

#### POPULATION AND DEMOGRAPHIC PROCESSES IN 2022

Demographic situation in Bulgaria in 2022:

- Number of population decreases and population ageing continues;
- Number of live births decreases;
- Number of deaths decreases:
- Infant mortality decreases;
- Number of marriages and number of divorces decreases;

#### **Population number and structures**

As of December 31, 2022, the population of Bulgaria is 6 447 710 persons, representing 1.5% of the EU population<sup>1</sup>. Compared to 2021, the country's population decreases by 34 774 persons or by 0.5%<sup>2</sup>.

Male population was 3 099 503 (48.1%) and female - 3 348 207 (51.9%), or 1 000 males correspond to 1 080 females. Males prevail among the population, aged up to 53 years. The number and share of females into the total population have increased among the elderly.

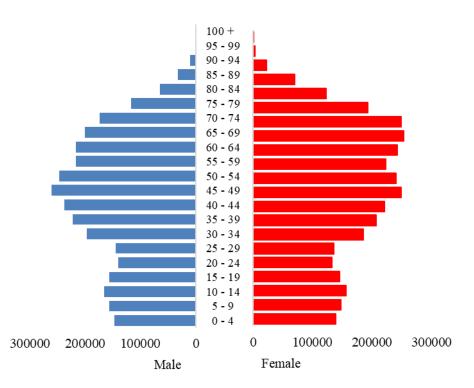


Figure 1. Age structure of the population as of 31.12.2022

<sup>&</sup>lt;sup>1</sup> In the international comparisons, data on EU member states refer to 2020. Source: Eurostat - <a href="http://epp.eurostat.ec.europa.eu/">http://epp.eurostat.ec.europa.eu/</a>.

<sup>&</sup>lt;sup>2</sup> For all comparisons with the previous year is used revised population as of 31.12.2021 which is calculated as the natural growth and migration increase of the population up to 31.12.2021 are added to the number of population of the Census as of 07.09.2021.

By the end of 2022, the number of persons aged 65 and over is 1 515 383, or 23.5% of the country's population. Compared to 2021, the share of the population aged 65 and over increases by 0.1 percentage points.

The share of females aged 65 and over is 27.4%, compared to 19.3% of males. The difference is due to the higher mortality among the male population and consequently - lower life expectancy.

The share of persons aged 65 and over is highest in districts Vidin (31.1%), Gabrovo (30.0%) and Kyustendil (28.0%). In 22 districts, share of people aged 65 and over is higher than the country's average. Lowest is the share of the elderly population in districts Sofia (stolitsa) - 19.2%, Varna - 21.4% and Blagoevgrad - 21.6%.

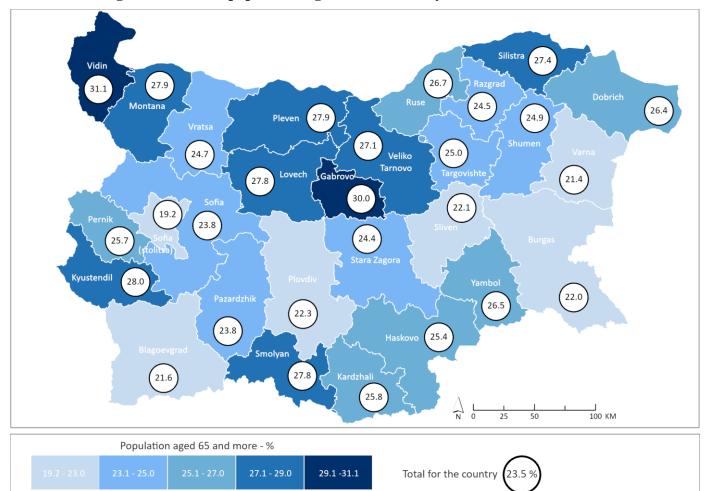


Figure 2. Share of population aged 65 and over by district as of 31.12.2022

The share of the population aged 65 and over for EU-27 is 21.1%. Highest is the share of the elderly population in Italy (23.8%), followed by Portugal (23.7%). In sixteen EU member states, including Bulgaria, the share of the elderly is above 20.0%.

As of 31.12.2022, children up to 15 years of age in the country are 913 419, or 14.2% of the total population number. The share of children up to 15 years decreases by 0.1 percentage points compared to 2021.

The share of population under 15 years of age is highest in districts Sliven - 18.9%, Yambol - 15.2% and Burgas - 15.1% of the district population. As a total, in 18 districts the share of children up to 15 years is lower than the country's average. Lowest is the share registered in districts Smolyan - 10.8%, Vidin - 11.5% and Gabrovo - 11.8%.

The share of the youngest EU-27 population in the beginning of 2022 is 15.0%. The lowest shares are observed in Italy - 12.7%, Portugal - 12.8% and Malta - 13.4%, and the highest - in Ireland - 19.7%, Sweden - 17.6% and France - 17.5%.

As of 31.12.2022, **the age dependency ratio**<sup>3</sup> in the country was **60.4%**, or to each person in 'dependent' ages (under 15 and over 65 years) correspond less than two persons in 'independent' age. The ratio in urban areas is 56.8%, and in rural - 71.6%. As a total, in all districts the age dependency ratio is over 50.0%. The lowest is the ratio in districts Sofia (stolitsa) - 51.4%, and the highest is in Vidin (74.5%), Gabrovo (71.8%) and Yambol (71.4%).

The population ageing over the years lead to increase of the population **mean age.** It has increased from 40.4 years in 2001 to **45.2 years at the end of 2022.** The mean age of the population is 44.3 years in urban areas, compared to 47.5 years in rural areas.

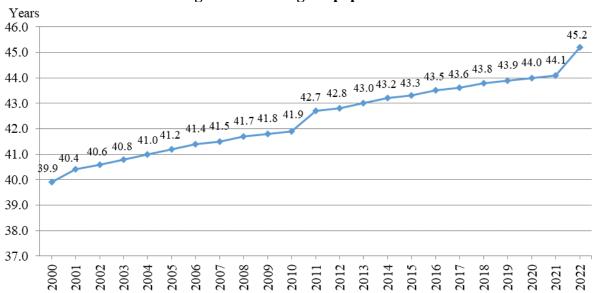


Figure 3. Mean age of population

The number of population and relative share of population **under**, at and over working age changes. The last are influenced not only by the population aging, but also by legislative changes<sup>4</sup> concerning the retirement age.

In 2022, at working age are women up to completion of 61 years and 10 months and men up to completion of 64 years and 5 months.

<sup>&</sup>lt;sup>3</sup> Number of persons in 'dependent' ages (persons under 15 years of age and 65 and more) per 100 persons in 'independent' ages (persons aged 15 to 64 years) calculated in percentage.

<sup>&</sup>lt;sup>4</sup> Age limits used for distribution of population under, at and over working age are defined according to Ordinance on pensions and length of insurance, adopted by the Decree of the Council of Ministers No. 30 (State Gazette 21/17.03.2000).

The number of population at working age as of 31.12.2022 is 3 775 thousand persons, or 58.5% of the total population, of which male are 1 975 thousand and female - 1 800 thousand persons.

By the end of 2022, the number of population over working age is 1 695 thousand persons, or 26.3%, and under working age are 978 thousand persons, or 15.2% of the country's population.

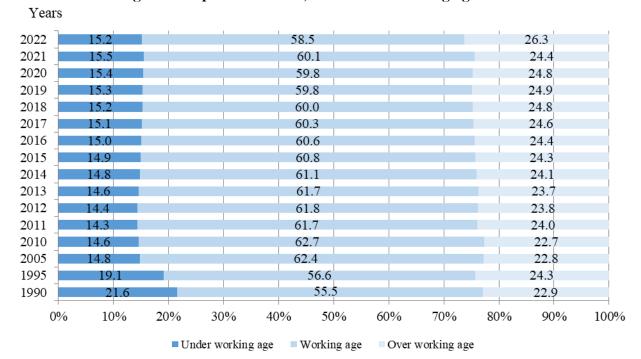


Figure 4. Population under, at and over working age as of 31.12.

The reproduction of population at working age is characterized by **the coefficient of demographic replacement**, showing the ratio between the number of persons entering working age (15 - 19 years) and the number of persons exiting it (60 - 64 years). As of 31.12.2022, the **coefficient of demographic replacement** was 66. For comparison, in 2001, every 100 persons exiting working age have been replaced by 124 young people.

Most favourable is the value of the indicator in districts Sliven - 87, Sofia (stolitsa) - 80 and Varna - 77. Lowest is the ratio in districts Smolyan - 42, Kardhzali - 47 and Silistra and Pernik where 100 persons exiting working age are replaced by 54 persons entering it.

## Territorial distribution of population

As of 31.12.2022, 4 746 710, or 73.6% of the total country's population, reside in urban areas and 1 701 000, or 26.4%, - in rural ones.

There are 5 256 settlements in Bulgaria by the end of 2022, of which 257 - towns and 4 999 - villages.

At the end of 2022, there are 205 settlements without population. Highest is the number of settlements without population in districts Veliko Tarnovo - 69, Gabrovo - 68 and Kardzhali, Kyustendil and Smolyan - by 9 each.

The population number is between 1 and 49 persons incl. in 1 249, or 23.8%, of the settlements.

There are six towns with a population above 100 thousand persons and 35.0% of the country population lives there.

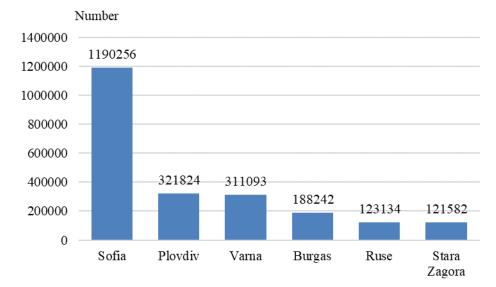


Figure 5. Towns with more than 100 000 inhabitants as of 31.12.2022

According to the country administrative-territorial structure, there are 6 statistical regions, 28 districts and 265 municipalities in Bulgaria.

## Statistical regions

Half of the country population (51.5%) lives in Yugozapaden and Yuzhen tsentralen regions. The smallest, according to the population number, is the Severozapaden region - 672 thousand persons, or 10.4% of the country's population.

The population number decreased compared to 2021 in all statistical regions; highest is the decrease in Severozapaden region - by 1.5% and lowest - in Yugozapaden region - 0.1%.

#### 1. Population by statistical region as of 31.12.2022

Statistical region	Population as of 31.12.2022 - in numbers	Population as of 31.12.2022 - %	Population growth - in numbers	Population growth - %
Severozapaden	671502	10.4	-10534	-1.5
Severen tsentralen	686334	10.6	-8638	-1.2
Severoiztochen	823884	12.8	-3756	-0.5
Yugoiztochen	948410	14.7	-5231	-0.5
Yugozapaden	2016554	31.3	-1946	-0.1
Yuzhen tsentralen	1301026	20.2	-4669	-0.4

#### **Districts**

The lowest is the number of the population in district Vidin - 72 754 persons, or 1.1% of the country's population and the highest is in district Sofia (stolitsa) - 1 280 334 persons (19.9%). Four districts have population above 300 thousand persons and in three of them, Sofia (stolitsa), Plovdiv and Varna, lives more than one third of the total country's population (36.3%).

# 2. Population by districts as of 31.12.2022

Districts	Population as of 31.12.2022 - in numbers	Population as of 31.12.2022 - %	Population growth - in numbers	Population growth - %
Total	6447710	100.0	-34774	-0.5
Blagoevgrad	288161	4.5	-2055	-0.7
Burgas	378596	5.9	-427	-0.1
Varna	430847	6.7	-356	-0.1
Veliko Tarnovo	204033	3.2	-2362	-1.1
Vidin	72754	1.1	-1483	-2.0
Vratsa	148874	2.3	-2156	-1.4
Gabrovo	95957	1.5	-1451	-1.5
Dobrich	147208	2.3	-1795	-1.2
Kardzhali	142508	2.2	1714	1.2
Kyustendil	108703	1.7	-1600	-1.5
Lovech	113356	1.8	-1790	-1.6
Montana	116172	1.8	-1941	-1.6
Pazardzhik	226209	3.5	-1416	-0.6
Pernik	111746	1.7	-1537	-1.4
Pleven	220346	3.4	-3164	-1.4
Plovdiv	631516	9.8	-244	0.0
Razgrad	101107	1.6	-922	-0.9
Ruse	189623	2.9	-2691	-1.4
Silistra	95614	1.5	-1212	-1.3
Sliven	170583	2.6	-912	-0.5
Smolyan	93354	1.4	-1798	-1.9
Sofia	227610	3.5	-2550	-1.1
Sofia (stolitsa)	1280334	19.9	5796	0.5
Stara Zagora	291852	4.5	-2617	-0.9
Targovishte	96201	1.5	-818	-0.8
Haskovo	207439	3.2	-2925	-1.4
Shumen	149628	2.3	-787	-0.5
Yambol	107379	1.7	-1275	-1.2

Compared to 2021, the population has increased only in Kardzhali and Sofia (stolica) districts by 1.2% and 0.5%, respectively. In all the rest, a decrease is observed, highest one in districts Vidin - 2.0%, Smolyan - 1.9% and Montana and Lovech - 1.6% each.

# Municipalities

The distribution of population by municipalities is not uniform. There are 83 municipalities with population below 6 000, and hardly 4.7% of the population lives there. At the same time, there are nine municipalities with population over 100 thousand people and 40.7% of the country's population lives there. Highest is the number of population of municipality Stolichna (1 280 334), followed by Plovdiv (321 824) and Varna (319 900). Lowest is the number of the population of municipality Treklyano - 470 persons.

#### 3. Municipalities according to the population number as of 31.12.2022

Size of municipality	Municipalities		Population	
	Number	%	Number	%
Total	265	100.0	6447710	100.0
Up to 5999	83	31.3	301345	4.7
6000 - 19999	119	44.9	1324549	20.5
20000 - 49999	42	15.8	1295677	20.1
50000 - 99999	13	4.9	904881	14.0
100000 and more	8	3.0	2621258	40.7

Basic factors influencing the changes of population number and structures are the demographic processes - fertility, mortality and migration.

### **Fertility**

100000

50000

There are 56 917 children born in 2022, of which **56 596 (99.4%)** - **live born.** The number of live births decreased by 2 082 children, or 3.5% compared to the previous year.

Number 250000 200000 150000

Figure 6. Live born children within the period 1920 - 2022

### The crude birth rate<sup>5</sup> in 2022 is 8.8‰.

The number of live born males (28 923) is by 1 250 higher compared to the live born females (27 673), or 957 females correspond to 1 000 born males.

The number of live born children in urban areas is 41 986 and in rural - 14 610. Crude birth rate in urban areas is 8.8% and in rural - 8.5%.

In Bulgaria, highest is the crude birth rate in districts Sliven - 12.2‰, Sofia (stolitsa) - 10.0‰ and Plovdiv - 9.7‰. The crude birth rate is lower than the country's average in 20 districts and the lowest is in districts Smolyan - 5.1‰, Vidin - 6.8‰ and Pernik - 6.9‰.

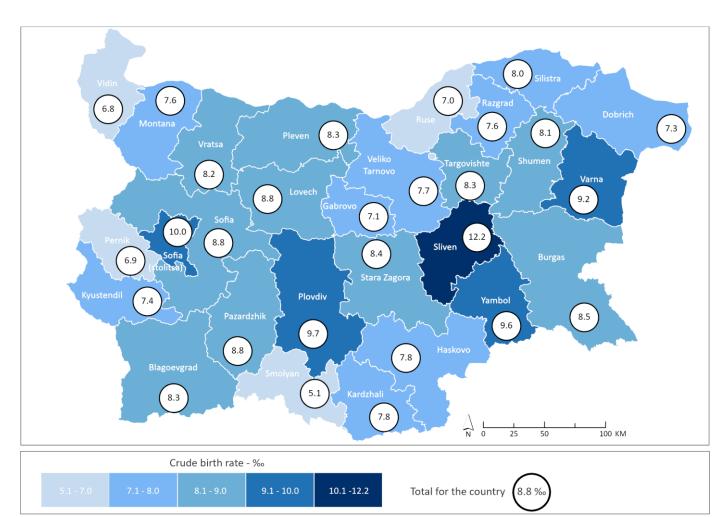


Figure 7. Crude birth rate by district in 2022

The crude birth rate in 2021 for EU-27 is 9.1‰ according to Eurostat data. The highest crude birth rate is observed in Ireland (12.0‰), followed by Cyprus - 11.4‰, France and Sweden - 11.0‰ each. Lowest crude birth rate is registered in Italy - 6.8‰.

<sup>&</sup>lt;sup>5</sup> Number of live born children per 1 000 persons of the average annual population during the year.

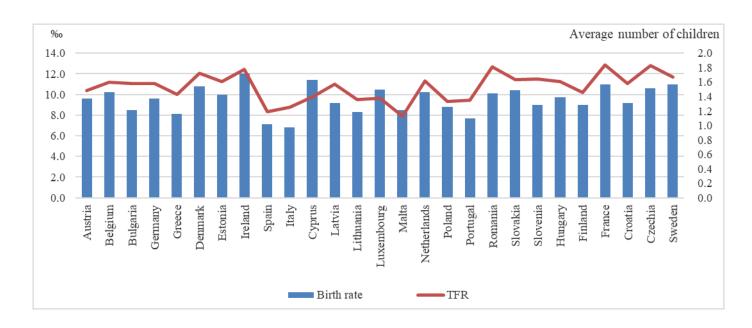


Figure 8. Crude birth rate in EU member states in 2021

The number of women in fertile age (15 - 49 completed years), or the size and fertility of the fertile contingents in the country, influences considerably the fertility levels and the character of population reproduction.

The number of women in fertile age as of 31.12.2022 is 1 278 thousand. It has decreased with 8 thousand compared to the previous year and with 372 thousand compared to 2011.

The number of children born by mothers aged below 18 years decreases from 3 015 in 2021 to 2 871 in 2022. Number of children born by mothers of age 40 and more years increases from 2 278 in 2021 to 2 410 in 2022.

Half of births (49.4%) in 2022 are first ones, 36.9% second and 13.3% - third or higher of rank.

Total fertility rate  $(TFR)^6$  is one of the basic indicators characterising the fertility. The average number of live born children per women in 2022 is 1.78 and it increases with 0.20 compared to 2021.

The mean age of women at first birth is 27.6 in 2022. Compared to 2021 it increases by 0.1 years. Mean age of women at first birth varies between 22.5 in district Sliven to 30.7 in district Sofia (stolitsa).

<sup>&</sup>lt;sup>6</sup> Average number of live born children, whom a mother would give birth to during her entire fertile period according to the age specific fertility rates during the reporting year.

Mean age Average number of children 35.0 2.50 30.0 2.00 25.0 1.50 20.0 15.0 1.00 10.0 0.50 5.0 0.0 0.00 Pleven Ruse Stara Zagora Varna Veliko Tamovo **Targovishte** Lovech Pazardzhik Plovdiv Razgrad Sofia (stolitsa) Vratsa Kardzhali yustendil Montana Sofia Blagoevgrad Right scale: Mean age of women at first birth

Figure 9. Mean age at first birth and TFR by district in 2022

There are 1 052 multi-foetal births registered in 2022, or 48 more than in 2021. In 1 040 of the cases, two children are born, in 12 - three children.

The number of children born outside marriage in 2022 is 34 141, or 60.0% of the total number of births. The share of extramarital births in rural areas (65.6%) is higher than in urban (58.0%). For 80.2% of the extramarital births, data on the fathers exists, i.e. most probably the children are growing up in families by parents cohabiting without marriage.

Highest share of extramarital births is registered in districts Lovech (79.9%), Vidin (77.0%) and Vratsa (76.6%). The share of extramarital births in all of the country's regions is higher than 50.0%, except in districts Razgrad (44.8%) and Kardzhali (34.6%).

### **Mortality**

The number of deaths in 2022 is 118 814 and the crude mortality rate<sup>7</sup> - 18.4‰. Compared to the previous year, the number of deaths has decreased by 30 181, or by 20.3%. The crude mortality rate remains high.

<sup>&</sup>lt;sup>7</sup> Number of dead persons per 1 000 persons of the average annual population during the year.

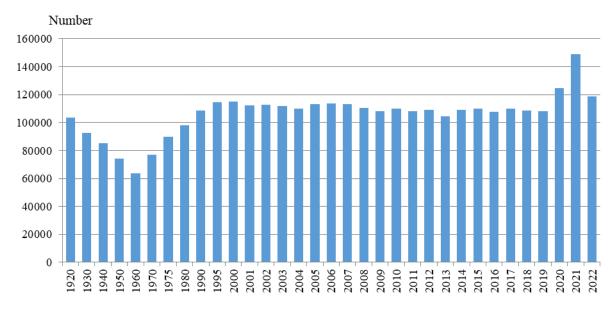


Figure 10. Deaths within the period 1920 - 2022

Mortality among males (19.8%) continues to be higher than among females (17.0%). In 2022, there are 1 079 deaths of males per 1 000 deaths of females. The considerable differences in mortality in urban and rural areas also remain unchanged. Mortality rate in rural areas (24.9%) is higher than in urban ones (16.0%).

The mortality rate for EU-27 in 2021 is 11.9‰. Mortality rate in Bulgaria is highest among the EU member states. Lowest is the mortality in Ireland - 6.8‰, Luxembourg - 7.0‰, and Malta and Cyprus - 8.0‰ each. Except in Bulgaria, rather high compared to the average EU-27 value is the mortality in Latvia - 18.4‰, Romania - 17.5‰ and Lithuania - 17.0‰.

Highest is the mortality rate in districts Vidin - 27.9‰, Gabrovo - 24.9‰ and Montana - 24.6‰. There are seven districts where the mortality rate is lower than the country's average. Lowest is the mortality rate in district Sofia (stolitsa) - 13.4‰.

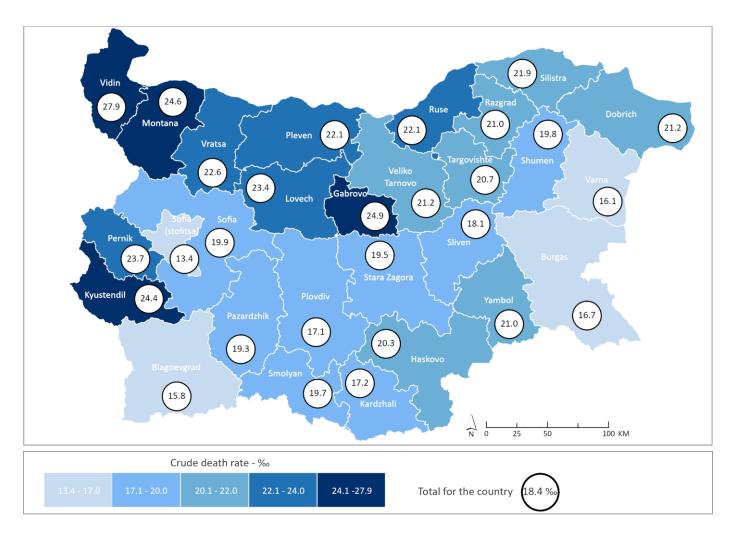


Figure 11. Crude death rate by district in 2022

The premature mortality<sup>8</sup> in 2022 (19.2%) has decreased compared to 2021 (20.3%). There are considerable differences in the premature mortality indicator for male and female population. The dead females aged under 65 years represent 12.5% of all dead females, while among the males it is 25.5%.

There are 274 children who died up to 1 year of age in 2022 and the infant mortality rate<sup>9</sup> is 4.8‰. The infant mortality rate was 14.4‰ in 2001 and 5.6‰ in 2021.

The infant mortality rate for 2022 is lower than the country's average in 10 districts. Lowest values are registered in districts Kardzhali - 0.9‰, Pernik - 1.3‰ and Sofia - 1.5‰. Highest infant mortality rate is registered in districts Yambol (11.6‰), Dobrich (10.2‰) and Vratsa (9.7‰).

<sup>&</sup>lt;sup>8</sup> Share of deaths of persons below 65 years of age of the total number of deaths.

<sup>&</sup>lt;sup>9</sup> Number of children who die up to 1 year of age per 1 000 live born.

‰ 25 20 14.8 14.8 18.4 15.0 14.4 15.1 15.3 15.1 15.5 15.4 15.5 14.2 14.6 14.7 14.6 13.6 10 12.5 9.0 7.8 5.1 1990 1995 1997 2001 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Crude death rate ■■Infant mortality

Figure 12. Crude death rate and infant mortality rate

# Marriages and divorces

There are 26 013 juridical marriages registered in 2022, or 607 less than the previous year. The marriage rate<sup>10</sup> is 4.0‰. Nearly three quarters of the total marriages number (18 976) are registered among urban population.

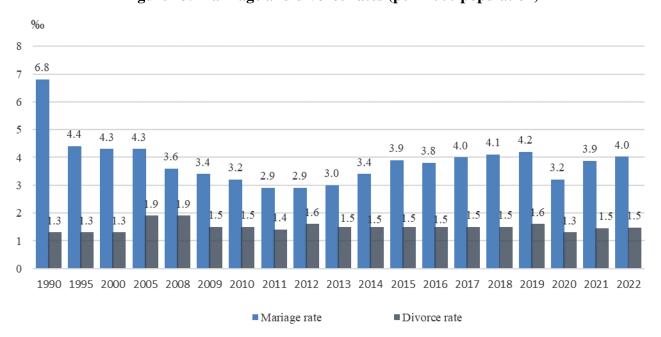


Figure 13. Marriage and divorce rates (per 1 000 population)

<sup>&</sup>lt;sup>10</sup> Number of marriages per 1 000 population.

The mean age at first marriage in 2022 is 33.0 for males and 30.1 years for females. Compared to the previous year, the mean age at first marriage has increased by 0.2 years for males and 0.3 for females.

84.7% of females and 84.3% of males have married for the first time in 2022.

The most marriages per 1 000 people of the population are registered in districts Razgrad - 5.4‰ and Silistra - 5.0‰. The marriage rate is the lowest in district Pernik and Vratsa - 2.6‰ each.

The number of divorces in 2022 is 9 525, or 496 less than the registered in 2021. Out of the total number of divorces, 77.1% refer to the urban population.

Highest is the number of divorces by 'mutual agreement' (67.3%), followed by divorces due to 'incompatibility of temperament' (20.1%) and 'virtual parting' (11.3%).

The divorce is not the first one for 11.0% of females and 11.1% of males who divorced in 2022. The average duration of a marriage before the divorce in 2022 is 15.3 years.

### **Internal migration**

### 102 920 persons change their residence within the country in 2022.

Among the migrants within the country, 44.5% are male and 55.5% - female.

The share of internal migrants in the age group 0 - 14 years is 18.6%, persons aged 15 - 64 years - 62.9% and persons aged 65 years and over - 18.5% of all internally migrated persons.

The share of flow 'town-town' is highest one (41.1%), followed by the flow 'village - town' - 25.1% and 'town - village' (23.6%). Considerably lower is the number and share of the flow 'village' (10.1%).

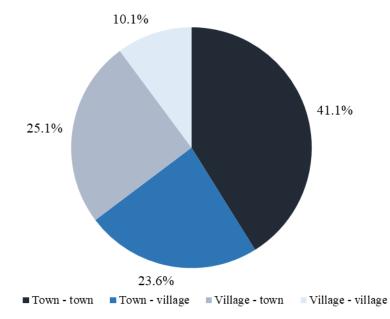


Figure 14. Directions of the internal migration in 2022

Out of the internal migrants, highest is the number of people who chose their new place of residence being Sofia (stolitsa) (17 196). The districts with the largest relative shares of migrants to Sofia (stolitsa) are Sofia - 13.0% and Blagoevgrad - 7.2%.

The lowest are the shares of migrants to Sofia (stolitsa) from the districts Razgrad and Silistra - 0.7% each, and Targovishte - 0.8%.

#### **International migration**

**13 175 persons change their current address in Bulgaria with an address abroad in 2022** - 64.3% male. The emigrants aged 0 - 14 years are 5.4%, those aged 15 - 64 years are 69.4% and the emigrants 65 and over years of age - 25.2%.

Most preferred destination countries are Germany (24.1%), Türkiye (20.0%) and the United Kigdom (9.3%).

Persons who change their address abroad with an address in Bulgaria, or the immigration flow, include Bulgarian citizens who have returned to Bulgaria and citizens of other countries granted residence permit or status in Bulgaria. There are 40 619 persons who changed their address abroad with an address in Bulgaria in 2022. Male represent 55.5% of the total number of immigrants and female - 44.5%.

Among the immigrants to Bulgaria, 14% are in the age group 0 - 14 years, persons aged 15 - 64 years are 75.5% and the oldest, persons aged 65 years and over - 10.5%.

Highest is the share of immigrants from Türkiye (23.1%), Germany (12.1%) and Syria (9.0%).

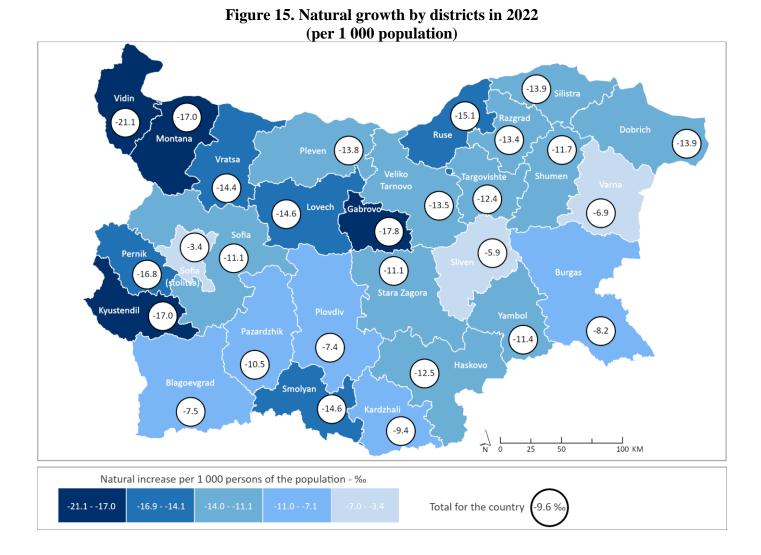
## Population natural and migration growth

The population number and structures are defined by the size and intensity of the natural and migration growth.

The difference between the number of live births and deaths represents the natural increase of population. The country's demographic development after 1990 is characterised by a negative natural increase. **Due to the negative natural increase, the country population decreases by 62 218 persons in 2022.** 

The population decrease, **measured through the natural increase rate**, is minus 9.6‰<sup>11</sup>. The natural increase rate in urban areas is minus 7.2‰, compared to minus 16.4‰ in rural areas.

<sup>&</sup>lt;sup>11</sup> Difference between the number of live births and number of deaths per 1 000 of the average annual population.



## The natural increase in all of the country's districts in 2022 is negative.

Lowest is the negative growth in districts Sofia (stolitsa) (-3.4%), Sliven (-5.9%) and Varna (-6.9%). Highest is the population decrease due to the high negative growth in district Vidin - minus 21.1%, followed by Gabrovo - minus 17.8% and Montana and Kyustendil - minus 17.0% each. Higher than minus 10.0% is the natural growth in twenty-two country districts.

#### The natural increase rate for EU-27 in 2021 is minus 2.7‰.

In 9 EU member states the natural increase is positive and highest is the rate in Ireland (5.2‰), Cyprus (3.5‰) and Luxembourg (3.4‰). Except in Bulgaria, rather high negative natural increase is registered in Latvia - minus 9.1‰ and Lithuania - minus 8.7‰.

Net migration (growth due to international migration) influences considerably the population number and structures. The net migration growth in 2022 is positive - plus 27 444 persons. The last is the difference between the number of immigrants and number of emigrants.

The decrease of population due to the international migration measured through the coefficient of net migration is  $+4.2\%^{12}$ .

There are twenty-two districts with a positive migration growth in 2022. Highest migration growth is registered in Kardzhali (21.5%), Sofia (stolitsa) (7.9%), Burgas (7.1%) and Plovdiv (7.0%). Highest population decrease due to the negative migration growth is registered in districts Smolyan (-4.5%), Haskovo (-1.5%) and Lovech (-1.1%).

<sup>&</sup>lt;sup>12</sup> Ratio of the net migration to the average annual population.

## Methodological notes

The population number and structures by the end of year are calculated based on the population data for the preceding year and data on the population natural and migration movement during the reference year. In the census years, recalculation of the population are done as of the end of the respective year. The estimation of the population as of 31.12.2022 reflect changes in the number and structure of the population registered during Census 2021.

For calculation of the demographic indicators is used the average annual population. The average annual population is an average value calculated on the bases of population at the end of the previous year and at the end of the reported year. For the population as of 31.12.2021, a revised population was used, calculated on the basis of the data from the Census of Population and Housing as of 07.09.2021 and the natural increase and migration of the population as of 31.12.2021.

For all coefficients in 2022 a time series break is observed due to a new population estimation based on the 2021 Census data.

The source of the data on population number and structures is the Statistical Register of the Population maintained by NSI. Data source on natural and migration movement of population (births, deaths, marriages, divorces, migration) is the Unified System for Civil Registration and Administrative Service of Population (Bulgarian acronym ESGRAON). Demographic events are registered through standard documents ESGRAON-CDS (Current Demographic Statistics): notification for birth, notification for marriage, notification for divorce, notification for death and address card for change of a present (current) address.

Data source on international migration are the Unified System for Civil Registration and Administrative Service of Population, document ESGRAON-CDS: notification for change of present address; National Revenue Agency; National Social Security Institute; Ministry of Interior; Estimates of emigration flows.

Data on population number and demographic events are distributed according to the administrative-territorial division of the country as of 31.12 of the reference year (settlements, municipalities, districts) and statistical regions according to the 'present address'. The last is the address corresponding to the residence declared by the person and officially registered.

The age of the population by the end of the year is calculated as of 31.12. in completed years.

The persons' age at occurrence of a demographic event is calculated in completed years based on the date of birth and the date of the respective event, i.e. the age completed at the time of the event.