



POPULATION AND DEMOGRAPHIC PROCESSES IN 2016

Demographic situation in Bulgaria in 2016:

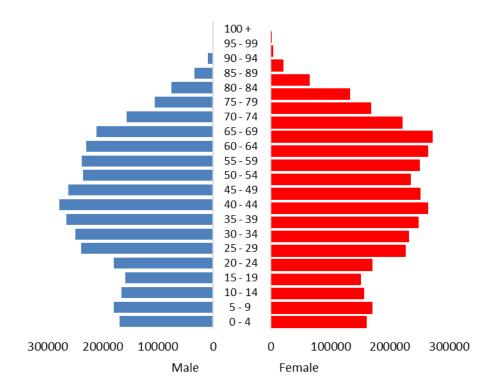
- Population number decrease and population ageing continue;
- Unbalanced territorial distribution of population go deeper;
- Number of live births and crude birth rate decrease;
- Number of deaths and crude death rate decrease;
- Infant mortality decreases;
- Number of marriages decrease whereas the number of divorces increase;
- Life expectancy at birth increase.

Population number and structures

As of 31 December 2016 the population of Bulgaria was 7 101 859 persons representing 1.4% of the EU population¹. Compared to 2015, the country population decreased by 51 925 persons or by 0.7%.

Male population was 3 449 978 (48.6%) and female - 3 651 881 (51.4%) or to 1 000 males correspond 1 059 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 population as of 31.12.2016



¹ In the international comparisons, data on EU member states refer to 2015. Source: Eurostat - <u>http://epp.eurostat.ec.europa.eu/</u>.



The process of population ageing continues. By the end of 2016 the number of persons aged 65 and over was 1 472 116, or 20.7% of the country population. Compared to 2015, the share of population aged 65 and over increases by 0.3 percentage points and compared to 2001 - by 3.8 percentage points.

The population aging is more intensive among female population than among male. The share of females aged 65 and over is 24.1%, compared to 17.2% - of males. The difference is due to the higher mortality among male population and consequently - lower life expectancy.

The share of persons aged 65 and more is highest in districts Vidin (28.9%), Gabrovo (27.9%), Kyustendil and Lovech - 26.4% each. In 18 districts share of people aged 65 and over is higher than the country average. Lowest is the share of elderly population in districts Sofia (stolitsa) - 17.0% and Varna - 18.3%.

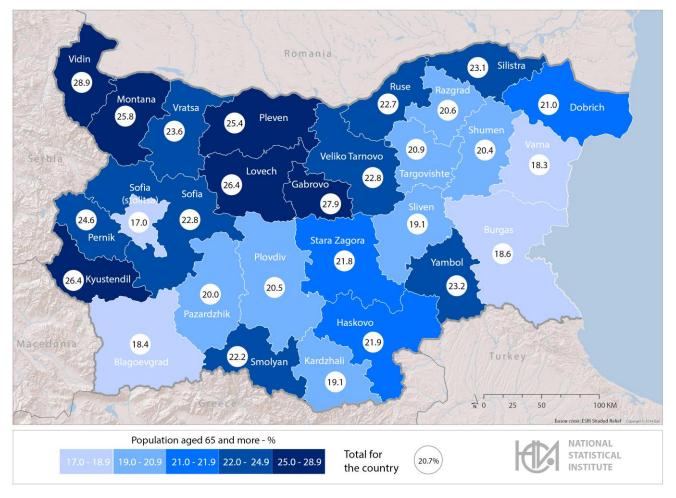


Figure 2. Share of population aged 65 and more as of 31.12.2016 by district

Share of population aged 65 and more for EU-28 is 19.2%. Highest is the share of elderly population in Italy (22.0%), followed by Greece (21.3%) and Germany (21.1%). In six countries, including Bulgaria, share of elderly is above 20.0%.

As of 31.12.2016, children up to 15 years of age in the country were 1 001 019 or 14.1% of the total population number. The share of children up to 15 years increases by 0.1 percentage points compared to 2015.



The share of population under 15 years of age is highest in districts Sliven - 18.2% and Burgas - 15.4% of the district population. As a total, in 15 districts the share of children up to 15 years is lower than the country average. Lowest is the share registered in districts Gabrovo - 11.4% and Smolyan - 11.5%.

Share of the youngest EU-28 population in the beginning of 2016 is 15.6%. Lowest shares are observed in Germany (13.2%) and Italy (13.7%), and highest - in Ireland (21.9%) and France (18.5%).

As of 31.12.2016, **the age dependency ratio**¹ in the country was **53.4%**, or to each person in 'dependent' ages (under 15 and over 65 years) correspond less than two persons in 'independent" ages. In 2005 and 2015, the ratio is 44.5% and 52.4% respectively.

The ratio is more favourable in urban areas - 49.0% than in rural - 67.0%. As a total, in 24 country districts the age dependency ratio is over 50.0%. Most unfavourable is the ratio in districts Vidin (69.2%), Lovech (65.7%) and Gabrovo (64.6%). The districts with most favourable values are Sofia (stolitsa) - 45.3% and Blagoevgrad - 49.0%.

The population ageing leads to increase of the population **mean age.** It increased from 40.4 years in 2001 to 41.2 years in 2005 and reached **43.5 years at the end of 2016**.

Ageing of population is observed both in urban and rural areas. In urban areas, the mean age of population is 42.5 years, compared to 46.2 years - in rural areas.

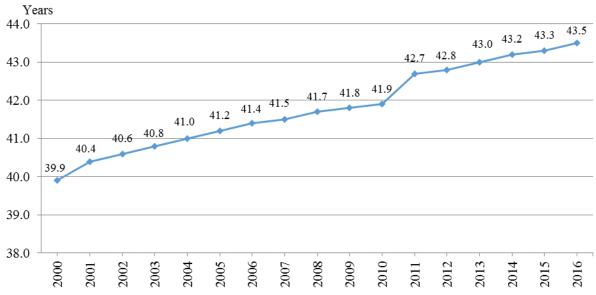


Figure 3. Mean age of population

The tendency of population ageing influences the distribution of population **under, at and over working age.** The last are influenced not only by the population aging, but also by legislative changes² concerning the retirement age. In 2016, at working age are women up to completion of 60 years and 10 months and men up to completion of 63 years and 10 months.

¹ 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.

 $^{^{2}}$ 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 31.12.2016 was 4 304 thousand persons or 60.6% of the total population, of which men are 2 262 thousand and female - 2 042 thousand persons. The population at working age decreased by almost 45 thousand or by 1.0% compared to the previous year.

By the end of 2016, the number of population over working age was 1 735 thousand persons or 24.4% and under working age were 1 063 thousand persons or 15.0% of the country population.

-	(Percentage)					
	Age					
Year	Under working age	Working age	Over working age			
1990	21.6	55.5	22.9			
1995	19.1	56.6	24.3			
2001	16.3	59.2	24.5			
2005	14.8	62.4	22.8			
2010	14.6	62.7	22.7			
2011	14.3	61.7	24.0			
2012	14.4	61.8	23.8			
2013	14.6	61.7	23.7			
2014	14.8	61.1	24.1			
2015	14.9	60.8	24.3			
2016	15.0	60.6	24.4			

1. 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 number of persons exiting it (60 - 64 years). As of 31.12.2016, the ratio was 63. For comparison, in 2001 every 100 persons exiting working age have been replaced by 124 young people.

Most favourable is the ratio in districts Sliven - 81, Pazardzhik and Varna - 69. Lowest is the ratio in districts Smolyan - 44, and Gabrovo and Kyustendil, where 100 persons exiting working age are replaced by 48 persons entering it.

Territorial distribution of population

As of 31.12.2016, 5 204 385 or 73.3% of the total country population resided in urban areas and 1 897 474 or 26.7% - in rural ones.

There were 5 256 settlements in Bulgaria by the end of 2016, of which 257 - towns and 4 999 - villages.



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At the end of 2016, there are 157 settlements without population. Highest is the number of settlements without population in districts Gabrovo, Veliko Tarnovo and Kardzhali - 59, 55 and 10 respectively.

The population number is between 1 and 49 persons incl. in 1 148 or 21.8% of the settlements.

There are six towns with a population above 100 thousand persons and 33.8% of the country population lives there.

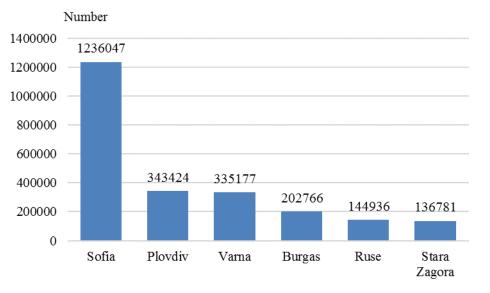


Figure 4. Towns with more than 100 000 inhabitants as of 31.12.2016

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

Statistical regions

Nearly half of the country population (49.9%) lives in Yugozapaden and Yuzhen tsentralen regions. Smallest according to the population number is Severozapaden region - 770 thousand persons or 10.8% of the country population.

The population number decreased compared to 2015 in all statistical regions; highest is the decrease in Severozapaden region - by 1.8% and lowest - in Yugozapaden region - 0.3%.

Statistical region	Population as of 31.12.2016 - in numbers	Population as of 31.12.2016 - %	Population growth - in numbers	Population growth - %
Severozapaden	769623	10.8	-14286	-1.8
Severen tsentralen	805441	11.3	-10000	-1.2
Severoiztochen	939262	13.2	-5196	-0.6
Yugoiztochen	1046125	14.7	-6450	-0.6
Yugozapaden	2115344	29.8	-5841	-0.3
Yuzhen tsentralen	1426064	20.1	-10152	-0.7

2. Population as of 31.12.2016 by statistical region



Districts

Lowest is the number of population in district Vidin - 88 867 persons or 1.3% of the country population and highest in district Sofia (stolitsa) - 1 323 637 persons (18.6%). In 16 districts, the population number is under 200 thousand and the population living in them represents 30.2% of the country population. There are six districts with a population between 200 and 300 thousand persons and 20.3% of the country population is living there. Six districts have population above 300 thousand persons and in three of them, Sofia (stolitsa), Plovdiv and Varna, lives more than 1/3 of the total country population (34.8%).

Districts		Population as of	Population	Population	
	31.12.2016 -	31.12.2016 -	growth -	growth -	
	in numbers	%	in numbers	%	
Total	7101859	100.0	-51925	-0.7	
Blagoevgrad	310321	4.4	-2510	-0.8	
Burgas	412684	5.8	-1200	-0.3	
Varna	472654	6.7	-272	-0.1	
Veliko Tarnovo	242259	3.4	-2747	-1.1	
Vidin	88867	1.3	-2368	-2.6	
Vratsa	168727	2.4	-3280	-1.9	
Gabrovo	112334	1.6	-1938	-1.7	
Dobrich	178438	2.5	-2163	-1.2	
Kardzhali	150837	2.1	-482	-0.3	
Kyustendil	123431	1.7	-2583	-2.0	
Lovech	129222	1.8	-2271	-1.7	
Montana	134669	1.9	-2519	-1.8	
Pazardzhik	260814	3.7	-2816	-1.1	
Pernik	123770	1.7	-1686	-1.3	
Pleven	248138	3.5	-3848	-1.5	
Plovdiv	671573	9.5	-1710	-0.3	
Razgrad	115402	1.6	-1839	-1.6	
Ruse	223489	3.1	-2185	-1.0	
Silistra	111957	1.6	-1291	-1.1	
Sliven	189788	2.7	-1397	-0.7	
Smolyan	109425	1.5	-2176	-1.9	
Sofia	234185	3.3	-2895	-1.2	
Sofia (stolitsa)	1323637	18.6	3833	0.3	
Stara Zagora	321377	4.5	-2308	-0.7	
Targovishte	113694	1.6	-1517	-1.3	
Haskovo	233415	3.3	-2968	-1.3	
Shumen	174476	2.5	-1244	-0.7	
Yambol	122276	1.7	-1545	-1.2	

3. Population as of **31.12.2016** by district



Compared to 2015, the population increased in district Sofia (stolitsa) only by 0.3%. In all the rest, a decrease is observed, highest one in districts Vidin - 2.6% and Kyustendil - 2.0%.

Municipalities

The distribution of population by municipalities is not uniform. There are 70 municipalities with population below 6 000 and hardly 3.8% of the country population lives there. At the same time, there are nine municipalities with population over 100 thousand people and 40.7% of the country population lives there. Highest is the number of population of municipality Stolichna (1 323 637)), followed by Varna (343 991) and Plovdiv (343 424). Lowest is the number of population of municipality Treklyano - 835 persons.

Size of municipality	Municipalities		Population	
	In numbers	%	In numbers	%
Total	265	100	7101859	100
Up to 5999	70	26.4	271038	3.8
6000 - 19999	124	46.8	1413584	19.9
20000 - 499999	46	17.4	1398955	19.7
50000 - 99999	16	6.0	1125570	15.8
100000 and more	9	3.4	2892712	40.7

Table 4. Municipalities according to the population number as of 31.12.2016

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

Fertility

There are 65 446 children born in 2016, of which **64 984 (99.3%)** - live born. The number of live births decreased by 966 children or 1.5% compared to the previous year.

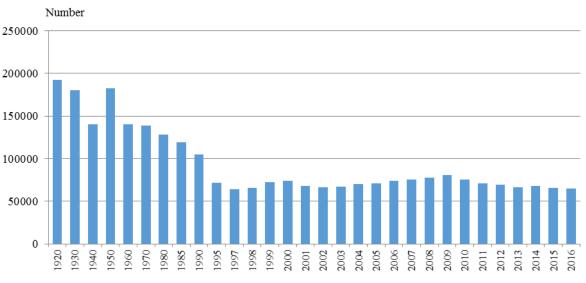


Figure 5. Live born children within the period 1920 - 2016



The crude birth rate¹ in 2016 is 9.1‰, compared to 9.2% in 2015.

The number of live born males (33 375) is by 1 766 higher compared to the live born females (31 609), or 947 females correspond to 1 000 born males.

The number of live born children in urban areas is 48 733 and in rural - 16 251. Crude birth rate in urban areas is 9.3‰ and in rural - 8.5‰.

In Bulgaria, highest is the crude birth rate in districts Sliven - 12.2‰, Sofia (stolitsa) - 10.2‰ and Varna and Burgas - each 9.6‰. The crude birth rate is lower than the country average in 18 districts and lowest in districts Gabrovo (6.4‰), and Vidin (6.2‰).

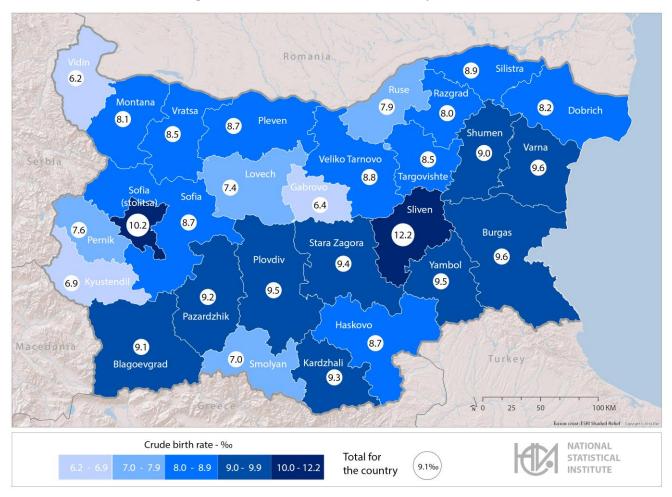
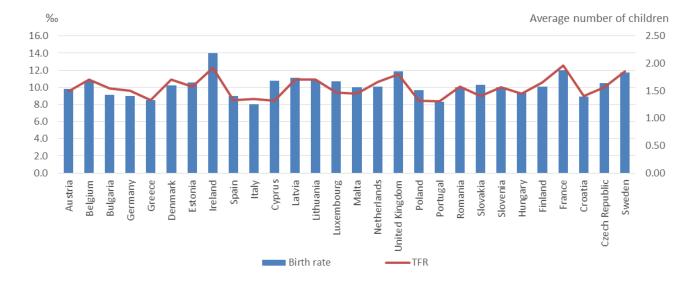


Figure 6. Crude birth rate in 2016 by districts

The crude birth rate in 2015 for EU-28 is 10.0‰ according to Eurostat data. Highest crude birth rate is observed in Ireland (14.0‰), followed by France (12.0‰) and United Kingdom (11.9‰). Lowest crude birth rate is registered in Italy - 8.0‰.

¹ Number of live born children per 1 000 persons of the average annual population during the year.







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

The number of women in fertile age as of 31.12.2016 was 1 539 thousand. It has decreased by over 22 thousand compared to the previous year and by over 111 thousand compared to 2011.

The number of children born by mothers aged below 18 years in 2016 is 3 249 or 168 more than in 2015. Tendency of increase the number of children born by mothers aged 40 and more continue - 1 705 in 2015 compared to 1 947 in 2016.

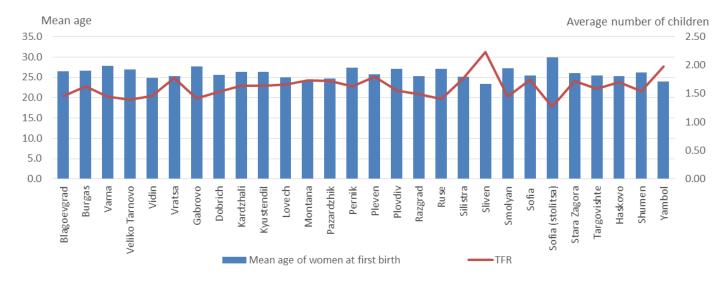
Half of births (50.5%) in 2016 are first ones, 36.5% second and 12.6% - third or higher of rank.

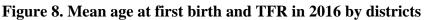
Total fertility rate $(TFR)^1$ is one of the basic indicators characterising the fertility. The average number of live born children per women in 2016 is 1.54. TFR in 2001 has been 1.24 children and in 2015 - 1.53 children.

The mean age of women at first birth increased from 26.9 in 2015 to **27.0 years in 2016.** Mean age of women at first birth vary from 29.8 in district Sofia (stolitsa) to 23.4 in district Sliven.

¹ 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.







There are 1 129 multi-foetal births registered in 2016 or 20 more than in 2015. In 1 113 of the cases, two children are born, in 15 - three children and in one - 4 children.

Stable tendency of increase of the number of extramarital births is observed since 1991. The share has increased from 18.5% in 1992 to 42.0% in 2001 and 59.2% in 2013.

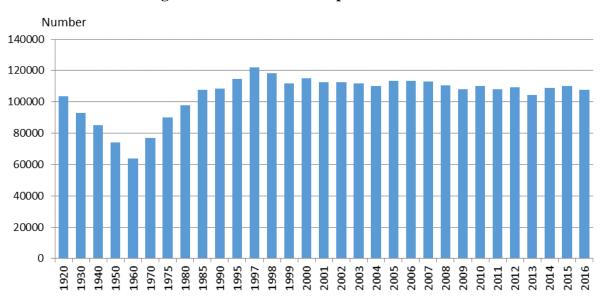
The number of children born outside marriage in 2016 is 38 440 or 58.7% of the total number of births. The share of extramarital births in rural areas (66.1%) is higher than in urban (56.3%). For 76.9% of the extramarital births data on the fathers exists, i.e. most probably the children are grown up in families, by parents cohabiting without marriage.

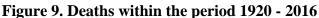
Highest share of extramarital births is registered in districts Vidin (75.5%) and Vratsa (75.0%). The share of extramarital births in all country regions is higher than 50.0% except in districts Razgrad (48.1%), Blagoevgrad (43.9%) and Kardzhali - (38.4%).



Mortality

The number of deaths in 2016 is 107 580 and the crude mortality rate¹ - 15.1‰. Compared to the previous year the number of deaths decreased by 2 537 or 2.3%. The crude mortality rate remains too high.





Mortality among males (16.2‰) continues to be higher than among females (14.0‰). In 2016 there are 1 091 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 (21.1‰) is higher than in urban ones (12.9‰).

The mortality rate for EU-28 in 2015 is 10.2‰. Mortality rate in Bulgaria is highest among the European countries. Lowest is the mortality in Ireland - 6.4‰, Cyprus - 6.9‰ and Luxembourg - 7.0‰. Except in Bulgaria, rather higher compared to the average EU-28 value is the mortality in Latvia and Lithuania - 14.4‰.

Highest is the mortality in districts Vidin - 23.1‰ and Montana - 21.3‰. There are ten districts where the mortality rate is lower than the country average. Lowest is the mortality rate in districts Sofia (stolitsa) - 11.7‰.

¹ Number of dead persons per 1 000 persons of the average annual population during the year.



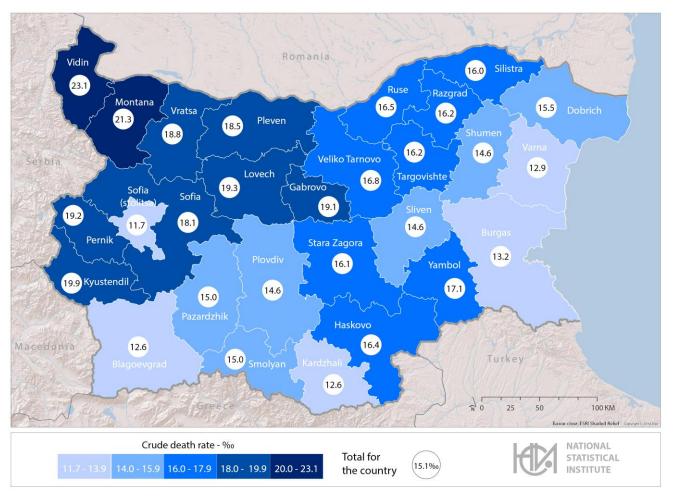


Figure 10. Crude death rate in 2016 by districts

The premature mortality¹ in 2016 (21.8%) increased compared to 2015 (21.4%). There are considerable differences in the premature mortality indicator for male and female population. The dead females aged up to 64 represent 14.2% of all dead females, while among the males it is 28.7%.

There are 423 children who die up to 1 year of age in 2016 and the infant mortality rate² is 6.5‰. The infant mortality has been 14.4‰ in 2001, 10.4‰ in 2005 and 6.6‰ in 2015.

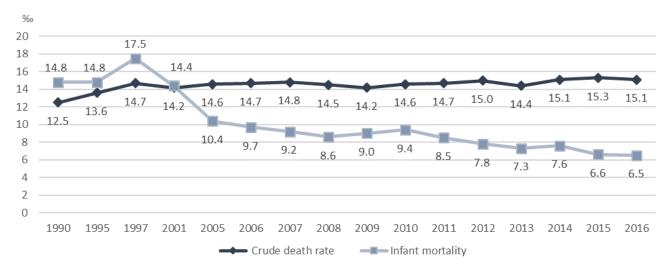
The infant mortality rate for 2016 is lower than the country average in 13 districts. Lowest values are registered in districts Razgrad - 2.1‰ and Sofia (stolitsa) - 2.5‰. Highest infant mortality rate is registered in districts Yambol (12.9‰) and Kyustendil (12.8‰).

¹ Share of deaths of persons below 65 years of age of the total number of deaths.

² Number of children who die up to 1 year of age per 1 000 live born.







The different mortality rates among male and female population, as well as among the urban and rural population determine the difference in the life expectancy for separate population groups.

Life expectancy for the country¹, calculated for the period 2014 - 2016 is 74.7 years. Compared to the previous period (2013 - 2015) it increases by 0.2 years.

The life expectancy of male population is 71.2 years, whereas of female - 7 years higher or 78.2 years. The life expectancy of urban population (75.5 years) is higher than of rural one (72.6 years).

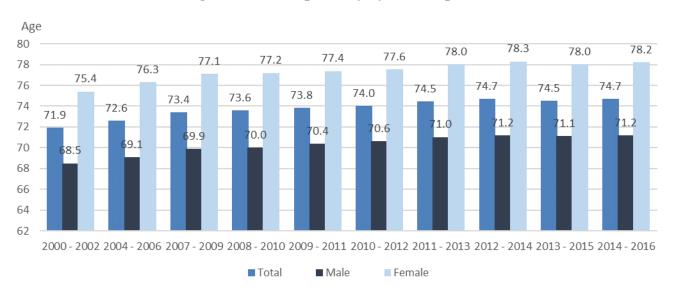


Figure 12. Life expectancy by sex and periods



Marriages and divorces

There are 26 803 juridical marriages registered in 2016, or 917 less than the previous year. The marriage rate¹ is 3.8%. Three quarters of the total marriages number (19 977) are registered among urban population.

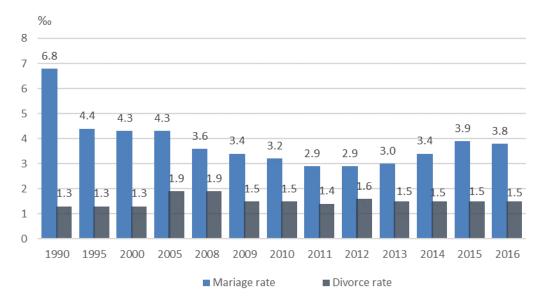


Figure 13. Marriage and divorce rates (per 1 000 population)

The mean age at first marriage in 2016 is 31.1 years for males and 28.1 - for females. Compared to the previous year, the mean age at first marriage has increased by 0.2 years for males and by 0.3 years for females.

88.5% of females and 87.2% of males have married for the first time in 2016.

Highest is the marriage rate in districts Dobrich and Kardzhali - 5.1‰ and 5.0‰ respectively. Lowest is the marriage rate in district Vratsa - 2.2‰.

The number of divorces in 2016 is 10 603 or 120 more than in 2015. Out of the total number of divorces, 81.1% refers to the urban population.

Highest is the number of divorces by 'mutual agreement' (63.4%), followed by divorces due to 'incompatibility of temperament' (28.4%) and 'virtual parting' (6.1%).

The divorce is not the first one for 9.2% of female and 10.4% of male who divorced in 2016. The average duration of a marriage before the divorce in 2016 is 15.7 years.

¹ Number of marriages per 1 000 population.



Internal migration

96 014 persons changed their residence within the country in 2016. Among the migrants within the country, 44.5% are male and 55.5% - female.

Highest is the share of internal migrants aged 20 - 39 years (35.6%), followed by persons below 20 years of age (26.7%) and 40 - 59 years old (17.2%).

The share of flow 'town-town' is highest one (44.4%), followed by the flow 'village - town' - 24.7% and 'town - village' (21.5%). Considerably lower is the number and share of the flow 'village - village' (9.4%).

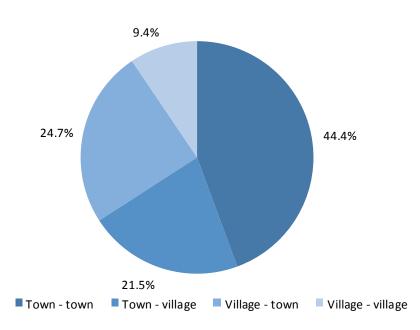


Figure 14. Directions of the internal migration in 2016

Out of the internal migrants, highest is the number of people who migrated to Sofia (stolitsa) - 18 397. Districts with highest shares of migrants to Sofia (stolitsa) are Sofia - 9.4%, Blagoevgrad - 7.0% and Plovdiv - 6.0%.

Lowest are the shares of migrants to Sofia (stolitsa) from districts Razgrad and Targovishte - 0.9% and 1.0% respectively.

International migration

30 570 persons changed their current address in Bulgaria with an address abroad in 2016 - 50.4% male. Every second emigrant (53.5%) is aged 20 to 39 years. The youngest emigrants (under 20 years) are 14.3% of the total number and the emigrants over 60 years of age - 8.7%.

Most preferred destination countries are Germany (21.7%), the United Kingdom (15.5%) and Spain (12.1%).

Persons who changed their address abroad with an address in Bulgaria, or the immigration flow, includes Bulgarian citizens who have returned to Bulgaria and citizens of other countries granted residence permit or status in Bulgaria. There are 21 241 persons who have changed their address abroad with an address in Bulgaria in 2016. Male represent 51.5% of the total number of immigrants and female - 48.5%.



Among the immigrants to Bulgaria, 33.8% are aged 20 - 39 years and 30.5% - 40 to 59 years. The youngest immigrants (under 20 years) are 16.7% and the oldest, over 60 years of age - 18.9%.

Highest is the share of immigrants from Turkey (22.5%), the Russian Federation (15.3%) and Ukraine (7.4%).

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 has decreased by 42 596 persons in 2016.

The population decrease, **measured through the natural increase rate is minus 6.0‰¹**. The natural increase rate in urban areas is minus 3.6‰, compared to minus 12.6‰ in rural areas, or the decrease of country population is mainly due to the negative demographic tendencies in rural areas.

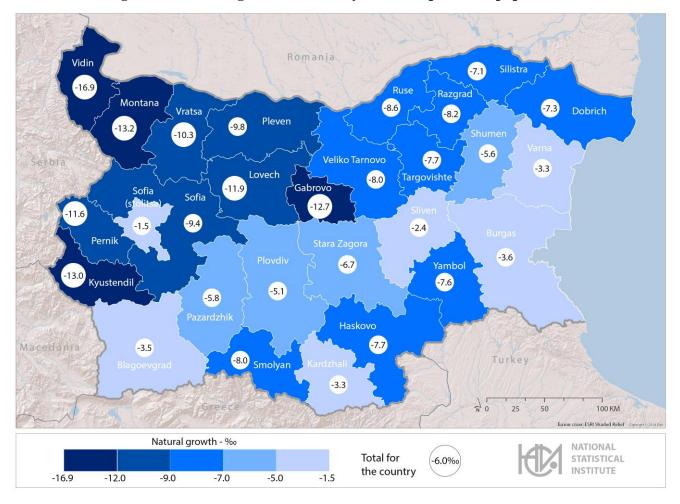


Figure 15. Natural growth in 2016 by districts (per 1 000 population)

¹ Difference between the number of live births and number of deaths per 1 000 of the average annual population.





The natural increase in all country districts in 2016 is negative.

Lowest is the negative growth in districts Sofia (stolitsa) (-1.5‰) and Sliven (-2.4‰). Highest is the population decrease due to the high negative growth in district Vidin (-16.9‰), followed by Montana (-13.2‰) and Kyustendil (-13.0‰). Higher than minus 10.0‰ is the natural growth in seven country districts.

The natural increase rate for EU-28 in 2015 is minus 0.2‰.

In 16 EU member states the natural increase is positive and highest is the rate in Ireland (7.6‰), Cyprus (3.9‰) and Luxembourg (3.7‰). Except in Bulgaria, rather high negative natural increase is registered in Hungary and Croatia - minus (-4.0‰) each.

Net migration (growth due to international migration) influences considerably the population number and structures. The net migration growth in 2016 is also negative - minus 9 329 persons. The last is the difference between the number of emigrants and number of immigrants.

The decrease of population due to the international migration measured through the coefficient of net migration is minus $1.3\%^{1}$.

There are five districts with a positive migration growth in 2016: Sofia (stolitsa) - (4.4%), Varna (2.8‰), Plovdiv (2.6‰), Burgas (0.8‰) and Kardzhali (0.1‰). Highest population decrease due to the negative migration growth is registered in districts Smolyan (-11.8‰), Vidin (-9.4‰) and Vratsa (-9.0‰).

¹ 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.

Source of data on population number and structures is the Information System Demography of the 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 administrativeterritorial 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 population by the end of 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 respective event, i.e. the age completed at the time of event.

The demographic indicators are calculated based on the average annual population. The last is an arithmetical average of the population number by the end of previous and the end of reference year.