



National Statistics Office of Georgia

# VITAL STATISTICS REPORT 2018



TBILISI  
2019

**National Statistics Office of Georgia – Geostat**

**Vital Statistics Report  
2018**

**Tbilisi**

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The publication is prepared by the Population Census and Demographic Statistics Department, LEPL National Statistics Office of Georgia.

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<b>Abbreviations</b>	
<b>Center for Disease Control (NCDC)</b>	National Center for Disease Control and Public Health
<b>Geostat</b>	National Statistics Office of Georgia
<b>CRA</b>	Civil Registry Agency
<b>PSDA</b>	Public Service Development Agency
<b>SDS</b>	State Department of Statistics
<b>Notes</b>	
The discrepancy between the totals and the sum in some cases can be explained by using rounded data.	
The data in this publication do not cover occupied territories of Abkhazian Autonomous Republic and Tskhinvali Region.	

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## **Preface**

The present document is prepared by the National Statistics Office of Georgia – Geostat. The aim of the report is to inform the statistical data users for about collection and analysis of vital statistics data in Georgia.

The report represents the existing registration system of civil acts and its linkages to the quality of the vital statistics data. The document contains the recent data analysis of births, deaths, marriages and divorces.

The present publication is designed for different groups of users.

## Definitions

<b>Population</b>	
<b>Population</b>	The total number of usual residents in a given area at a given time. The number of population is calculated as of 1 January considering natural increase and net-migration.
<b>Population density</b>	The number of population in a certain area. Usually, shows the number of population per square kilometer.
<b>Urban</b>	A settlement in the territory of which industrial enterprises, tourist and resort establishments or medical and socio-cultural institutions are located, and which carries out the functions of a local economic and cultural center. Urban infrastructure is not essentially focused on carrying out agricultural activities. A settlement with a registered population of over 5,000 may fall within the category of a city.
<b>Rural</b>	A settlement the boundaries of which mainly include agricultural land and other natural resources, and the infrastructure of which is essentially focused on carrying out agricultural activities.
<b>Age</b>	The population age is calculated as of 1 January and shows the number of completed years based on date of birth, i.e. The age reached at the end of the reference year.
<b>Births</b>	
<b>Live birth</b>	Complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which after such separation breathes or shows any other evidence of life – e.g., beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles – whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered to be live-born.
<b>Stillborn</b>	A fetus, whose death is prior to the complete expulsion or extraction from its mother, from the 22nd week of pregnancy, the fetus does not breathe or show any other signs of life, such as beating of the heart, pulsation of the umbilical cord, or contraction of certain groups of skeletal muscles.
<b>Sex ratio at birth</b>	The ratio shows the number of male births per 100 female births.
<b>Mean age of childbearing</b>	The average age of mothers at the birth of their children. It is calculated as a weighted average within the interval between the birth of mothers' generations and children birth.
<b>Crude birth rate</b>	Number of births over a given period divided by the mid-year population over that period. It is expressed as average annual number of births per 1,000 population.
<b>Age-specific fertility rate</b>	Number of births to women in a particular age group, divided by the number of women in that age group. It is expressed as average number of live births per 1,000 women in a specific age group.
<b>Total fertility rate</b>	The average number of live births per woman (usually at the age of 15-49 years). TFR represents the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year.

<b>Deaths</b>	
<b>Deaths</b>	A termination of all vital functions without a possibility to be recovered.
<b>Infant mortality</b>	The mortality of live-born children during the first year of their life (0-12 months).
<b>Neonatal mortality</b>	A death during the first 28 days of life (0-27 days).
<b>Post-neonatal mortality</b>	A death of infants from 28th day of life till one year of age (28-365 days).
<b>Crude death rate</b>	The number of deaths over a given period divided by the mid-year population over that period. It is expressed as average annual number of deaths per 1 000 population.
<b>Infant mortality rate</b>	The number of deaths per 1 000 live births of children under one year of age.
<b>Under-5 mortality rate</b>	The number of deaths per 1 000 live births of children under 5 year of age.
<b>Life expectancy at birth</b>	The average number of years that a newborn could expect to live if he or she were to pass through life subject to the age-specific mortality rates of a given period.
<b>Natural Increase</b>	
<b>Natural increase</b>	The difference between the number of live births and the number of deaths during the year. The natural increase is negative when the number of deaths exceeds the number of births.
<b>Natural increase rate</b>	The difference between crude birth rate and crude death rate. It is expressed as the natural increase per 1,000 population.
<b>Marriages</b>	
<b>Marriage</b>	A voluntary union of a woman and a man for the purpose of creating a family, registered in the territorial offices of the Public Service Development Agency, a legal entity of public law governed by the Ministry of Justice of Georgia.
<b>Crude marriage rate</b>	The number of registered marriages over a given period divided by the mid-year population over that period. It is expressed as average annual number of marriages per 1 000 population.
<b>Divorces</b>	
<b>Divorce</b>	The fact of legal significance, which is one of the grounds for termination of marriage between spouses, and is confirmed by the relevant individual administrative-legal act.
<b>Crude divorce rate</b>	The number of registered divorces over a given period divided by the mid-year population over that period. It is expressed as average annual number of divorces per 1 000 population.

## I. General Information about Georgia

Georgia is located in the Western part of the Caucasus, on the east coast of the Black Sea. It is bounded to the north by Russia, to the south – by Turkey and Armenia, and to the southeast – by Azerbaijan. The total area is 69 700 sq.km.

Time zone is UTC+4. National currency – Georgian Lari. Official language – Georgian, while in the Autonomous Republic of Abkhazia – Georgian and Abkhaz languages. GDP per capita – 4 345.5 USD (2018). Unemployment rate – 12.7 % (2018).

### Physical Map of Georgia



The capital city of Georgia is Tbilisi. Not occupied territory of Georgia includes 1 autonomous republic and 10 regions: Adjara A.R., Guria, Imereti, Kakheti, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti, Samegrelo-Zemo Svaneti, Samtskhe-Javakheti, Kvemo Kartli, Shida Kartli.

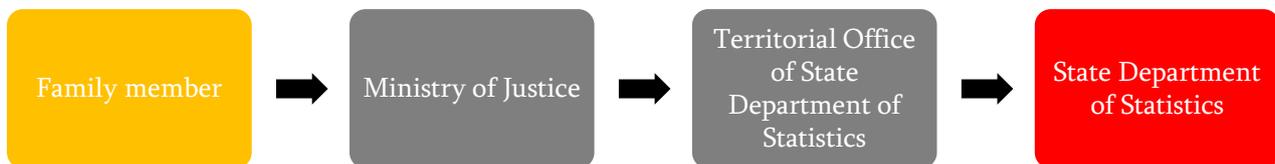
## II. Registration System of Civil Acts and Vital Statistics

The Central Historical Archive of Georgia keeps Church Metrical Books from 1819 until 1921. The books include records about the persons born, died and married for that period. The official registration system of civil acts started in 1921. Those act records are kept in the Central Archive of the Recent History of the National Archives of Georgia until 1935.

### 2.1. Registration system of births and deaths before 2003

In the 1990s, after the collapse of the Soviet Union, the existing registration system of demographic events deteriorated. The existing registration system, which was based on the information from the Ministry of Justice, did not adequately reflect the situation and had quantitative, as well as qualitative drawbacks.

Figure 1: Registration System before 2003



During these years acts were registered according to the request of a family member by the relevant authorities (Ministry of Justice). There was a registration fee which created disincentives for the citizens to register civil acts.

Registered acts were provided to the State Department of Statistics on a quarterly basis for further processing. Afterwards they were returned to the territorial offices of Civil Registry Agency.

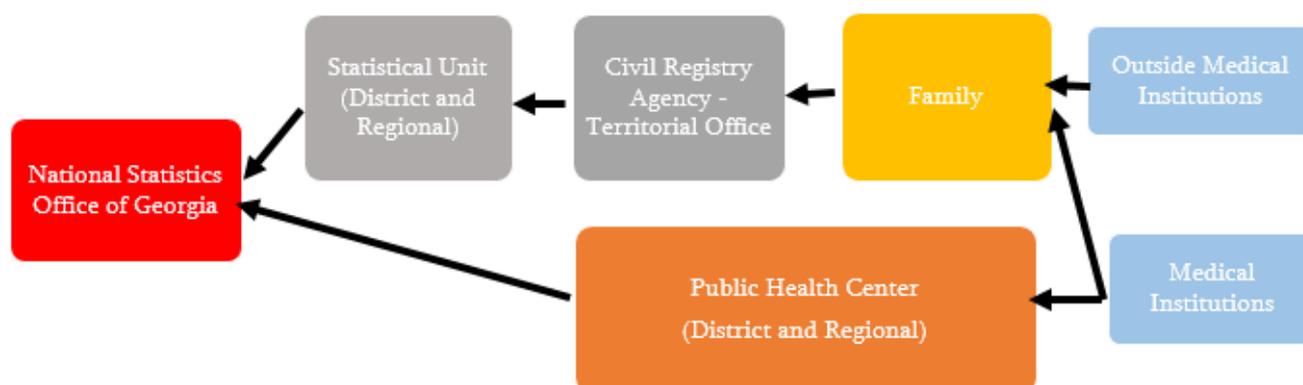
It is remarkable that territorial offices provided primary data to the State Department of Statistics with significant delays.

### 2.2. Registration system of births and deaths in 2003-2010

In 2003 a new system of collecting vital statistics data was introduced by the Presidential Decree. Under the new system, apart from receiving civil acts from the CRA, SDS would obtain primary data on births and deaths directly from medical institutions. A medical institution was obliged to fill in a medical certificate of death and birth prepared in line with the UN recommendations in two copies. One copy was sent to the family for registration, while the other one was sent to the SDS via Public Health offices, which collected data at local levels.

SDS matched and merged data from both sources, thus producing final statistics.

Figure 2: Registration System in 2003-2008



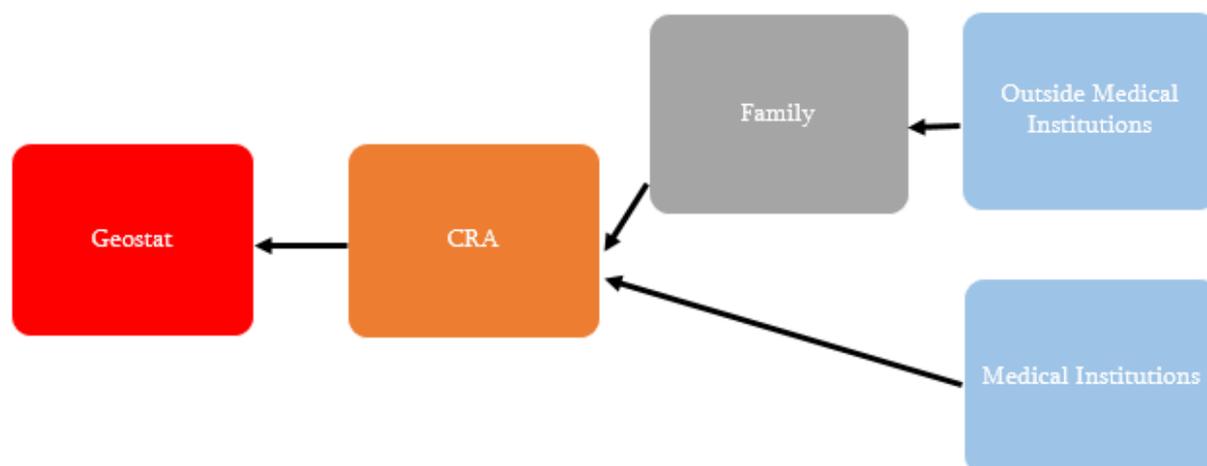
It was found that by means of merging two sources of data in 2003-2008 a much bigger amount of births and deaths was captured compared to the official civil registration system. As a result, with the view of improving registration of civil acts, it became obligatory for medical institutions to provide the copy of the medical certificate to the CRA instead of SDS.

At the same time, other medical institutions were added to the list of entities responsible for issuing the certificates (ambulance services, family doctors, etc.).

Family members were now obliged to register respective births (deaths) occurred outside a medical institution. In case of absence of registration, obtaining permission for the burial of the deceased person has become limited.

During this period State Department of Statistics received electronic databases from CRA.

Figure 3: Registration System in 2009-2010



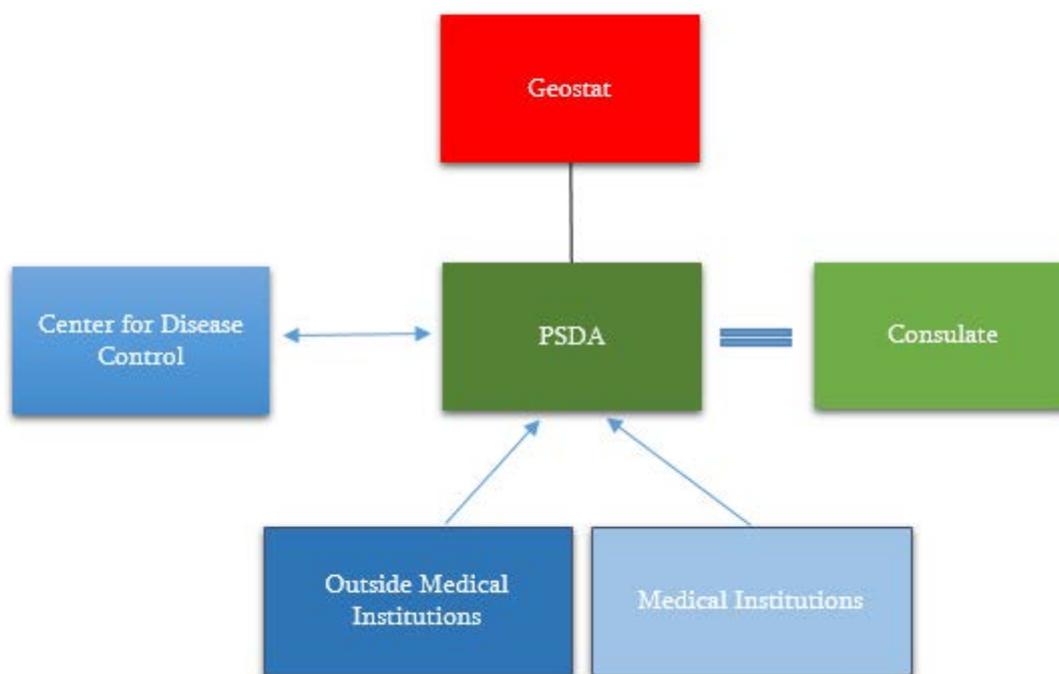
Despite the fact that regulations related to assigning a personal identification number (PIN) existed already in 1994, actual implementation of PIN assignment to a newborn child started in 2008. Without a PIN a child cannot be accepted to a kindergarten or a school. This has drastically improved registration in urban areas, however, in rural settlements the situation has improved only partially.

### 2.3. Registration system of births and deaths from 2011

In 2011 new changes to the system were made. In particular, medical certificates, previously filled in a paper form and taken by stakeholders to register with CRA, are filled electronically and automatically sent to the Public Service Development Agency (PSDA, former Civil Registry Agency).

The objective of the changes to the current system represents development of a unified registration system of Civil Acts.

Figure 4: Registration System of Civil Acts in 2011-2016



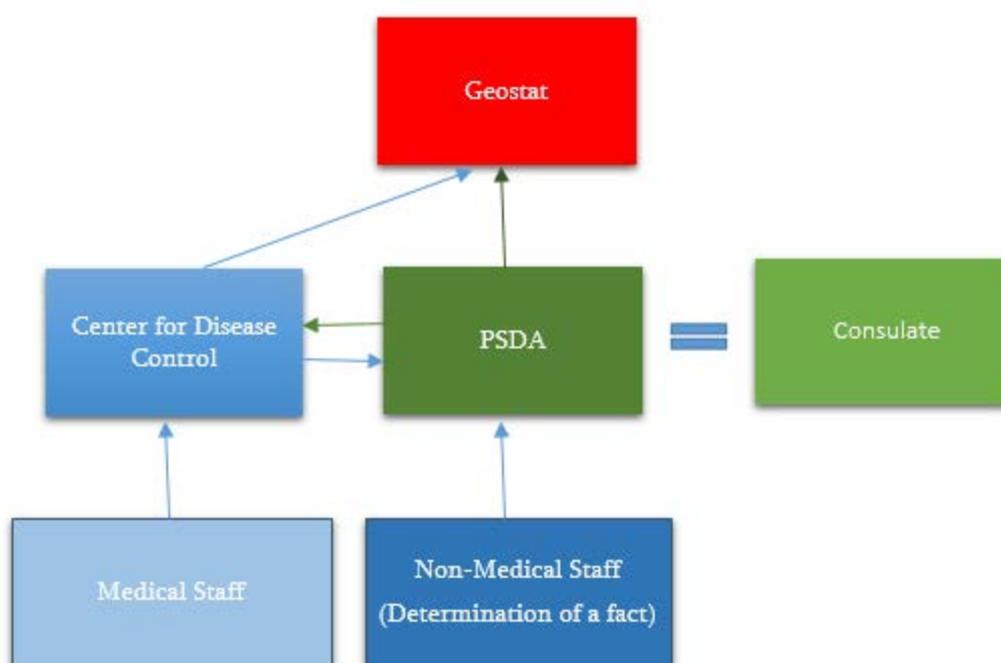
Note: the consulate performs a registration directly in the databases of PSDA.

In 2017 new changes were made again to the system. If the aim of the previous one was to develop a unified registration system of Civil Acts, now it was the purpose of improving quality.

According to the current registration system of births and deaths functions are distributed among the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs and the Public Service Development Agency. Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, the National Center for Disease Control and Public Health has been obliged to fill in the medical certificates of birth and death facts and control the quality of the data. Therefore, the National Center for Disease Control and Public Health has to control the electronic system and the database of the medical certificates, however, the electronic notification about each birth and death fact is sent to the PSDA (territorial offices) – responsible for the registration of facts.

At the same time, PSDA is obliged to provide NCDC with the cases registered by the non-medical entities on a monthly basis, except for the cases registered by the authorized authorities of other countries outside Georgia, which were re-registered in Georgia.

Figure 5: Registration System of Civil Acts from 2017

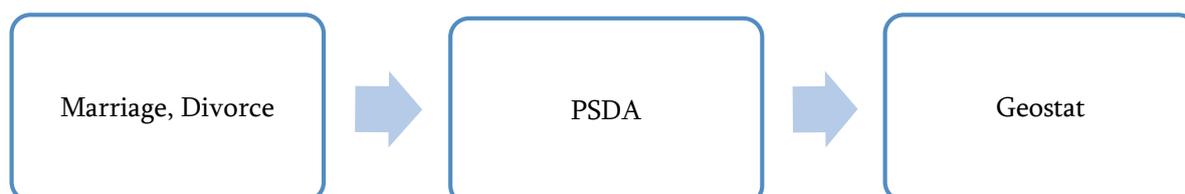


Note: the consulate performs a registration directly in the databases of PSDA.

Geostat receives the electronic data on births and deaths on a quarterly basis from both sources. Afterwards the information obtained is compared and processed.

Geostat receives the individual databases of registered marriages and divorces from PSDA, and after processing aggregate statistical data are disseminated.

Figure 6: Registration System of Marriages and Divorces



## 2.4. Civil acts registration from 2011

In Georgia civil acts are registered by:

- Public Service Development Agency, under the Ministry of Justice of Georgia which exercises its powers through territorial offices;
- Georgian Diplomatic Representations Abroad, Georgian interests section set up within Diplomatic Missions of third states and Consular offices;
- Notaries (only registration of marriages and divorces).

The following main normative acts regulate the registration facts related to births, deaths, marriages and divorces:

- Law of Georgia on “Civil Status Acts”;
- “On Approval of the Procedures for Civil Registration“ Minister of Justice Order N18 January 31, 2012;
- Joint order of the Minister of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs and the Minister of Justice, №01-37/ n- №173 August 24, 2016 on approval of “Birth and death medical certificate details, forms, their completion and sending rules”.

The Geostat receives individual databases on births, deaths, marriages and divorces electronically on a quarterly basis from the PSDA since 2011.

### 2.4.1. Birth registration

One of the following documents proving the fact of birth is used for birth registration:

- Medical certificate of birth;
- Decision of a competent authority for the establishment of a legal significance fact of a person’s birth at a certain time and in certain circumstances;
- Document of birth issued by a competent authority of another country based on the laws of this country.

The following persons are required to apply to the civil registration authority for birth registration:

1. A head of a medical institution<sup>1</sup> or his/her authorized representative, provided a child was born in that institution;
2. A person authorized to issue a medical certificate of birth but is not employed by any medical institution, provided he/she assisted a child’s mother in delivery outside a medical establishment;
3. A parent of a child, if the persons indicated in 1-2 subparagraphs of this article have not announced the child’s birth or if a child was born in another country or outside a medical institution without the assistance of a person authorized to issue a medical certificate of birth;

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<sup>1</sup> For the purpose of this rule, “medical institution” is:

- Obstetrical inpatient service provider;
- A person with the right of providing an independent medical service who performs this activity within the relevant state program.

4. An authorized representative of a local administrative body, if a child was born outside a medical institution without the assistance of a person authorized to issue a medical certificate of birth;
5. The head of a guardianship authority or an educational institution, if the person whose birth has not been registered is the ward of such institution or is under its guardianship.

The data required for birth registration in civil records is indicated on the basis of a medical certificate on birth issued by the joint Order of the Minister of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs and the Minister of Justice.

The medical certificate on birth includes the following information:

Mother	Child	Father
1. Name, surname	1. Name, surname	1. Name, surname
2. PIN	2. Sex (female, male)	2. PIN
3. Date of birth	3. Weight (g)	3. Date of birth
4. Place of birth	4. Date of occurrence	4. Place of birth
5. Citizenship	5. Place of occurrence (medical institution, house, other)	5. Citizenship
6. Place of registration	6. Place of birth	6. Place of registration
7. Usual place of residence	7. Place of registration	7. Usual place of residence
8. Marital status (married, single, divorced, widow)	8. Surname (father's, mother's, both)	8. Attained level of education
9. Birth order		
10. Pregnancy duration (number of weeks)		
11. Status of delivery (stillbirths, live births)		
12. Type of births (i.e. single, twin or higher-multiple delivery)		
13. Attained level of education		

A medical certificate is filled in electronically by an institution providing obstetric inpatient services or by a primary healthcare provider with the independent medical practice. The system is administered by the PSDA.

The medical institutions are obliged to send an electronic notification about the birth to the PSDA within 5 working days and the latter completes the registration on the basis of this notification. No receiving of the notification in PSDA envisages penalty of 500 Lari.

In case of software malfunctions and no possibility to submit a medical certificate electronically, it can be represented in paper form. Submission in paper form is acceptable if software malfunction lasts at least for 2 working days.

Completion of a medical certificate is prohibited if the birth fact was outside a medical institution, except for the cases when a person with an independent medical practice assisted the childbirth outside a medical institution. It is not allowed to establish the fact of birth in absentia the medical person (doctor, midwife, nurse).

A head of a medical institution authorizes a person/persons to fill in a medical certificate in the medical institution.

In case of a stillbirth, only a medical birth certificate is filled, indicating the relevant status. In case of errors in a certificate, a medical institution is obliged to make necessary corrections and send the new certificate to the PSDA.

One paper copy of a medical certificate (hard copy of an electronic form, signed and sealed) is kept in the medical institution.

The paper copy of a certificate is kept in the medical institution for 3 years.

### **Factors enhancing registration of births**

Registration of births is directly related to a number of state programs and it encourages stakeholders to perform comprehensive registration of newborns timely. Mentioned programs include:

- A universal healthcare program;
- Financial social assistance (subsistence allowance) program;
- Target program for improving demographic situation.

It also has to be mentioned that a universal healthcare program covers pregnancy and childbirth expenses. Thus, a pregnant has incentives to register at a medical institution in order to get free services.

### **2.4.2. Death registration**

It is obligatory to register the death of a citizen of Georgia, a stateless person with status and any person deceased in Georgia.

The following persons are required to apply to the civil registration authority for a person's death registration:

- A head of a medical<sup>2</sup>, anatomic pathology (clinical pathology) or forensic institution or his/her authorized representative, within five business days from a person's death, provided he/she died at the above-mentioned institution or the fact of death was established/confirmed by the same institution;
- An individual who is authorized to issue a medical certificate of death but is not employed by any medical, anatomic pathology (clinical pathology) or forensic institution, within five business days from a person's death, provided that the individual has issued a medical certificate of death or established the fact of death;

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<sup>2</sup> For the purpose of this rule, "medical institution" is:

- Inpatient medical institution;
- Pathologic and Forensic Medical Expertise Service Providers;
- Obstetrical service provider or a person with the right of providing an independent medical service who performs this activity within the relevant state;
- Emergency medical institution.

- A representative of local administrative body, within five working days from the notification of a person's death;
- The Ministry of Internal Affairs of Georgia, with respect to an officer killed in any military action or natural calamity, within 30 calendar days from the notification of a person's death;
- The Ministry of Defense of Georgia, with respect to an officer killed under martial law, or during participation in any mission for the preservation and restoration of international peace and safety, or during other peacekeeping missions, within 30 calendar days from the notification of a person's death;
- A parent (an adoptive parent), a spouse or a child (an adoptee) if he/she can assume that the persons specified in this paragraph are not aware of the fact of a person's death;
- The State Security Service of Georgia, with respect to an officer killed in any military action or natural calamity, within 30 calendar days from the notification of a person's death;
- Any legally capable person of full age or an administrative body may apply to the civil registration authority for the registration of a person's death;
- If a person dies in another country, any competent authority in the country of residence of the deceased person may also apply to the consular office for the registration of a person's death.

One of the following documents proving the fact of death is used for death registration:

- A medical certificate of death;
- A decision of a competent authority establishing the legal significance fact of a person's death;
- A court decision of declaring a person dead;
- A report drafted by a representative of a local administrative body confirming the death of a person;
- A notification of the Ministry of Defense of Georgia, the Ministry of Internal Affairs of Georgia or State Security Service of Georgia regarding the death of an officer during peacekeeping missions, in war or combat operations, as well as during natural calamity;
- A document issued by a competent authority of any other country under the laws of the same country evidencing the death.

The head of any medical, anatomic pathology (clinical pathology), or forensic institution, or his/her authorized representative, as well as a person authorized to issue a medical certificate of death, not being, however, employed by any of the above-mentioned institutions is required to submit a medical certificate of death to the PSDA in electronic form for the further registration.

The joint order of the Minister of Internally Displaced Persons from the Occupied Territories, Labour, Health, and Social Affairs of Georgia and the Minister of Justice of Georgia defines the details of a medical certificate of death and the procedures for drafting and sending thereof.

An entity/person sending a medical certificate of death to the PSDA shall be responsible for the accuracy and completeness of the medical certificate sent except when it is impossible to fully complete the certificate due to failure to obtain relevant information.

Failure to send a death certificate to the PSDA results in a penalty of 500 Lari.

The medical death certificate includes the following information:

- I. Name of a self-governing unit;
- II. Name of a medical institution;
- III. Information on a deceased person:
  1. Name, surname
  2. PIN
  3. Date of birth (hour and minutes indicated only in case of infant death)
  4. Date of occurrence (hour and minute is indicated only in case of death in 24 hours)
  5. Place of birth
  6. Citizenship
  7. Place of registration
  8. Usual place of residence
  9. Source to complete personal information
  10. Marital status (married, single, divorced, widow)
  11. Attained level of education
  12. Sex (female, male)
  13. Place of occurrence (medical institution, house, other)
  14. Causes of death (disease or pathological process, which directly led to the death)
  15. Other important diseases
  16. Cause of death (illness, accident, murder, suicide, iatrogenic disease, unknown causes of death);
- IV. Information on violence death:
  1. Place of occurrence (educational institution, house, road, workplace, sport event, other)
  2. Date of occurrence of violence death
  3. Place
  4. Circumstances of violence death;
- V. The death of a pregnant, parturient (maternity, obstetric) or puerperal:
  1. Duration of gestation (number of weeks, unknown) of a pregnant, parturient (maternity, obstetric) or puerperal death
  2. Pregnancy in the last 12 months (yes, no, unknown)
  3. Death is related to complications of abortion, intraperitoneal pregnancy, pregnancy, childbirth, puerperium – including 42 days, other;
- VI. Under-5 mortality:
  1. Gestational age (22-27 weeks, 28 weeks and more)
  2. Type of birth (i.e. single, twin or higher-multiple delivery)
  3. Height at birth (more or less than 47 cm);
- VII. Death was established by a doctor, pathologist, forensic expert, other independent medical staff;
- VIII. The cause of death was established by corpse examination, on the basis of medical documentation, autopsy.

### III. Data Quality

Data quality assurance plays an important role in collecting, processing and analyzing vital statistics. Starting from 2011 changes in normative acts and transition to the electronic issuance of medical certificates increased the coverage of death and birth facts, use of personal identification numbers and introduction of the electronic system eliminated duplicates and improved quality of personal information (name, surname, sex, date of birth).

The PSDA assigns a PIN to a person at birth registration, or during registration by place of usual residence, or by the time of issuance of Identity (Residence) cards. It is prohibited to assign two or more PINs to the same person, the same PIN to different persons, or to change or reuse a PIN of a deceased person. A PIN consists of eleven digits. First two digits (from 01 to 99) denote an administrative unit code; the subsequent digit (from 1 to 9) is the control digit calculated from the other ten digits based on a certain formula. The following two digits (from 01 to 99) represent a code of a territorial office that assigned the PIN and the last six digits denote the serial number of the PIN record (from 000001 to 999999). The Chairperson of the PSDA approves the formula for calculating the control digit.

The Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs, via the new system, performs logical checks of birth and death certificates sent from the medical institutions. In case of missing information and/or inconsistencies within variables the certificates are sent back to respective medical institutions for correction or filling up.

Since 1998 Causes of death are coded according to the ICD-10 (the 10th revision of the International Statistical Classification of Diseases and Related Health Problems). The IRIS software recommended by the WHO for determining causes of death is used in Geostat since 2012. The software automatically selects the main cause of death and assigns a code according to the ICD-10. Additional quality checks for causes of death are performed using the ANACOD software, also recommended by the WHO.

Despite this, there are still some variables in birth and death databases which are not completely filled for the certain reasons.

Starting from 2009, Geostat compares birth and death bases, on the basis of which the women are being identified who have given a born to a child and have died within 1 year of childbirth.

Geostat also cooperates closely with the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia to share and compare data. From 2016 the Ministry has established a new online system for the maternal and newborn health surveillance. The system contains information on mothers, fetuses, and newborns with the view to formulating a comprehensive statistical and epidemiological analysis. Any pregnant woman addressing an antenatal clinic is registered using the PIN, and pertinent information about the pregnant is available in the system. The system also contains information about child delivery. PIN assignment for a newborn is performed through this system. PINs of a mother and her child are linked to each other. It gives the possibility of data quality improvement.

The owner of the electronic birth and death system is NCDC since 2017, which defines the rules of functioning and system using, based on individual administrative-legal acts.

#### IV. Number of Population<sup>3</sup> as of 1 January, 2019

As of January 1, 2019 the population of Georgia equaled 3 723.5 thousand persons, population density – 65.1 persons per 1 sq.km.

In 2018 the natural increase turned out positive (4 614 persons) and the net migration – negative (-10 783 persons).

58.7 percent of the Georgian population lives in urban settlements. At the same time, almost one third of total population lives in the capital Tbilisi. Tbilisi is the most densely populated area (2 322.5 persons per 1 sq.km) compared to the other regions. The least number of residents live in Racha-Lechkhumi and Kvemo Svaneti region (29.7 thousand persons) and the density of population does not exceed 7 persons per 1 sq.km.

Table 1: Population density and number of population as of 1 January, 2019 by regions and urban/rural settlements (thousand persons)

Regions	Number of population			Population density per 1 sq.km <sup>4</sup>
	Total	Urban	Rural	
<b>Georgia</b>	<b>3 723.5</b>	<b>2 184.3</b>	<b>1 539.1</b>	<b>65.1</b>
C. Tbilisi	1 171.1	1 140.7	30.4	2 322.5
Adjara A.R.	349.0	197.7	151.4	120.4
Guria	109.4	31.4	78.0	53.8
Imereti	497.4	244.9	252.5	77.5
Kakheti	312.5	71.0	241.5	27.5
Mtskheta-Mtianeti	93.6	22.1	71.6	16.7
Racha-Lechkhumi and Kvemo Svaneti	29.7	6.8	22.9	6.5
Samegrelo-Zemo Svaneti	316.2	125.0	191.2	42.3
Samtskhe-Javakheti	154.1	54.4	99.8	24.0
Kvemo Kartli	433.2	188.4	244.7	67.3
Shida Kartli	257.3	101.9	155.4	75.0

The share of men and women to the total population as of 1 January, 2019 equals, respectively, 48.1 and 51.9 percent.

Table 2: Number of population as of 1 January, 2019 by sex and major age groups (thousand persons) and sex ratio

Age	Both sexes	Males	Females	Sex ratio
<b>Total</b>	<b>3 723.5</b>	<b>1 790.9</b>	<b>1 932.1</b>	<b>92.7</b>
0-14	754.5	393.6	360.9	109.1
15-64	2 416.3	1 188.9	1 227.3	96.9
65+	552.7	208.4	344.3	60.5

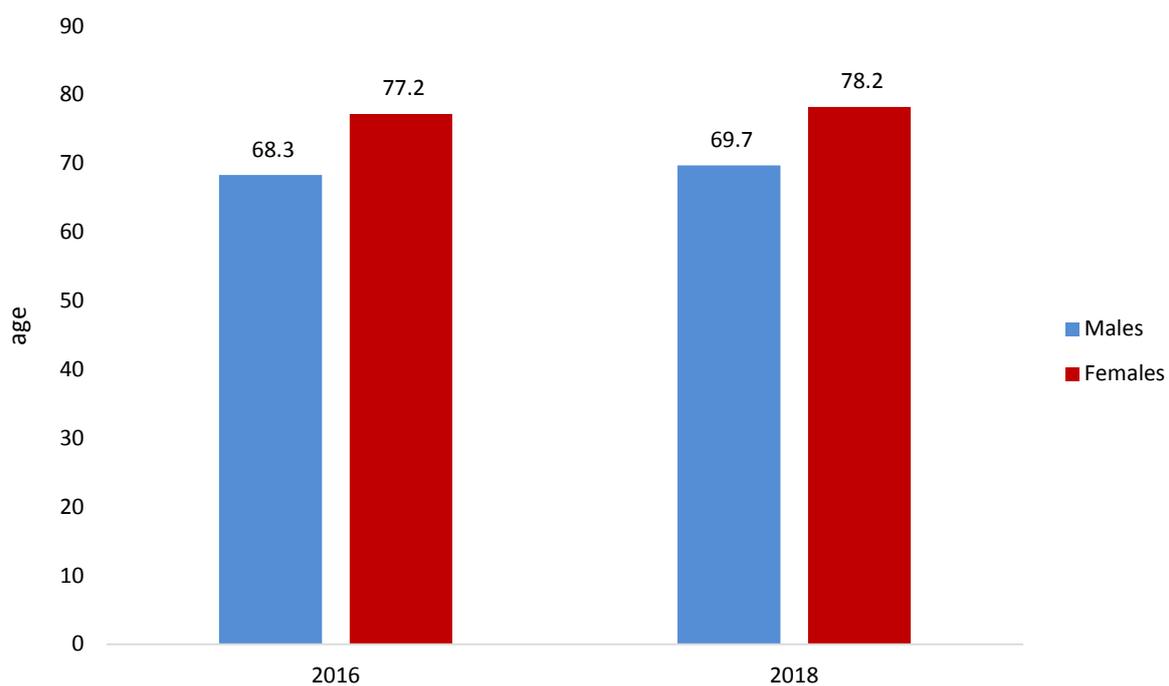
At the age of 0-14, the share of males to the total population exceeds the share of females, while at the age of 65 and over women take greater share. This is due to the longer life expectancy of women compared to men's.

The difference between life expectancies of women and men in Georgia accounted 8.5 years.

<sup>3</sup> Data do not cover occupied territories of Autonomous Republic of Abkhazia and Tskhinvali Region

<sup>4</sup> The area of the regions is as of March, 2014

Figure 7: Life expectancy at birth by sex (years)

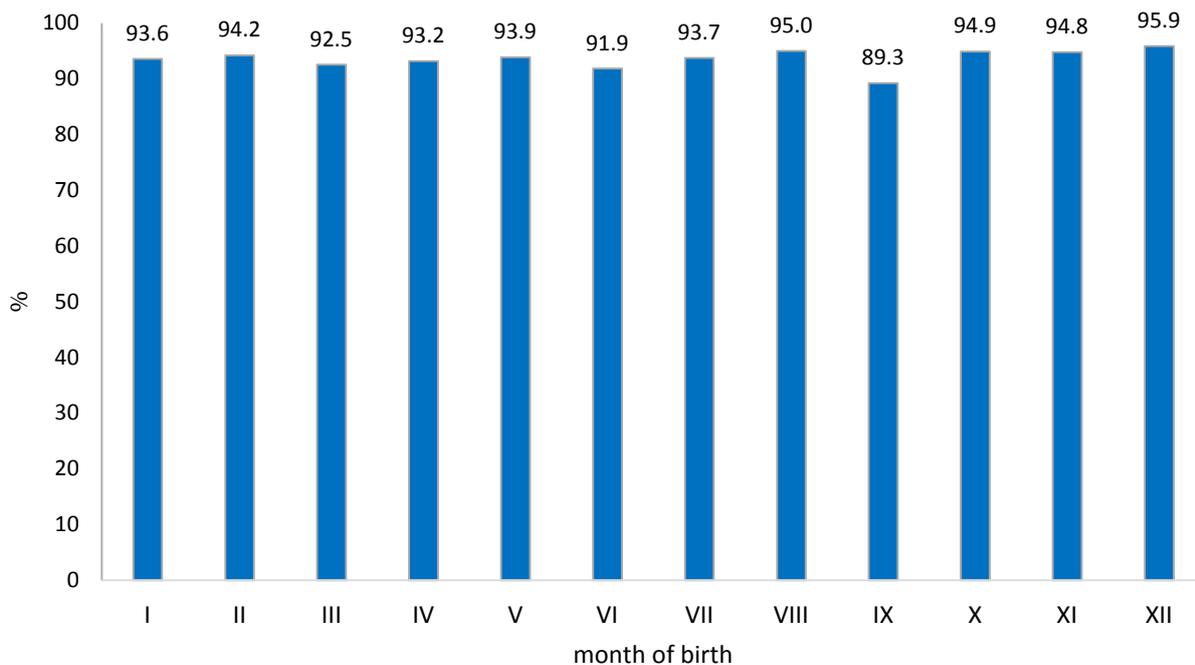


In 2018 the life expectancy equaled to 74.0 years, of which 69.7 years for men and 78.2 years for women.

## V. Births

The introduction of the online birth registration system and the amendments to the current legislation in Georgia practically eliminated the problem of late registration. The absolute majority of newborns (93.6 percent in 2018) are born and registered in the same month, indicating an efficiency of the registration system.

Figure 8: Live births distribution by months of birth in 2018, for whom the months of birth and registration is the same



### 5.1. Data availability and completeness rate

The number of live births in Georgia in urban and rural terms is available for 1940 and for the period after 1950 whereas the number of stillbirths is available from 1969. The data on the number of live births and stillbirths by regions and sex are available only since 1969. In the Soviet time, the statistical data on stillbirths was not disseminated.

Introduction of the online registration system in 2011 led to improvements in the coverage and quality of vital statistics. The birth databases contain different birth-related variables, such as the number of births by sex, birth date, birth place, registration date, registration place, birth order, weight and length of child, age of mother, legitimacy status of a child, mother's marital status and attained level of education of parents. These variables are available by regions, municipalities and urban and rural areas.

The 2014 General Population Census revealed differences between the numbers of registered live births and the number of census-estimated live births. The difference in live births from the registration and census sources could be at least partially explained by resident and non-resident births in Georgia. Non-resident citizens of Georgia may prefer to give birth in a medical institution on the territory of Georgia in order to benefit from free healthcare programs. Accordingly, on the basis of the results of the 2014 General

Population Census, the number of live births have been adjusted in 1995-2013 at the national, regional and municipal level.

Table 3: Live births according to different sources and birth completeness rate

	1995-2000	2000-2005	2005-2010	2010-2015
(1) Geostat <sup>5</sup>	313 841	277 178	305 647	326 305
(2) UN <sup>6</sup>	310 543	273 526	297 251	293 667
Births completeness rate (1):(2)	101.1	101.3	102.8	111.1

## 5.2. Main trends of birth statistics in 2018

The number of live births equaled 51 138 in 2018, registering a 9.6 percent decrease from 2016. The largest number of live births was recorded in Tbilisi (31.6 percent) while the smallest – in Racha-Lechkhumi and Kvemo Svaneti region (0.6 percent).

Table 4: Number of live births by regions

Regions	2016	2017	2018
<b>Georgia</b>	<b>56 569</b>	<b>53 293</b>	<b>51 138</b>
C. Tbilisi	16 784	14 906	16 161
Adjara A.R.	5 977	6 108	5 800
Guria	1 535	1 471	1 272
Imereti	7 784	7 574	6 757
Kakheti	4 870	4 722	4 159
Mtskheta-Mtianeti	1 180	1 205	1 067
Racha-Lechkhumi and Kvemo Svaneti	327	341	328
Samegrelo-Zemo Svaneti	4 797	4 436	3 972
Samtskhe-Javakheti	2 349	2 178	2 107
Kvemo Kartli	6 892	6 693	6 179
Shida Kartli	4 074	3 659	3 336

In 2018 the number of live births totaled to 26 538 for boys and 24 600 for girls. Accordingly, sex ratio at birth (male births per 100 female births) equaled 107.9.

Table 5: Number of live births by sex and sex ratio at births

Year	Both sexes	Boys	Girls	Sex ratio at birth
2016	56 569	28 887	27 682	104.4
2017	53 293	27 658	25 635	107.9
2018	51 138	26 538	24 600	107.9

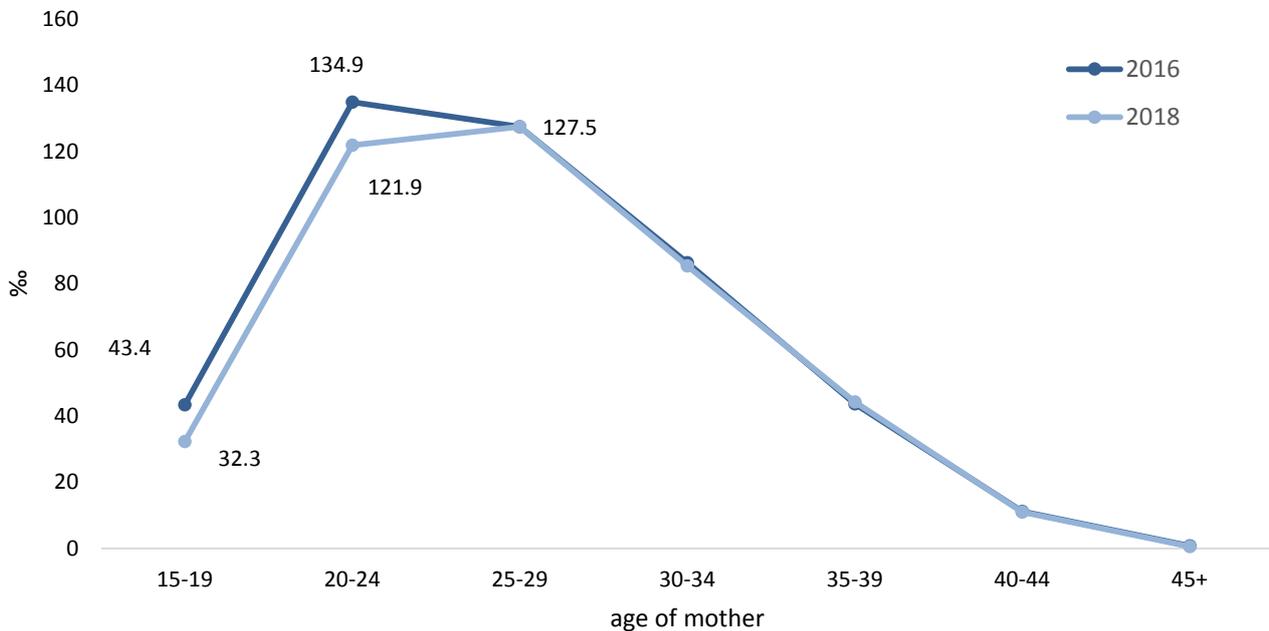
In recent years, the renewal of generations has been achieved by the average number of children of one woman. Total fertility rate accounted 2.1 in 2018.

<sup>5</sup> In 1995-2013 is based on the retro-projection, starting from 2014 is based on the registered data.

<sup>6</sup> United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision.

Compared to 2016 age-specific fertility rate has decreased for women aged 15-19 and 20-24. In 2018 the number of newborn per woman aged 15-19 equaled 32.3 and 121.9 – per woman aged 20-24. In other age groups the indicator remained practically the same.

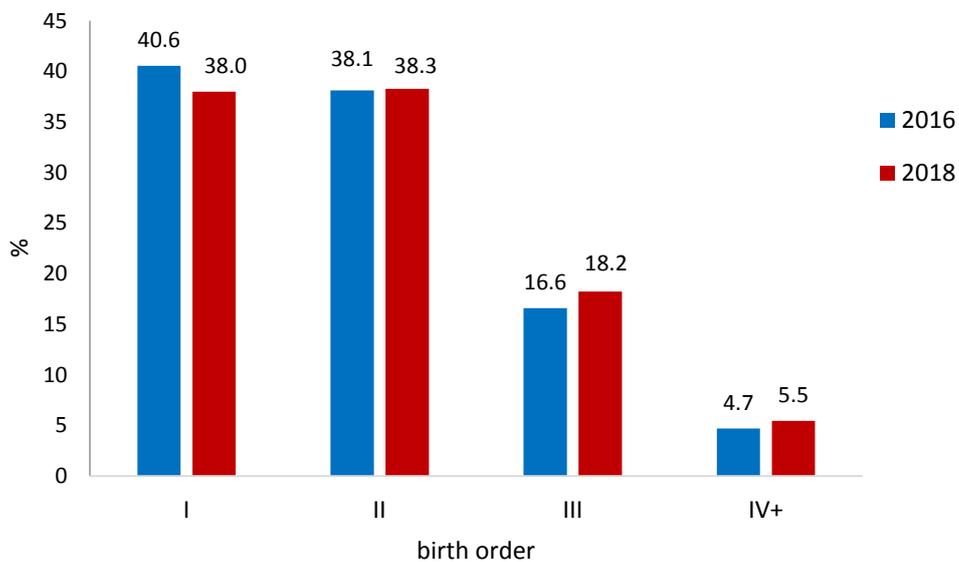
Figure 9: Age-specific fertility rates



In 2018 the share of the first child in total births decreased from 40.6 percent to 37.9 percent compared to 2016. Consequently, the share of the third and next order child increased from 21.3 percent to 23.6 percent, while the share of the second child remained practically unchanged.

The mean age of mothers at first birth equaled 25.0 years in 2016. In 2018 the indicator increased to 25.6 years.

Figure 10: Distribution of live births by order (%)



In 2018 17 375 children were born out of wedlock which is 34.0 percent of total live births.

It is noteworthy that the registration status of birth out of wedlock can be two types: births registered according to the declaration of a) both parents and b) the mother. The share of births registered according to the declaration of mother is small and does not exceed 7.5 percent. The high rate of birth outside of wedlock is mostly a consequence of religious marriages that have no legal significance.

Table 6: Number of live births by legitimacy status

Year	Total	Born within wedlock	Born out of wedlock	<i>of which:</i>		Not stated
				According to the declaration of both parents	According to the declaration of mother	
2016	56 554	37 865	18 689	17 325	1 364	15
2017	53 258	35 154	18 104	16 569	1 535	35
2018	51 138	33 760	17 375	16 068	1 307	3

In Georgia, the number of stillbirths totaled to 438 in 2016 which is 21.5 percent less than in 2016.

## VI. Deaths

In Georgia the major documents underlying death registration include i) a medical death certificate, which follows the standards of the World Health Organization (WHO) and the recommendations of the United Nations, and ii) a death certificate which contains only personal data on the deceased person.

Similar to births, the introduction of the online death registration system and the amendments to the current legislation in Georgia practically eliminated the problem of late registration. In 2018 for 91.4 percent of total deaths months of death and registration do not differ from each other.

Figure 11: Deaths distribution by months of death in 2018, for whom the months of death and registration is the same



In 2018 almost half of total deaths (22 816) was recorded as a death at home.

### 6.1. Data availability

Similar to birth data, continuous time series for death statistics by urban and rural settlements are available starting from 1950. Before 2004 death data included only sex, dates of birth and death, main cause of death and permanent place of residence.

Dates of birth and death of deceased children aged 0-4 is available starting from 1996 and data disaggregated by regions and main causes of death – from 2005.

Starting from 2011 the list of variables was increased, and it currently includes data on place and site of occurrence, up to 8 causes of death, additional fields related to infant and under-5 mortality.

On the basis of the results of the 2014 General Population Census, the number of death have been adjusted in 1995-2013 at the national, regional and municipal level. It should be noted that a relative adjustment of infant mortality figures was higher compared to other age groups. The adjustment factors were largely based on the results of the 2010 Georgia Reproductive Health Survey.

## 6.2. Main trends in death statistics in 2018

In 2018 the number of deaths decreased by 8.4 percent compared to 2016 and totaled 46 524 persons. The largest number of deaths was recorded in Tbilisi (26.1%) while the smallest – in Racha-Lechkhumi and Kvemo Svaneti region (1.4%).

Table 7: Number of deaths by regions

Regions	2016	2017	2018
<b>Georgia</b>	<b>50 771</b>	<b>47 822</b>	<b>46 524</b>
C. Tbilisi	12 720	11 976	12 122
Adjara A.R.	3 622	3 480	3 438
Guria	1 832	1 861	1 691
Imereti	9 102	8 733	8 005
Kakheti	5 099	4 806	4 529
Mtskheta-Mtianeti	1 416	1 370	1 329
Racha-Lechkhumi and Kvemo Svaneti	823	736	656
Samegrelo-Zemo Svaneti	5 532	5 119	4 904
Samtskhe-Javakheti	2 053	1 941	1 927
Kvemo Kartli	4 855	4 351	4 525
Shida Kartli	3 717	3 449	3 398

The number of infant deaths equaled 416 in 2018. Accordingly, the infant mortality rate (per 1 000 live births) equaled 8.1 ‰, a 0.9 points decrease from 2016.

The highest share of infant deaths takes neonatal mortality - mortality from the moment of birth to the 28th day of life.

Table 8: Number of infant deaths by age and infant mortality rate (per 1 000 live births)

Year	Infant mortality	Neonatal mortality	Post-neonatal mortality	Infant mortality rate
2016	507	356	151	9.0
2017	512	362	150	9.6
2018	416	254	162	8.1

The under-5 mortality rate (per 1 000 live births) totaled 9.8‰ in 2018.

## 6.3. Main causes of death

Starting from 1998 Georgia causes of death are classified according to the 10<sup>th</sup> revision of the International Classification of Diseases (ICD-10). Before 1998 Georgia has been using the Soviet classifications.

Table 9: Available classifications by years of usage

	Year
Soviet classification 1952 (second version in 1957)	1959-1964
Soviet classification 1952 (based on ICD-7)	1965-1969
Soviet classification 1970 (based on ICD-8)	1970-1981
Soviet classification 1981 (based on ICD-9)	1981-1987
Soviet classification 1981 (revised in 1988)	1988-1998
ICD-10	Since 1998

During the Soviet period, very few data on causes of death were published. From 1960 to 1990, some aggregated data for very broad groups of causes of death (only for infectious diseases, cancer, cardiovascular diseases, respiratory diseases and violent deaths) were published in the statistical yearbooks. Starting from 1999, detailed causes of death according to International Classification of Diseases became available.

In 2018 in Georgia like in most European countries diseases of the circulatory system (46.3 %) and neoplasms (15.8 %) are the dominant causes of death.

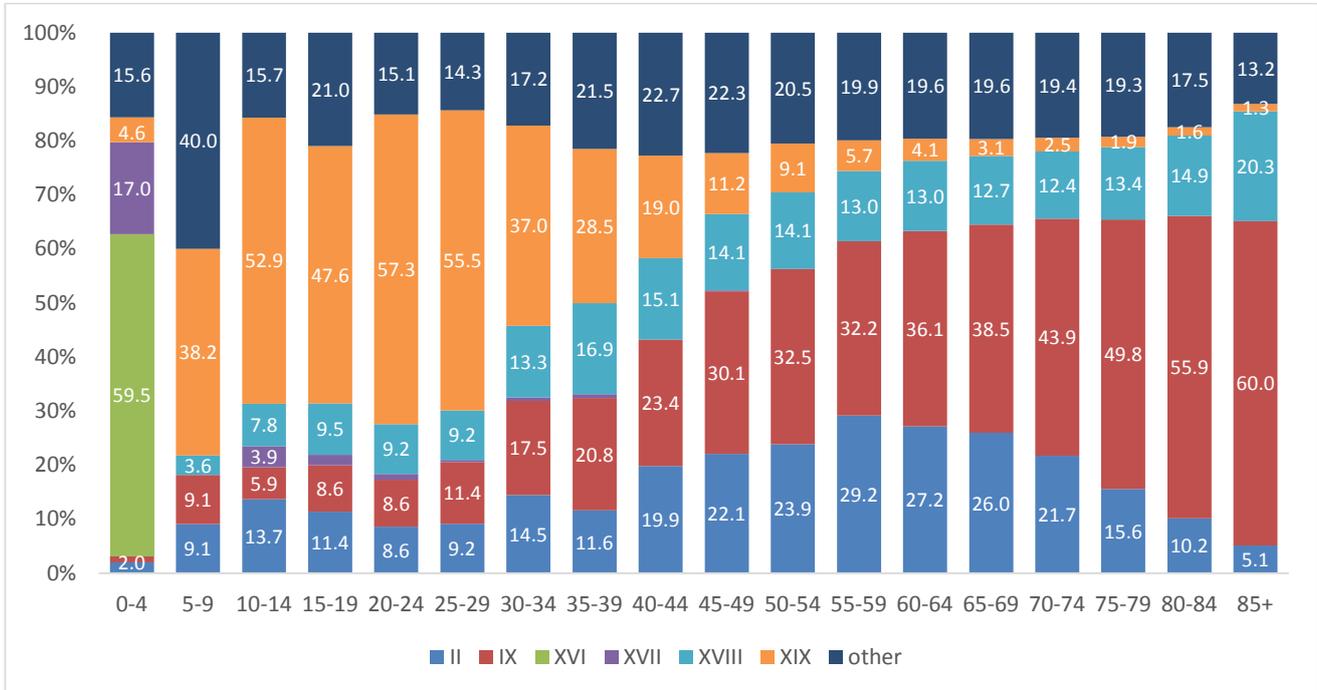
Table 10: Distribution of deaths (%) by main causes of death

Chapter	Main causes of death <sup>7</sup>	2016	2017	2018
I	Certain infectious and parasitic diseases	1.1	1.5	1.3
II	Neoplasms	13.5	14.8	15.8
III	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	0.7	1.2	1.1
IV	Endocrine, nutritional and metabolic diseases	1.5	2.1	1.5
V	Mental and behavioural disorders	0.2	0.2	0.1
VI	Diseases of the nervous system	0.9	1.3	1.1
VII	Diseases of the eye and adnexa	0.0	0.0	0.0
VIII	Diseases of the ear and mastoid process	0.0	0.0	0.0
IX	Diseases of the circulatory system	35.4	41.5	46.3
X	Diseases of the respiratory system	4.9	5.5	7.9
XI	Diseases of the digestive system	3.1	2.9	3.4
XII	Diseases of the skin and subcutaneous tissue	0.1	0.1	0.0
XIII	Diseases of the musculoskeletal system and connective tissue	0.1	0.1	0.1
XIV	Diseases of the genitourinary system	1.2	1.7	1.4
XV	Pregnancy, childbirth and the puerperium	0.0	0.0	0.0
XVI	Certain conditions originating in the perinatal period	0.7	0.7	0.6
XVII	Congenital malformations, deformations and chromosomal abnormalities	0.2	0.3	0.2
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	33.1	22.1	14.9
XIX	Injury, poisoning and certain other consequences of external causes	3.2	3.8	4.3
<b>Total</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>7</sup> based on the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10)

In 2018 certain disorders originating in the perinatal period is dominant among children under-5. At the age of 5-44, chapter XIX (Injury, poisoning and certain other consequences of external causes) prevails, as the risk of accidents is higher for these age groups. With the increase in age, the dominant causes of death are diseases of the circulatory system (chapter IX).

Figure 12: Distribution of deaths (%) by age and the main causes of death<sup>8</sup>, 2018



From 2007 the number of deaths with non-identifiable causes increases. In 2010 the share of non-identifiable causes exceeded 50%. In the aim of improvement of data quality secondary research of non-identifiable causes of death was carried out in collaboration with the National Center for Disease Control and Public Health. In each case, verbal autopsy was applied using an international standard questionnaire. The results of the secondary research have been used to establish mortality structure. The activities implemented by the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs in the recent years contributed to the decrease in the share of XVIII class deaths, as the latter declined and totaled 14.9 percent in 2018.

In 2019 the data of causes of death for 2015-2017 was adjusted based on the information (Verbal Autopsy and other alternative data registers) from the National Center for Disease Control and Public Health. The share of XVIII class deaths totaled 14.9 percent in 2018.

<sup>8</sup> other – includes all major chapters except II, IX, XVI, XVII, XVIII and XIX

## VII. Marriages and Divorces

The number of registered marriages and divorces is available only for 1940, 1950 and for the period after 1960. The data on the marriages and divorces by regions and urban/rural settlements are available only since 1969.

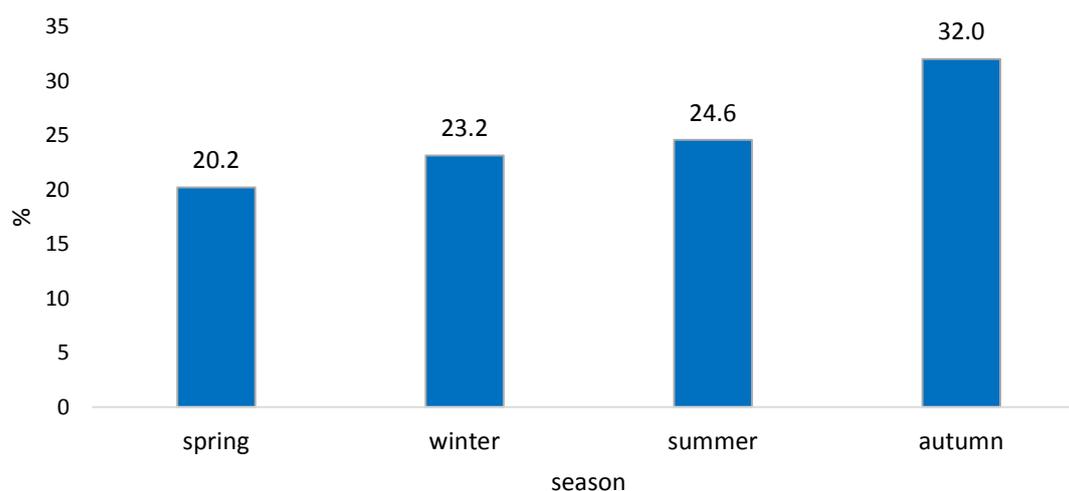
The number of registered marriages<sup>9</sup> and divorces equaled, respectively, 23 202 and 10 288 in 2018. The largest number of marriages and divorces was recorded in Tbilisi (totaled 29.0% and 37.9%, respectively).

Table 11: Number of registered marriages and divorces by regions

Regions	2018	
	Marriages	Divorces
<b>Georgia</b>	<b>23 202</b>	<b>10 288</b>
C. Tbilisi	6 718	3 898
Adjara A.R.	2 598	761
Guria	665	252
Imereti	3 661	1 668
Kakheti	1 794	727
Mtskheta-Mtianeti	500	234
Racha-Lechkhumi and Kvemo Svaneti	177	70
Samegrelo-Zemo Svaneti	2 055	813
Samtskhe-Javakheti	921	233
Kvemo Kartli	2 666	994
Shida Kartli	1 447	638

In Georgia the most popular season for marriages is autumn.

Figure 13: Registered marriages by seasons (%), 2018



Mean age of the first marriage for females and males accounted 27.7 and 30.4 years in 2018, respectively.

<sup>9</sup> Except the marriages when both spouses are foreign citizens

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