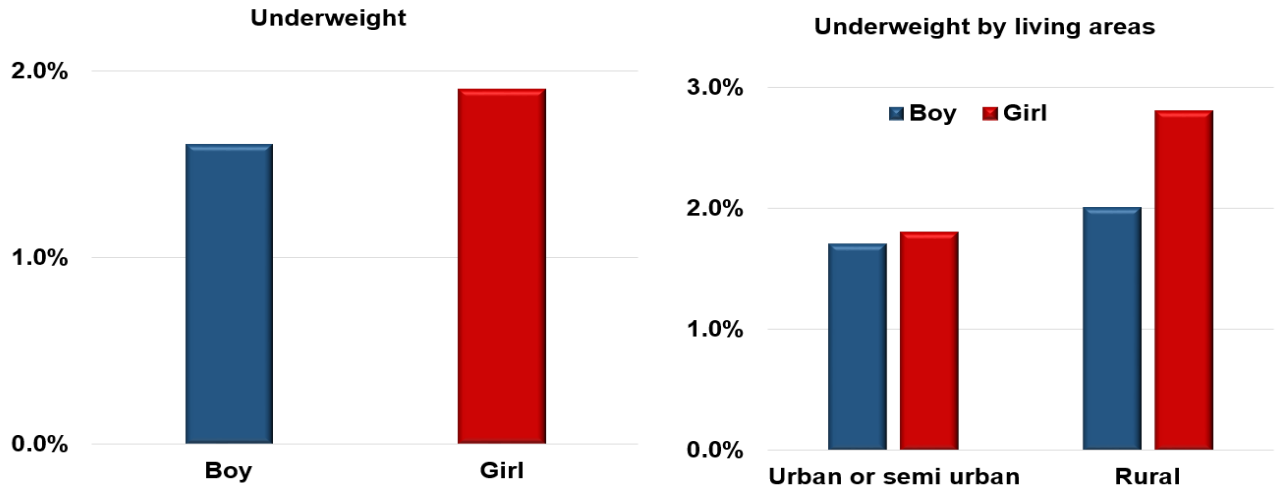
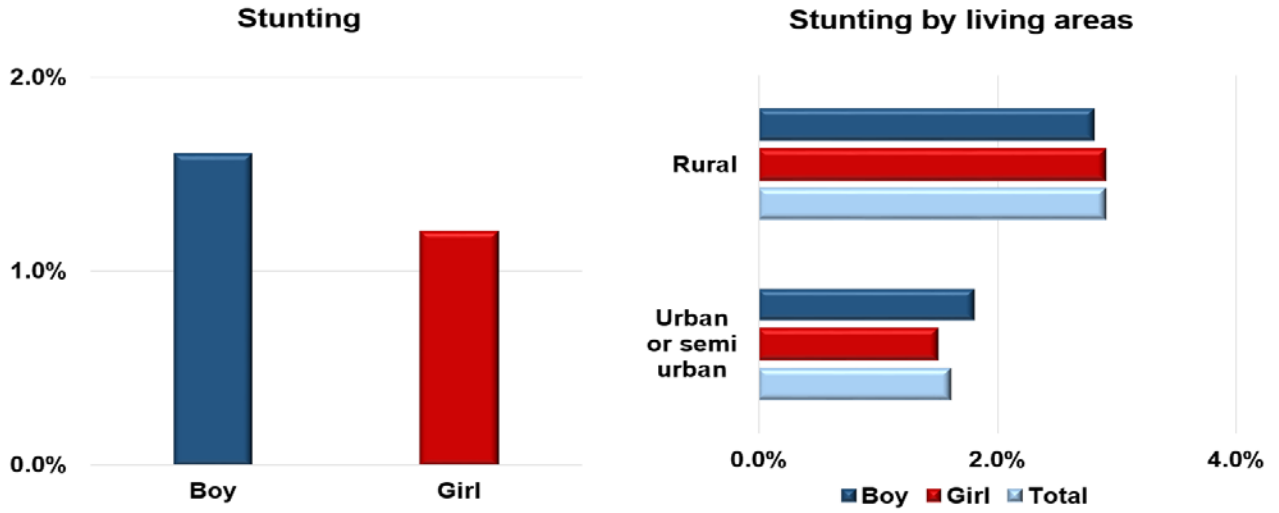


Figure 7.12 Prevalence of growth retardation in 7 year old children, according to the WHO definition



Strengthening of Surveillance of Micronutrient Deficiency in Georgia

In 2015, with the financial support of the US Centers for Disease Control and Prevention, the implementation of the Nutrition Surveillance and Monitoring System in Georgia was initiated in the framework of the US CDC - NCDC Georgia Collaborative Project on Strengthening Micronutrient Deficiency Surveillance. The project was also supported by UNICEF. Supervision is carried out in 4 regions of Georgia (Tbilisi, Kakheti / Lagodekhi, Adjara / Batumi, and Samegrelo / Martvili). In each of these regions, within the surveillance system, there are 2 sentinel medical facilities (pediatric and for pregnant). The 3-4 years of operation of the system has demonstrated an acute problem of iron and folate deficiency, and fortification has again become an issue. Results of the supervision of the target groups (pregnant, children less than 2) over the past three years show that iron deficiency is significantly high in both groups of children and pregnant women; and folate deficiency is high in pregnant women. Iron deficiency prevalence is 70-80% in children (12-23 months) and 60% in pregnant women (1st trimester). High rates of folate deficiency are also observed, it

varies within 30%. Relatively high rates were observed in the western regions of Georgia (compared to the eastern regions). A high prevalence of neural tube defects (NTDs) is also (within 4% of cases reported in sentinels, while the WHO recommendations do not exceed 0.5), based on the evidence, it can be assumed, that the major cause of it is the folate deficiency in pregnant women. (The Nutrition Surveillance System records both infants born with a neural tube defect and cases of induced abortion due to a neural tube defect revealed by ultrasound).

Table 7.4 Anemia, summary data for 2016-2018 by the regions (sentinels)

Regions	Number of children aged 12-23 months	Hb<110 g/L	Number of pregnant women (1st trimester)	Hb <110 g/L
Tbilisi	191	37.3%	176	13.3%
Kakheti	198	38.6%	180	15.8%
Ajara	195	45.4%	181	22.6%
Samegrelo	197	20.6%	186	13.0%
Total	781	35.5%	723	16.5%

Table 7.5 Iron (ferritin) and folate deficiency, 2016-2018

Regions	Number of children aged 12-23 months	Iron deficiency	Number of pregnant women (1st trimester	Iron deficiency	Folate deficiency
Tbilisi	191	70%	176	51.7%	20.0%
Kakheti	198	72.0%	180	55.0%	28.4 %
Ajara	195	80.0%	181	62.5%	32.5%
Samegrelo	197	68.2%	186	60.8%	42.2 %
Total	781	72%	723	58%	30.6%

Table 7.6 Distribution of NTDs (by sentinels involved in the project), 2016-2018

Number of live birth	NTDs (Neural tube defects)	NTDs for 1000 live birth
8741	34	3.9

Table 7.7 Distribution of NTDs by regions (sentinel data only), 2016-2018

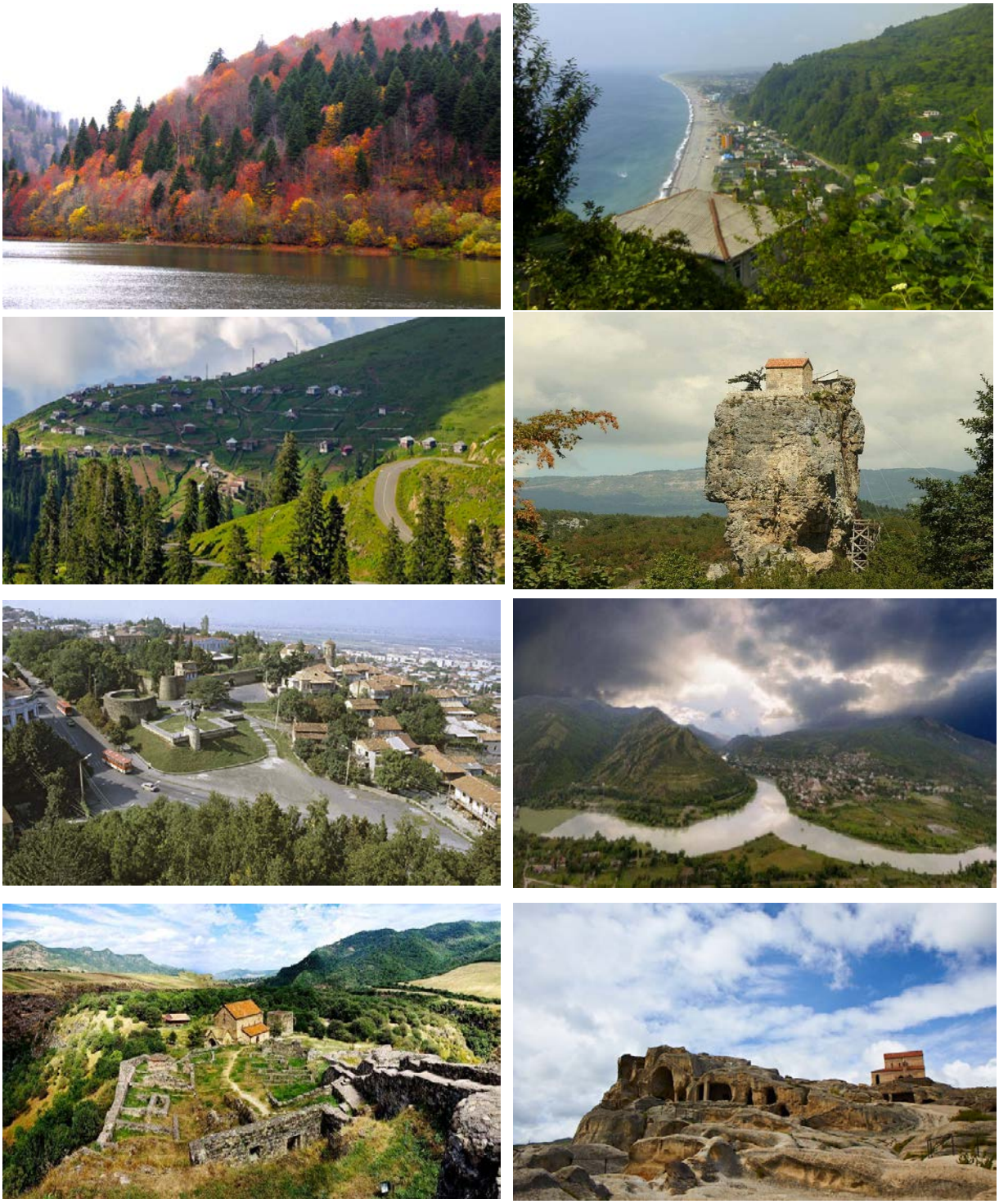
Regions	Number of live birth	NTDs (Neural tube defects)		
		Total	Spina Bifida	Anencephaly / Encephalocele
Tbilisi	6110	17	13	3/1
Kakheti	802	4	3	1
Ajara	1299	10	6	3/1
Samegrelo	530	3	2	1
Total	8741	34	24	8/2

Table 7.8 Anthropometric measurements, 2016-2018

Target population	(%)					
children (12-23 month)	Stunted growth	Depletion		Underweight		Over weight
4 regions	< -2 Z-scores	< -3 acute	< -2	< -3 Z acute	< -2	> +2
1248	10.4	0.5	1.1	0.1	1.2	22.6

Chapter 8.

Statistics by Regions



Tbilisi

Population
Total - 1164900
Live births
Total number - 16161 Rate per 100000 population – 13.9
Stillbirths
Total number - 121; Rate per 1000 births- 7.4
Under-5 mortality rate
Total – 136; 0-5 mortality rate per 1000 live births – 8.4
Under-1 mortality rate
Total - 107; 0-1 mortality rate per 1000 live births – 6.6
Obstetric care
Number of deliveri - 24361; Number of cesarean sections - 9384; ratio per 1000 LB – 580.7
Abortions
Total - 10106; ratio per 1000 LB – 41.1
Healthcare network
In-patient facilities - 127 Out-patient facilities - 382 Ambulance stations - 10 Blood transfusion stations - 10
Physicians 17292
Nurses 8566
Human resources in Health
Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 7241382; Number of enrollements per capita per year – 6.2
Hospital beds
Total number - 8361; density per 100000 population – 717.8

Ajara

	Population	Live births	
		Total number	Rate per 1000 population
Ajara	**347688**	**5800**	**16.7**
Batumi	164742	2885	17.5
Keda	16817	242	14.4
Kobuleti	73103	1142	15.6
Shuakhevi	15109	206	13.6
Khelvachauri	52242	896	17.2
Khulo	25676	429	16.7
Stillbirths			
Total number - 36 ; Rate per 1000 births- 6.1			
Under-5 mortality rate			
Total - 78; 0-5 mortality rate per 1000 live births – 13.4			
Under-1 mortality rate			
Total - 66; 0-1 mortality rate per 1000 live births – 11.4			
Obstetric care			
Number of deliveri - 6078; Number of cesarean sections - 3135; ratio per 1000 LB – 540.5			
Abortions			
Total - 3592; ratio per 1000 LB – 58.5			
Healthcare network			
In-patient facilities - 19 Out-patient facilities - 207 Ambulance stations - 5 Blood transfusion stations - 3			
Human resources in Health			

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Ajara	**2654**	**763.3**	**2059**	**592.2**
Batumi	2223	1349.4	1732	1051.3
Khelvachauri	60	114.9	48	91.9
Keda	32	190.3	32	190.3
Khulo	36	140.2	49	190.8
Kobuleti	267	365.2	171	233.9
Shuakhevi	36	238.3	27	178.7

Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 731576; Number of enrollements per capita per year – 2.1
Hospital beds
Total number - **1542**; density per 100000 population – 443.5

Guria

	Population	Live births	
		Total number	**Rate per 1000 population**
Guria	109960	**1272**	11.6
Lanchkhuti	30653	290	9.5
Ozurgeti	60969	749	12.3
Chokhatauri	18339	233	12.7
Stillbirths			
Total number - 21 ; Rate per 1000 birth - 16.2			
Under-5 mortality rate			
Total - 10; 0-5 mortality rate per 1000 live births – 7.9			
Under-1 mortality rate			
Total - 9; 0-1 mortality rate per 1000 live births – 7.1			
Obstetric care			
Number of deliveries - 485; Number of cesarean sections - 147; ratio per 1000 LB – 115.6			
Abortions			
Total - 147; ratio per 1000 LB – 30.3			
Healthcare network			
In-patient facilities - 5 Out-patient facilities – 108 Ambulance stations - 3 Blood transfusion stations - 0			
Human resources in Health			

	Physicians		Nurses	
	Total number	**Density per 100000 population**	**Total number**	**Density per 100000 population**
Guria	**405**	**368.3**	**275**	**250.1**
Chokhatauri	**83**	**453.6**	**54**	**295.1**
Ozurgeti	**185**	**303.3**	**146**	**239.3**
Lanchkhuti	**137**	**446.3**	**75**	**244.3**

Number of enrollements with primary healthcare and ambulance
Total number of enrollements – 288576; Number of enrollements per capita per year – 2.6
Hospital beds
Total number - 142; density per 100000 population – 129.1

Imereti

	Population	Live births	
		Total number	Rate per 1000 population
Imereti	**502217**	**6757**	**13.5**
Kutaisi	139576	2270	16.3
Bagdati	19553	249	12.7
Vani	22519.5	325	14.4
Zestaponi	56281.5	724	12.9
Terjol	32966	377	11.4
Samtredia	45461	552	12.1
Sachkhere	36068.5	477	13.2
Tkibuli	19070.5	196	10.3
Tskhaltubo	50570.5	570	11.3
Chiatura	39114.5	511	13.1
Kharagauli	18997.5	226	11.9
Khoni	22038.5	280	12.7
Stillbirths			
Total number - 47 ; Rate per 1000 births- 7.1			
Under-5 mortality rate			
Total - 50; 0-5 mortality rate per 1000 live births – 7.4			
Under-1 mortality rate			
Total - 41; 0-1 mortality rate per 1000 live births – 6.1			
Obstetric care			
Number of deliveries - 6606; Number of cesarean sections - 3226; ratio per 1000 LB – 477.4			
Abortions			
Total - 1882; ratio per 1000 LB – 28.4			
Healthcare network			
In-patient facilities - 38 Out-patient facilities – 389 Ambulance stations - 13 Blood transfusion stations - 3			
Human resources in Health			

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Imereti	**3518**	**700.5**	**2578**	**513.3**
Samtredia	210	461.9	88	193.6
Chiatura	94	240.3	89	227.5
Kutaisi	2192	1570.5	1569	1124.1
Bagdati	56	286.4	35	179.0
Vani	65	288.6	45	199.8
Sachkhere	138	382.6	194	537.9
Terjola	181	549.1	81	245.7
Tkibuli	48	251.7	31	162.6
Kharagauli	54	284.2	44	231.6
Khoni	98	444.7	136	617.1
Tskhaltubo	130	257.1	61	120.6
Zestaponi	252	447.7	205	364.2

Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 1275545; Number of enrollements per capita per year – 2.5
Hospital beds
Total number - 2391; density per 100000 population – 476.1

Kakheti

	Population	Live births	
		Total number	Rate per 1000 population
Kakheti	**313567**	**4159**	**13.3**
Akhmeta	29889	398	13.3
Gurjaani	52860	623	11.8
Dedoplistskaro	20990	252	12.0
Telavi	56323	757	13.4
Lagodekhi	41337	601	14.5
Sagarejo	52241	796	15.2
Sighnaghi	29627	324	10.9
Kvareli	30303	408	13.5
Stillbirths			
Total number - 45 ; Rate per 1000 births- 10.7			
Under-5 mortality rate			
Total - 42; 0-5 mortality rate per 1000 live births – 10.1			
Under-1 mortality rate			
Total - 36; 0-1 mortality rate per 1000 live births – 8.7			
Obstetric care			
Number of deliveries - 2646; Number of cesarean sections - 1202; ratio per 1000 LB – 289.0			
Abortions			
Total - 1146;; ratio per 1000 LB – 43.0			
Healthcare network			
In-patient facilities - 15 Out-patient facilities - 282 Ambulance stations - 8 Blood transfusion stations - 0			
Human resources in Health			

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Kakheti	**1374**	**438.2**	**716**	**228.3**
Telavi	468	830.9	233	413.7
Kvareli	65	214.5	41	135.3
Dedoplistskaro	58	276.3	43	204.9
Sighnaghi	104	351.0	47	158.6
Lagodekhi	186	450.0	79	191.1
Gurjaani	277	524.0	140	264.9
Akhmeta	92	307.8	43	143.9
Sagarejo	124	237.4	90	172.3

Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 599408; Number of enrollements per capita per year – 1.9
Hospital beds
Total number - 517; density per 100000 population – 164.9

Mtskheta-Mtianeti

	Population	Live births	
		Total number	Rate per 1000 population
Mtskheta-Mtianeti	**93767**	**1067**	**11.4**
Dusheti	26140	299	11.4
Mtskheta	10047	94	9.4
Stepantsminda	53768	611	11.4
Tianeti	3812	63	16.5

Stillbirths

Total number - 6 ; Rate per 1000 births- 5.6

Under-5 mortality rate

Total - 8; 0-5 mortality rate per 1000 live births – 7.5

Under-1 mortality rate

Total - 8; 0-1 mortality rate per 1000 live births – 7.5

Obstetric care

Number of deliveries - 50
Number of cesarean sections - 3; ratio per 1000 LB - 2.8

Abortions

Total - 40; ratio per 1000 LB – 81.6

Healthcare network

In-patient facilities - 5
Out-patient facilities - 70
Ambulance stations - 6
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Mtskheta-Mtianeti	**388**	**413.8**	**261**	**278.3**
Stepantsminda	16	29.8	16	29.8
Mtskheta	264	2627.7	159	1582.6
Dusheti	56	214.2	51	195.1
Tianeti	33	865.7	28	734.5

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 164539; Number of enrollements per capita per year – 1.8

Hospital beds

Total number - 207; density per 100000 population – 220.8

Racha-Lechkhumi and Kvemo Svaneti

	Population	Live births	
		Total number	Rate per 1000 population
Racha-Lechkhumi and Kvemo Svaneti	**29974**	**328**	**10.9**
Ambrolauri	10694	98	9.2
Lentekhi	4203	76	18.1
Oni	5831	52	8.9
Tsageri	9246	102	11.0
Stillbirths			
Total number - 1 ; Rate per 1000 births- 3.0			
Under-5 mortality rate			
Total - 4; 0-5 mortality rate per 1000 live births – 12.2			
Under-1 mortality rate			
Total - 4; 0-1 mortality rate per 1000 live births – 12.2			
Obstetric care			
Number of deliveries - 46 Number of cesarean sections - 8; ratio per 1000 LB – 24.0			
Abortions			
Total - 2; ratio per 1000 LB – 4.4			
Healthcare network			
In-patient facilities - 4 Out-patient facilities - 65 Ambulance stations - 4 Blood transfusion stations - 0			
Human resources in Health			

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Racha-Lechkhumi and Kvemo Svaneti	**161**	**537.1**	**203**	**677.3**
Lentekhi	31	737.6	33	785.2
Tsageri	46	497.5	61	659.7
Ambrolauri	53	495.6	70	654.6
Oni	31	531.7	39	668.9

Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 42165; Number of enrollements per capita per year – 1.4
Hospital beds
Total number - 70; density per 100000 population – 233.5

Samegrelo and Zemo Svaneti

	Population	Live births	
		Total number	Rate per 1000 population
Samegrelo and Zemo Svaneti	**318500**	**3972**	**12.5**
Zugdidi	102537	491	11.8
Senaki	36490	188	9.1
Mestia	9495	1462	14.3
Abasha	20593	358	11.1
Tsalenjikha	24523	155	16.3
Khobi	28990	450	12.3
Chkhorotsku	21821	259	11.9
Martvili	32375	304	12.4
Poti	41678	305	10.5

Stillbirths

Total number - 43 ; Rate per 1000 births- 10.7

Under-5 mortality rate

Total - 40; 0-5 mortality rate per 1000 live births – 10.1

Under-1 mortality rate

Total - 32; 0-1 mortality rate – 8.1

Obstetric care

Number of deliveries - 2529
Number of cesarean sections - 1467; ratio per 1000 LB – 369.3

Abortions

Total - 927; ratio per 1000 LB – 36.7

Healthcare network

In-patient facilities - 22
Out-patient facilities - 273
Ambulance stations – 10 Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Samegrelo and Zemo Svaneti	**1709**	**536.6**	**1034**	**324.6**
Zugdidi	657	640.7	463	451.5
Senaki	327	896.1	146	400.1
Mestia	40	421.3	51	537.1
Abasha	84	407.9	53	257.4
Tsalenjikha	115	468.9	62	252.8
Khobi	91	313.9	67	231.1
Chkhorotsku	50	229.1	33	151.2
Martvili	76	234.7	53	163.7
Poti	269	645.4	106	254.3

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 563105; Number of enrollements per capita per year – 1.8

Hospital beds

Total number - - 565; density per 100000 population – 177.4

Samtskhe-Javakheti

	Population	Live births	
		Total number	Rate per 1000 population
Samtskhe-Javakheti	**155021**	**2107**	**13.6**
Adigeni	16277	241	14.8
Aspindza	10539	155	14.7
Akhalkalaki	42604	593	13.9
Akhaltsikhe	39385	505	12.8
Borjomi	25188	321	12.7
Ninotsminda	21029	292	13.9

Stillbirths

Total number - 22 ; Rate per 1000 births- 10.3

Under-5 mortality rate

Total - 23; 0-5 mortality rate per 1000 live births – 10.9

Under-1 mortality rate

Total - 20; 0-1 mortality rate – 10.5

Obstetric care

Number of deliveries - 1460
Number of cesarean sections - 237; ratio per 1000 LB – 112.5

Abortions

Total - 628; ratio per 1000 LB – 43.0

Healthcare network

In-patient facilities - 2
Out-patient facilities - 106
Ambulance stations - 6
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Samtskhe-Javakheti	**512**	**330.3**	**499**	**321.9**
Ninotsminda	36	171.2	47	223.5
Akhalkalaki	77	180.7	96	225.3
Adigeni	41	251.9	59	362.5
Borjomi	118	468.5	92	365.3
Akhaltsikhe	215	545.9	176	446.9
Aspindza	25	237.2	29	275.2

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 208624; Number of enrollements per capita per year – 1.3

Hospital beds

Total number - 372; density per 100000 population – 240.0

Kvemo Kartli

	Population	Live births	
		Total number	**Rate per 1000 population**
Kvemo Kartli	**432713**	**6179**	14.3
Rustavi	128069	1845	14.4
Bolnisi	55364	706	12.8
Gardabani	81034	1121	13.8
Dmanisi	20299	280	13.8
Marneuli	21973	1725	78.5
Tetritskaro	106616	245	2.3
Tsalka	19359	257	13.3
Stillbirths			
Total number - 69 ; Rate per 1000 births- 11.0			
Under-5 mortality rate			
Total - 67; 0-5 mortality rate – 10.8			
Under-1 mortality rate			
Total - 56; 0-1 mortality rate - 9.1			
Obstetric care			
Number of deliveries - 4074 Number of cesarean sections - 1435; ratio per 1000 LB – 232.2			
Abortions			
Total - 2240; ratio per 1000 LB – 55.0			
Healthcare network			
In-patient facilities - 18 Out-patient facilities - 231 Ambulance stations - 8 Blood transfusion stations - 0			
Human resources in Health			

	Physicians		Nurses	
	Total number	**Density per 100000 population**	**Total number**	**Density per 100000 population**
Kvemo Kartli	**1671**	**386.2**	**986**	**227.9**
Tsalka	47	242.8	31	160.1
Marneuli	497	2261.9	351	1597.4
Gardabani	186	229.5	73	90.1
Rustavi	743	580.2	379	295.9
Bolnisi	120	216.7	89	160.8
Dmanisi	33	162.6	25	123.2
Tetritskaro	45	42.2	38	35.6

Number of enrollements with primary healthcare and ambulance
Total number of enrollements - 490476; Number of enrollements per capita per year – 1.1
Hospital beds
Total number - 986; density per 100000 population - 227.9

Shida Kartli

	Population	Live births	
		Total number	Rate per 1000 population
Shida Kartli	**258265**	**3336**	**12.9**
Gori	122713	1712	14.0
Kaspi	42551	444	10.4
Kareli	41077	567	13.8
Khashuri	51924	613	11.8

Stillbirths

Total number - 26; Rate per 1000 births- 7.7

Under-5 mortality rate

Total - 41; 0-5 mortality rate - 12.3

Under-1 mortality rate

Total - 37; 0-1 mortality rate - 11.1

Obstetric care

Number of deliveries - 2133
Number of cesarean sections - 800; ratio per 1000 LB – 239.8

Abortions

Total - 2023; ratio per 1000 LB – 179.0

Healthcare network

In-patient facilities - 11
Out-patient facilities - 170
Ambulance stations - 4
Blood transfusion stations - 0

Human resources in Health

	Physicians		Nurses	
	Total number	Density per 100000 population	Total number	Density per 100000 population
Shida Kartli	**1314**	**508.8**	**834**	**322.9**
Kaspi	141	331.4	94	220.9
Gori	718	585.1	449	365.9
Khashuri	269	518.1	161	310.1
Kareli	160	389.5	88	214.2
Tskhinvali	26	--	42	--

Number of enrollements with primary healthcare and ambulance

Total number of enrollements - 658519; Number of enrollements per capita per year - 2.5

Hospital beds

Total number - 756; density per 100000 population - 292.7

Certain statistical data by the regions

Table 8.1 Mid-year population by regions (in thousands), Georgia

	2017	2018
Ajara	344.7	347.7
Tbilisi	1152.1	1164.9
Kakheti	315.3	313.6
Imereti	510.7	502.2
Samegrelo and Zemo Svaneti	322.5	318.5
Shida Kartli	259.8	258.3
Kvemo Kartli	431.0	432.7
Guria	111.0	110.0
Samtskhe-Javakheti	156.5	155.0
Mtskheta-Mtianeti	93.9	93.8
Racha-Lechkhumi and Kvemo Svaneti	30.5	30.0
Georgia	**3728.0**	**3726.5**

Table 8.2 Number of live births by regions, Georgia

	2017	2018
Ajara	6108	5800
Tbilisi	14906	16161
Kakheti	4722	4159
Imereti	7574	6757
Samegrelo and Zemo Svaneti	4436	3972
Shida Kartli	3659	3336
Kvemo Kartli	6693	6179
Guria	1471	1272
Samtskhe-Javakheti	2178	2107
Mtskheta-Mtianeti	1205	1067
Racha-Lechkhumi and Kvemo Svaneti	341	328
Georgia	**53293**	**51138**

Table 8.3 Number of deaths by regions, Georgia

	2017	2018
Ajara	3480	3438
Tbilisi	11976	12122
Kakheti	4806	4529
Imereti	8733	8005
Samegrelo and Zemo Svaneti	5119	4904
Shida Kartli	3449	3398
Kvemo Kartli	4351	4525
Guria	1861	1691
Samtskhe-Javakheti	1941	1927
Mtskheta-Mtianeti	1370	1329
Racha-Lechkhumi and Kvemo Svaneti	736	656
Georgia	**47822**	**46524**

Table 8.4 Population natural growth by regions, Georgia, 2017-2018

	2017	2018
Ajara	2628	2362
Tbilisi	2930	4039
Kakheti	-84	-370
Imereti	-1159	-1248
Samegrelo and Zemo Svaneti	-683	-932
Shida Kartli	210	-62
Kvemo Kartli	2342	1654
Guria	-390	-419
Samtskhe-Javakheti	237	180
Mtskheta-Mtianeti	-165	-262
Racha-Lechkhumi and Kvemo Svaneti	-395	-328
Georgia	**5471**	**4614**

Table 8.5 Immunization coverage (percent) by regions, Georgia, 2018[9]

	BCG	DPT+HIB+HEPB/DPT+HIB+HEPB+IPV/DPT3	Polio-3	MMR-1	MMR-2
Ajara	96.7%	93.5%	93.5%	95.8%	90.3%
Tbilisi	98.3%	92.0%	92.0%	99.9%	99.2%
Kakheti	100.0%	97.6%	97.6%	100.9%	98,4%
Imereti	95.2%	92.7%	92.7%	96.1%	94.7%
Samegrelo and Zemo Svaneti	96.0%	91.5%	91.5%	98.2%	96.1%
Shida Kartli	93.9%	97.1%	97.1%	97,9%	95.4%
Kvemo Kartli	93.8%	88.2%	88.2%	98.4%	89.5%
Guria	98.5%	90.6%	90.6%	105.2%	94.9%
Samtskhe-Javakheti	96.4%	94.4%	94.4%	96.7%	91.0%
Mtskheta-Mtianeti	102.2%	95.4%	95.4%	99.6%	97.3%
Racha-Lechkhumi and Kvemo Svaneti	100.0%	95.6%	95.6%	103.8%	99.1%
Georgia	**97.1%%**	**92.6%**	**92.6%**	**98.7%**	**95.6%**

[9] *Coverage according to the scheduled number of the target population*

Table 8.6 Number of population, who received ambulance assistance by regions, Georgia

	2012	2013	2014	2015	2016	2017	2018
Ajara	77756	91550	102174	116280	127656	117387	125061
Tbilisi	505492	602591	640885	709320	735182	686311	698586
Kakheti	64832	66977	59022	79331	90895	84009	86819
Imereti	108989	108989	123975	158375	154547	142339	144998
Samegrelo and Zemo Svaneti	80447	82854	69251	98156	106168	91586	96711
Shida Kartli	48993	53702	51887	76421	71258	64590	64775
Kvemo Kartli	67959	87380	83890	107578	128216	116109	120687
Guria	21926	21693	23387	28216	32758	30947	29756
Samtskhe-Javakheti	23177	30109	24550	33040	36865	34788	35932
Mtskheta-Mtianeti	22677	27800	30438	34066	34230	33351	48309
Racha-Lechkhumi and Kvemo Svaneti	13022	12185	11945	12074	12462	11993	11442
Georgia	**1035270**	**1199884**	**1221404**	**1452857**	**1530237**	**1413410**	**1463076**

Table 8.8 Certain infectious and parasitic diseases, hospital discharges by regions, Georgia

	2017		2018	
	Number of hospital discharges	Case fatality rate (%)	Number of hospital discharges	Case fatality rate (%)
Ajara	2935	0.6	2961	0.3
Tbilisi	13457	1.8	18260	1.5
Kakheti	264	1.5	525	0.6
Imereti	4961	0.4	6142	0.5
Samegrelo and Zemo Svaneti	441	1.4	718	0.4
Shida Kartli	1413	0.4	1541	0.7
Kvemo Kartli	674	0.0	512	0.8
Guria	168	0.6	186	0.0
Samtskhe-Javakheti	303	0.3	290	1.4
Mtskheta-Mtianeti	5	80.0	15	33.3
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	2	0.0
Georgia	**24621**	**1.2**	**31152**	**1.1**

Table 8.9 Diarrhoea of presumed infectious origin by regions, Georgia

	2017				2018			
	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	6107	1771.7	3893	5699.9	6830	1964.4	4644	6639.1
Tbilisi	2428	210.7	1412	618.2	2845	244.2	1750	746.7
Kakheti	701	222.3	552	883.2	664	211.8	497	787.8
Imereti	4709	922.1	2781	2748.0	5193	1034.0	3413	3377.9
Samegrelo and Zemo Svaneti	775	240.3	260	406.9	792	248.7	315	491.6
Shida Kartli	988	380.3	576	1118.4	792	720.3	375	1695.1
Kvemo Kartli	773	179.3	696	814.0	950	367.8	715	1376.1
Guria	118	106.3	30	136.4	346	80.0	148	170.0
Samtskhe-Javakheti	68	43.5	35	112.9	105	112.0	66	349.9
Mtskheta-Mtianeti	75	79.9	40	215.1	84	280.2	39	646.8
Racha-Lechkhumi and Kvemo Svaneti	17	55.7	9	150.0	3	1.9	1	3.2
Georgia	**16759**	**449.5**	**10337**	**1399.0**	**18604**	**499.2**	**11963**	**1595.7**

Table 8.10 Tuberculosis morbidity rates per 100000 population by regions, Georgia, 2018

	Number of registered cases	Rate per 100000 population	New cases	Rate per 100000 population	New cases and relapses	Rate per 100000 population
Ajara	298	59.3	211	60.7	231	66.4
Tbilisi	269	62.2	703	60.3	747	64.1
Kakheti	933	80.1	125	39.9	128	40.8
Imereti	157	50.1	224	44.6	242	48.2
Samegrelo and Zemo Svaneti	54	57.6	244	76.6	258	81.0
Shida Kartli	128	49.6	98	37.9	104	40.3
Kvemo Kartli	272	78.2	191	44.1	199	46.0
Guria	47	42.7	38	34.6	39	35.5
Samtskhe-Javakheti	11	36.7	25	16.1	26	16.8
Mtskheta-Mtianeti	314	98.6	44	46.9	44	46.9
Racha-Lechkhumi and Kvemo Svaneti	46	29.7	7	23.4	8	26.7
Other departments	57	--	35	--	41	--
Georgia	**2586**	**69.4**	**1945**	**52.2**	**2064**	**55.4**

Table 8.11 Pulmonary tuberculosis morbidity rates per 100000 population by regions, Georgia, 2018

	Number of registered cases	Rate per 100000 population	New cases	Rate per 100000 population	New cases and relapses	Rate per 100000 population
Ajara	211	60.7	156	44.9	176	50.6
Tbilisi	744	63.9	539	46.3	583	50.0
Kakheti	133	42.4	103	32.8	106	33.8
Imereti	247	49.2	178	35.4	196	39.0
Samegrelo and Zemo Svaneti	63	19.8	199	62.5	213	66.9
Shida Kartli	105	40.7	77	29.8	83	32.1
Kvemo Kartli	233	53.8	158	36.5	166	38.4
Guria	42	38.2	33	30.0	34	30.9
Samtskhe-Javakheti	36	23.2	16	10.3	17	11.0
Mtskheta-Mtianeti	43	45.9	34	36.3	34	36.3
Racha-Lechkhumi and Kvemo Svaneti	10	33.4	6	20.0	7	23.4
Other departments	45	--	27	--	33	--
Georgia	**1912**	**51.3**	**1526**	**40.9**	**1648**	**44.2**

Table 8.12 Incidence of extrapulmonary tuberculosis by regions, Georgia

	2017			2018		
	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	66	19.1	18.0	55	15.8	26.1
Tbilisi	182	15.8	18.0	164	14.1	23.3
Kakheti	34	10.8	17.0	19	6.1	15.2
Imereti	38	7.4	12.9	46	9.2	20.5
Samegrelo and Zemo Svaneti	54	16.7	13.8	45	14.1	18.4
Shida Kartli	17	6.5	11.3	21	8.1	21.4
Kvemo Kartli	44	10.2	15.2	33	7.6	17.3
Guria	6	5.4	11.3	5	4.5	13.2
Samtskhe-Javakheti	20	12.8	25.0	9	5.8	36.0
Mtskheta-Mtianeti	9	9.6	13.6	10	10.7	22.7
Racha-Lechkhumi and Kvemo Svaneti	0	0.0	0.0	1	3.3	14.3
Other departments	9	--	13.2	8	--	22.9
Georgia	**479**	**12.8**	**16.1**	**416**	**11.2**	**21.4**

Table 8.13 New cases of HIV infection, incidence by regions, Georgia

	2016		2017		2018	
	Total	Incidence per 100000 population	Total	Incidence per 100000 population	Total	Incidence per 100000 population
Abkhazia	35	-	35	--	33	--
Ajara	63	18.4	76	22.0	54	15.5
Tbilisi	289	25.4	252	21.9	277	23.8
Kakheti	40	12.6	33	10.5	31	9.9
Imereti	80	15.4	70	13.7	57	11.3
Samegrelo and Zemo Svaneti	87	26.7	59	18.3	96	30.1
Shida Kartli	35	13.4	33	12.7	30	11.6
Kvemo Kartli	50	11.7	37	8.6	32	7.4
Guria	18	16.1	9	8.1	18	16.4
Samtskhe-Javakheti	11	7.0	13	8.3	24	15.5
Mtskheta-Mtianeti	10	10.6	11	11.7	18	19.2
Racha-Lechkhumi and Kvemo Svaneti	1	3.2	3	9.8	2	6.7
Georgia	**719**	**19.3**	**631**	**16.9**	**672**	**18.0**

Table 8.14 Sexually transmitted diseases, incidence, Georgia, 2018

	Syphilis		Gonococcal infection	
	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 population
Ajara	378	108.7	113	32.5
Tbilisi	617	53.0	416	35.7
Kakheti	37	11.8	63	20.1
Imereti	131	26.1	84	16.7
Samegrelo and Zemo Svaneti	30	9.4	12	3.8
Shida Kartli	1	0.9	0	0.0
Kvemo Kartli	13	5.0	6	2.3
Guria	30	6.9	55	12.7
Samtskhe-Javakheti	0	0.0	1	1.1
Mtskheta-Mtianeti	0	0.0	0	0.0
Racha-Lechkhumi and Kvemo Svaneti	6	3.9	0	0.0
Georgia	**1243**	**33.4**	**765**	**20.5**

Table 8.15 Diseases of the circulatory system by regions, Georgia, 2018

	Registered cases by the of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Ajara	35136	10105.6	14967	4304.7
Tbilisi	106792	9167.7	39960	3430.4
Kakheti	42896	13680.0	10969	3498.1
Imereti	83915	16708.9	23098	4599.2
Samegrelo and Zemo Svaneti	36784	11549.1	15908	4994.7
Shida Kartli	28267	10945.0	13996	5419.2
Kvemo Kartli	29636	6848.9	13435	3104.8
Guria	11484	10443.8	3236	2942.9
Samtskhe-Javakheti	7623	4917.4	14868	9591.0
Mtskheta-Mtianeti	11295	12045.8	3247	3462.8
Racha-Lechkhumi and Kvemo Svaneti	7160	23887.4	1540	5137.8
Georgia	**408233**	**10954.7**	**147979**	**3970.9**

Table 8.16 Hypertensive diseases, morbidity rates by regions, Georgia, 2018

	Registered cases by the of the year	Prevalence per 100000 population	New cases	Incidence per 100000 population
Ajara	30576	8794.1	6515	1873.8
Tbilisi	86840	7454.9	17629	1513.4
Kakheti	36029	32765.6	5375	4888.1
Imereti	65743	13090.6	11339	2257.8
Samegrelo and Zemo Svaneti	34484	10997.3	8221	2621.8
Shida Kartli	25727	8077.6	7165	2249.6
Kvemo Kartli	23915	25504.7	7103	7575.2
Guria	10406	34716.8	1869	6235.4
Samtskhe-Javakheti	12640	8153.7	3455	2228.7
Mtskheta-Mtianeti	9961	2302.0	2138	494.1
Racha-Lechkhumi and Kvemo Svaneti	5080	1967.0	916	354.7
Georgia	**341401**	**9161.3**	**71725**	**1924.7**

Table 8.17 Endocrine, nutritional and metabolic diseases, Georgia, 2018

	Registered cases total		New cases		Including new cases in children	
	Number of cases	Prevalence per 100000 population	Number of cases	Incidence per 100000 population	Number of cases	Incidence per 100000 children
Ajara	28809	8285.9	7165	2060.8	762	1089.4
Tbilisi	110868	9517.6	38252	3283.8	1275	544.0
Kakheti	20616	6574.7	4222	1346.4	399	632.5
Imereti	44373	8835.4	8451	1682.7	529	523.6
Samegrelo and Zemo Svaneti	20093	6308.6	7049	2213.2	338	527.5
Shida Kartli	22377	8664.4	6906	2674.0	829	1595.5
Kvemo Kartli	26378	6096.0	6888	1591.8	972	1116.5
Guria	5976	5434.7	1177	1070.4	134	605.7
Samtskhe-Javakheti	5033	3246.7	1881	1213.4	142	455.3
Mtskheta-Mtianeti	4425	4719.2	800	853.2	91	482.4
Racha-Lechkhumi and Kvemo Svaneti	2249	7503.4	344	1147.7	14	232.2
Georgia	**291197**	**71814.1**	**83135**	**2230.9**	**5485**	**731.6**

Table 8. 18 Diseases of the respiratory system by regions, Georgia, 2018

	Total				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
Ajara	56554	16265.8	42471	12215.3	24998	35738.0	21450	30665.6
Tbilisi	227731	19549.8	213260	18307.5	94001	40110.7	91698	39128.0
Kakheti	66751	21287.6	61136	19496.9	24713	39174.8	24009	38058.8
Imereti	111752	22251.7	96896	19293.7	44980	44518.3	43632	43184.2
Samegrelo and Zemo Svaneti	47878	15032.3	41107	12906.4	19032	29702.2	18062	28188.4
Shida Kartli	65847	25495.9	61655	23872.8	30623	58938.0	30368	58447.2
Kvemo Kartli	62626	14472.9	56845	13136.9	34097	39167.6	32700	37562.9
Guria	28340	25773.0	25549	23234.8	10197	46094.4	9869	44611.7
Samtskhe-Javakheti	22914	14781.2	20180	13017.6	8586	27530.7	8414	26979.2
Mtskheta-Mtianeti	18285	19500.7	17218	18362.7	7236	38358.8	6943	36805.6
Racha-Lechkhumi and Kvemo Svaneti	5747	19173.9	5048	16841.8	1634	27097.8	1629	27014.9
Georgia	**714425**	**19171.2**	**641365**	**17210.7**	**300097**	**40027.9**	**288774**	**38517.6**

Table 8.19 New cases of asthma and status asthmaticus by the regions, Georgia

	2017				2018			
	Total		Children under-15		Total		Children under-15	
	Number of registered cases by the end of the year	Incidence per 100000 population	Number of registered cases by the end of the year	Incidence per 100000 children	Number of registered cases by the end of the year	Incidence per 100000 population	Number of registered cases by the end of the year	Incidence 100000 children
Ajara	193	56.0	33	48.3	152	43.7	20	28.6
Tbilisi	649	56.3	103	45.1	1482	127.2	27	11.5
Kakheti	236	74.8	5	8.0	183	58.4	4	6.3
Imereti	460	90.1	147	145.3	430	85.6	80	79.2
Samegrelo and Zemo Svaneti	221	68.5	30	46.9	215	67.5	35	54.6
Shida Kartli	146	56.2	0	0.0	299	115.8	20	38.5
Kvemo Kartli	222	51.5	32	38.8	138	31.9	3	3.4
Guria	76	68.5	3	13.6	51	46.4	1	4.5
Samtskhe–Javakheti	106	67.7	1	3.2	121	78.1	4	12.8
Mtskheta–Mtianeti	63	67.1	2	10.8	23	24.5	0	0.0
Racha–Lechkhumi and Kvemo Svaneti	27	88.5	3	49.6	34	113.4	3	49.8
Georgia	**2600**	**69.7**	**361**	**48.9**	**3128**	**83.9**	**197**	**26.3**

Table 8.20 Asthma and status asthmaticus by the regions,Georgia

	2017				2018			
	Total		Children under-15		Total		Children under-15	
	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children	Number of registered cases by the end of the year	Prevalence per 100000 population	Number of registered cases by the end of the year	Prevalence per 100000 children
Ajara	864	250.7	36	52.7	950	273.2	50	71.5
Tbilisi	1689	146.6	246	107.7	1179	101.2	68	29.0
Kakheti	1002	317.8	36	57.6	970	309.3	24	38.0
Imereti	2006	392.8	153	151.2	1768	352.0	109	107.9
Samegrelo and Zemo Svaneti	1145	355.0	110	172.1	1050	329.7	96	149.8
Shida Kartli	879	338.3	18	35.0	853	330.3	16	30.8
Kvemo Kartli	586	136.0	38	46.1	505	116.7	7	8.0
Guria	529	476.6	43	195.5	486	442.0	30	135.6
Samtskhe–Javakheti	368	235.1	7	22.6	318	205.1	5	16.0
Mtskheta–Mtianeti	307	326.9	11	59.1	236	251.7	5	26.5
Racha–Lechkhumi and Kvemo Svaneti	133	436.1	0	0.0	148	493.8	3	49.8
Other departments	82	--	2	--	--	--	--	--
Georgia	**9670**	**259.4**	**702**	**95.0**	**8463**	**227.1**	**413**	**55.1**

Table 8.21 Malignant neoplasms, morbidity according to the regions, Georgia, 2018

	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 10000 population
Abkhazia	110	-	-	-
Ajara	912	262.3	828	238.1
Tbilisi	3720	319.3	7713	662.1
Kakheti	722	230.3	68	21.7
Imereti	1223	243.5	582	115.9
Samegrelo and Zemo Svaneti	693	217.6	135	42.4
Shida Kartli	551	213.3	113	43.8
Kvemo Kartli	821	189.7	86	19.9
Guria	279	253.7	27	24.6
Samtskhe-Javakheti	278	179.3	51	32.9
Mtskheta-Mtianeti	235	250.6	29	30.9
Racha-Lechkhumi and Kvemo Svaneti	91	303.6	3	10.0
Georgia	**9635**	**258.6**	**9635**	**258.6**

Table 8.22 Diseases of blood and blood-forming organs in children by the regions, Georgia

	2017				2018			
	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	935	--	379	--	--		--	
Ajara	2427	704.1	1308	379.5	2462	708.1	1523	438.0
Tbilisi	7420	644.0	3998	347.0	7386	634.1	3908	335.5
Kakheti	2709	859.2	1801	571.2	2643	842.9	1626	518.5
Imereti	7105	1391.2	4000	783.2	6881	1370.1	3845	765.6
Samegrelo and Zemo Svaneti	3400	1054.3	2234	692.7	2601	816.6	1650	518.1
Shida Kartli	2590	996.9	1903	732.5	2497	966.8	1945	753.1
Kvemo Kartli	3562	826.5	2145	497.7	3907	902.9	2215	511.9
Guria	1442	1299.1	1114	1003.6	1196	1087.7	909	826.7
Samtskhe-Javakheti	677	432.6	448	286.3	589	379.9	351	226.4
Mtskheta-Mtianeti	629	669.9	460	489.9	429	457.5	300	319.9
Racha-Lechkhumi and Kvemo Svaneti	162	531.1	92	301.6	125	417.0	82	273.6
Other departments	512	--	285	--	--	--	--	--
Georgia	**33570**	**900.5**	**20167**	**541.0**	**30716**	**824.2**	**18354**	**492.5**

Table 8.23 Anemia by regions, Georgia

	2017				2018			
	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
Ajara	2368	687.0	1268	367.9	2355	677.3	1389	399.5
Tbilisi	5778	501.5	3422	297.0	5158	442.8	2622	225.1
Kakheti	2453	778.0	1660	526.5	2309	736.4	1364	435.0
Imereti	5240	1026.0	3140	614.8	5260	1047,4	2943	586,0
Samegrelo and Zemo Svaneti	3194	990.4	2089	647.8	2429	762.6	1532	481.0
Shida Kartli	2191	843.3	1666	641.3	2164	837.9	1713	663.6
Kvemo Kartli	3303	766.4	2065	479.1	3069	709.2	1732	400.3
Guria	1402	1263.1	1085	977.5	1168	1062.2	896	814.8
Samtskhe–Javakheti	664	424.3	438	279.9	543	350.3	333	214.8
Mtskheta–Mtianeti	589	627.3	433	461.1	399	425.5	281	299.7
Racha–Lechkhumi and Kvemo Svaneti	145	475.4	73	239.3	133	377.0	77	256.9
Other departments	432	--	280	--	--	--	--	--
Georgia	**28555**	**766.0**	**17971**	**482.1**	**25018**	**671.3**	**14933**	**400.7**

Table 8.24 Congenital malformations, deformations and chromosomal abnormalities by regions, Georgia, 2018

	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
Ajara	677	394	194.7	563.3	342	171	98.4	244.5
Tbilisi	2938	1824	252.2	778.3	1528	905	131.2	386.2
Kakheti	418	336	133.3	532.6	52	47	16.6	74.5
Imereti	875	661	174.2	654.2	243	190	48.4	188.0
Samegrelo and Zemo Svaneti	223	147	70.0	229.4	14	13	4.4	20.3
Shida Kartli	403	266	156.0	512.0	209	130	80.9	250.2
Kvemo Kartli	343	199	79.3	228.6	73	52	16.9	59.7
Guria	215	145	195.5	655.5	7	7	6.4	31.6
Samtskhe–Javakheti	97	66	62.6	211.6	17	12	11.0	38.5
Mtskheta–Mtianeti	72	66	76.8	349.9	35	34	37.3	180.2
Racha–Lechkhumi and Kvemo Svaneti	14	10	46.7	165.8	7	4	23.4	66.3
Georgia	**6275**	**4114**	**168.4**	**548.7**	**2527**	**1565**	**67.8**	**208.7**

Table 8.25 Congenital malformations, deformations and chromosomal abnormalities, hospital discharges, Georgia, 2018

	Total		Children <5			
	Number of hospital discharges, all ages	Case fatality rate (%)	Number of hospital discharges	Case fatality rate (%)	Including <1 year	
					Number of hospital discharges	Case fatality rate (%)
Ajara	101	0.0	45	0.0	16	0.0
Tbilisi	2637	1.6	1435	2.6	712	0.4
Kakheti	25	0.0	23	0.0	15	0.0
Imereti	73	0.0	38	0.0	22	0.0
Samegrelo and Zemo Svaneti	4	0.0	0	0.0	0	0.0
Shida Kartli	12	0.0	3	0.0	2	0.0
Kvemo Kartli	16	0.0	3	0.0	3	0.0
Guria	3	0.0	1	0.0	0	0.0
Samtskhe–Javakheti	3	0.0	1	0.0	0	0.0
Mtskheta–Mtianeti	1	0.0	0	0.0	0	0.0
Racha–Lechkhumi and Kvemo Svaneti	0	0.0	0	0.0	0	0.0
Georgia	**2875**	**1.4**	**1549**	**2.5**	**770**	**0.3**

Table 8.26 Injury, poisoning and certain other consequences of external causes, hospital discharges by regions, Georgia

	2017				2018			
	Total		Including children		Total		Including children	
	Number of hospital discharges, all ages	Case fatality rate (%)	Case fatality rate (%)	Number of hospital discharges,	Number of hospital discharges, all ages	Case fatality rate (%)	Case fatality rate (%)	Number of hospital discharges,
Ajara	3535	1.1	270	0.7	4149	0.7	330	0.7
Tbilisi	18202	1.1	3990	0.3	18765	1.1	3995	1.1
Kakheti	1802	1.4	257	0.0	1250	1.6	237	1.6
Imereti	4655	1.5	784	0.8	4888	1.5	562	1.5
Samegrelo and Zemo Svaneti	1139	3.2	107	0.9	870	1.7	75	1.7
Shida Kartli	1496	2.3	123	0.0	1828	2.0	194	2.0
Kvemo Kartli	1207	1.2	125	0.0	1421	1.8	174	1.8
Guria	296	1.4	45	2.2	384	2.3	76	2.3
Samtskhe–Javakheti	486	1.2	42	0.0	543	1.3	39	1.3
Mtskheta–Mtianeti	448	1.8	46	0.0	655	1.4	47	1.4
Racha–Lechkhumi and Kvemo Svaneti	101	1.0	16	0.0	73	1.4	6	1.4
Georgia	**33367**	**1.3**	**5805**	**0.4**	**34826**	1.3	**5735**	1.3

Table 8. 27 Digestive system diseases, incidence, Georgia

	2017				2018			
			Including in children				Including in children	
	New cases	Incidence per 100000 population	New cases	Incidence per 100000 children	New cases	Incidence per 100000 population	New cases	ncidence per 100000 children
Ajara	44581	12933.3	5656	8281.1	49850	14337.6	5824	8326.2
Tbilisi	137920	11971.2	21091	9234.2	206849	17757.1	29784	12709.0
Kakheti	9881	3133.8	2023	3236.8	9748	3108.7	1923	3048.3
Imereti	25710	5034.3	2800	2766.8	27424	5460.6	2501	2475.3
Samegrelo and Zemo Svaneti	15600	4837.2	2727	4267.6	17794	5586.8	2195	3425.6
Shida Kartli	7290	2806.0	1860	3611.7	12806	4958.5	1454	2798.4
Kvemo Kartli	8916	2068.7	1434	1738.2	12157	2809.5	1938	2226.2
Guria	3652	3290.1	353	1604.5	5178	4709.0	384	1735.8
Samtskhe–Javakheti	2955	1888.2	517	1667.7	4643	2995.1	556	1782.8
Mtskheta–Mtianeti	3347	3564.4	447	2403.2	2243	2392.1	411	2178.8
Racha–Lechkhumi and Kvemo Svaneti	502	1645.9	74	1233.3	676	2255.4	66	1094.5
Georgia	**267788**	**7183.2**	**39396**	**5331.7**	**349368**	**9375.1**	**47036**	**6273.8**

Table 8. 28 Digestive system diseases, hospital discharges, Georgia

	2017				2018			
	Total		Including children		Total		Including children	
	Number of hospital discharges, all ages	Case fatality rate (%)	Case fatality rate (%)	Number of hospital discharges,	Case fatality rate (%)	Case fatality rate (%)	სტაციონარიდან ბავშვი	Case fatality rate (%)
Ajara	3989	3.1	252	0.0	3820	1.8	211	0.0
Tbilisi	21997	2.2	1910	0.3	20621	2.2	2167	0.2
Kakheti	2382	3.1	190	0.0	1911	2.0	147	0.0
Imereti	5787	3.0	367	0.0	5388	3.3	297	0.3
Samegrelo and Zemo Svaneti	2351	3.0	143	0.0	1751	1.7	140	0.0
Shida Kartli	2280	2.8	266	0.0	2574	1.2	362	0.0
Kvemo Kartli	2798	1.5	341	0.0	2625	1.9	355	0.0
Guria	853	1.9	94	0.0	730	2.3	74	0.0
Samtskhe–Javakheti	1181	0.8	229	0.0	1225	0.7	240	0.0
Mtskheta–Mtianeti	586	1.7	38	0.0	577	2.8	35	0.0
Racha–Lechkhumi and Kvemo Svaneti	107	1.9	1	0.0	81	1.2	1	0.0
Georgia	**44311**	**2.4**	**3831**	**0.1**	**41303**	**2.1**	**4029**	**0.1**

Table 8.29 Diseases of the genitourinary system, hospital discharges by regions, Georgia, 2018

	Number of hospital discharges, all ages	Including deaths	Case fatality rate (%)	Children Under-15		
				Number of hospital discharges	Including deaths	Case fatality rate (%)
Ajara	2898	24	0.8	146	0	0
Tbilisi	15888	158	1	1735	1	0.1
Kakheti	602	6	1	72	0	0
Imereti	2271	41	1.8	132	0	0
Samegrelo and Zemo Svaneti	406	5	1.2	36	0	0
Shida Kartli	689	9	1.3	58	0	0
Kvemo Kartli	598	14	2.3	50	0	0
Guria	115	1	0.9	9	0	0
Samtskhe–Javakheti	385	3	0.8	161	0	0
Mtskheta–Mtianeti	181	9	5	15	0	0
Racha–Lechkhumi and Kvemo Svaneti	10		0	4	0	0
Georgia	**24043**	**270**	**1.1**	**2418**	**1**	**0**

Table 8.30 Births and infant deaths by the region, Georgia, 2018

	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	5800	36	6.2	66	11.4	31	5.3	10.6
Tbilisi	16161	121	7.4	107	6.6	48	3.0	10.4
Kakheti	4159	45	10.7	36	8.7	11	2.6	13.3
Imereti	6757	48	7.1	41	6.1	16	2.4	9.4
Samegrelo and Zemo Svaneti	3972	43	10.7	32	8.1	15	3.8	14.4
Shida Kartli	3336	26	7.7	37	11.1	18	5.4	13.1
Kvemo Kartli	6179	69	11.0	56	9.1	16	2.6	13.6
Guria	1272	21	16.2	9	7.1	3	2.4	18.6
Samtskhe-Javakheti	2107	22	10.3	20	9.5	6	2.8	13.2
Mtskheta-Mtianeti	1067	6	5.6	8	7.5	1	0.9	6.5
Racha-Lechkhumi and Kvemo Svaneti	328	1	3.0	4	12.2	1	3.0	6.1
Unknown	**51138**	**438**	**8.5**	**416**	**8.1**	**166**	**3.2**	**11.7**

Table 8.31 Antenatal care, according to the „Electronic Module for Pregnant and Newborn Health Surveillance", Georgia, 2018

	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	5964	5371	5335	5365	5361
Tbilisi	21739	18851	18779	18835	18814
Kakheti	2669	2383	2375	2393	2384
Imereti	5662	5466	5444	5447	5447
Samegrelo and Zemo Svaneti	2629	2482	2431	2480	2479
Shida Kartli	2401	2246	2242	2248	2247
Kvemo Kartli	4419	3973	3922	3991	3963
Guria	637	627	623	630	628
Samtskhe-Javakheti	1687	1659	1640	1660	1660
Mtskheta-Mtianeti	199	196	188	195	196
Racha-Lechkhumi and Kvemo Svaneti	74	71	71	71	72
Georgia	**48080**	**43325**	**43050**	**43315**	**43251**

Table 8.32 Caesarean sections, total number and indicators, Georgia, 2018

	Number of deliveries	Total number of caesarean sections	Ratio per 1000 live births	% of total number of deliveries
Ajara	6078	3135	540.5	51.6
Tbilisi	24361	9384	580.7	38.5
Kakheti	2646	1202	289.0	45.4
Imereti	6606	3226	477.4	48.8
Samegrelo and Zemo Svaneti	2529	1467	369.3	58.0
Shida Kartli	2133	800	239.8	37.5
Kvemo Kartli	4074	1435	232.2	35.2
Guria	485	147	115.6	30.3
Samtskhe-Javakheti	1460	237	112.5	16.2
Mtskheta-Mtianeti	50	3	2.8	6.0
Racha-Lechkhumi and Kvemo Svaneti	46	8	24.4	17.4
Georgia	**50468**	**21044**	**411.5**	**41.7**

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27	https://dashboards.sdgindex.org/#/GEO
28	Noncommunicable Diseases (NCD) Country Profiles, World Health Organization, 2018
29	https://www.unfpa.org/sites/default/files/pub-pdf/UNFPA_PUB_2019_EN_State_of_World_Population.pdf