

## BIRTH RATE

## Final data

The birth rate is one of the main factors influencing the number and structures of the population. Since the beginning of the 1950s, a permanent trend of decreasing birth rates has been observed in the country. The reasons for this are many and different during the different periods of the demographic development of Bulgaria. The change in the family model, the changing socio-economic environment, the general reduction of the population, in particular of the fertile contingents, the postponement of marriage and the birth of the first child and, last but not least, the emigration from the country mainly of the workingage population.

The main factors that determine the level of birth rate and reproduction of the population are the size of the fertile contingents and their fertility. In addition, while at the beginning of the last century, the birth rate was mainly influenced by the size of the fertile contingents, since fertility was high, with the changes in the family model and the role of women in society in recent decades, fertility has become increasingly important.

Fig. 1. Women in fertile age (15-49 years of age) and Total fertility rate ${ }^{1}$ by census years


The number of women in fertile age increased until 1975, reaching 2178000 , then began to decline to reach 1295000 women aged $15-49$ in the 2021 census. The biggest decrease was registered in the last ten-year period (2011-2021) - 377 thousand, or $22.5 \%$.

The fertility rate also saw a decline from 6.97 children in 1900 to 1.58 in 2021. In the last ten years, the indicator has remained at levels above 1.5 , but nevertheless, its value is not sufficient for the simple reproduction of the population.

[^0]The rich set of data collected during the censuses allows an assessment of the relationship between fertility and the main demographic, ethnocultural and socio-economic characteristics of women. For the purposes of the birth rate study, the indicator average number of live births ${ }^{2}$ was used in this material.

As of September 7, 2021, 748000 or $24.7 \%$ of women aged 12 and over have had one live birth. This share is higher among women who live in urban areas ( $27.1 \%$ ) than among those who live in rural areas - $17.6 \%$.

The absolute number and the relative share of women with two children are the highest - 1353 thousand (44.6\%).

204000 or $6.7 \%$ of women have three children each, and this share is twice as high in rural as in urban areas -11.3 and $5.1 \%$, respectively. 78000 or $2.6 \%$ of women have four or more children.

A little more than a fifth of women - 650 thousand ( $21.4 \%$ ) do not have children at the census critical time.

Fig. 2. Distribution of women aged 12 and over by number of children and place of residence as of September 7, 2021


As of September 7, 2021, the average number of live births per woman aged 12 and over was 1.47. This indicator is higher in villages (1.75) than in cities (1.37).

The relationship between the age of women and the average number of children they have given birth to is directly proportional. As age increases, so does the average number of children, or women in higher age groups have already reached the desired number of children, while those in lower age groups could still increase their number of children.

[^1]Table 1. Average number of children by age and place of residence of the mother as of September 7, 2021

| Age | Total | In urban <br> areas | In rural |
| :--- | ---: | ---: | ---: |
| Total | $\mathbf{1 . 4 7}$ | $\mathbf{1 . 3 7}$ | $\mathbf{1 . 7 5}$ |
| $12-19$ | 0.04 | 0.03 | 0.07 |
| $20-29$ | 0.53 | 0.43 | 0.87 |
| $30-39$ | 1.30 | 1.21 | 1.66 |
| $40-49$ | 1.53 | 1.46 | 1.80 |
| $50-59$ | 1.70 | 1.61 | 1.96 |
| $60-69$ | 1.91 | 1.82 | 2.15 |
| $70-79$ | 1.92 | 1.82 | 2.14 |
| $80+$ | 1.84 | 1.73 | 2.07 |

The trend of increasing the educational level of the population affects the birth rate. As the educational level increases, the average number of live births decreases. Data from the latest census confirms this trend. The average number of children for women aged 12 and over with no education is the highest 2.75 children. This indicator is similar in value for women with completed primary and lower secondary education - 1.72 and 1.63 children, respectively. The average number of children for women with tertiary education is the lowest -1.25 , with 1.47 children on average for all women

Fig. 3. Average number of children by level of completed education of the mother as of September 7, 2021


Unemployed and uneducated women aged 15-64 have the highest average number of children - 3.07. At the opposite pole are unemployed women with higher education with an average number of children of 0.90 . In general, the average number of children is higher for unemployed women with elementary, primary and no education, while for women with higher and secondary education, the number of children is higher for employed women aged 15-64 years.

Fig. 4. Average number of children by degree of completed education and economic activity of the mother as of September 7, 2021


The distribution by ethnicity shows that only among women who identify themselves as belonging to the Roma ethnic group, the average number of children is sufficient for simple reproduction - 2.25 children. The significantly younger age structure and low educational level are factors that determine the higher birth rate among this group. This indicator is higher than the national average for the Turkish ethnic group - 1.79. The average number of live births for women who self-identified as belonging to the Bulgarian ethnic group is 1.41 .

Fig. 5. Average number of children by ethnicity of the mother as of September 7, 2021


The average number of live births among women of the Roma ethnic group aged 25-49 is over 2.0, and that among women over 50 is over 3.0. Among women of the Turkish ethnic group, the average number of children is over 2.0 in ages 55 and over, and among the oldest women (70+) it is 2.71 . Among those who self-identified as belonging to the Bulgarian ethnic group, the average number of live births
is highest (1.85) among those who are in the age group 65-69 years of age. Comparison with the data from the 2011 census shows a decrease in the average number of children in the older age groups for women who self-identified as Roma and Turkish ethnic groups. Therefore, it can be concluded that the birth rate is decreasing among these ethnic groups as well.

Table 2. Average number of children by age and ethnicity of the mother as of September 7, 2021

| Age | Bulgarian | Turkish | Roma | Other | I cannot <br> determine | I do not want <br> to answer |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Total | $\mathbf{1 . 4 1}$ | $\mathbf{1 . 7 9}$ | $\mathbf{2 . 2 5}$ | $\mathbf{1 . 2 8}$ | $\mathbf{1 . 2 2}$ | $\mathbf{1 . 3 6}$ |
| $12-14$ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| $15-19$ | 0.03 | 0.08 | 0.34 | 0.02 | 0.09 | 0.07 |
| $20-24$ | 0.19 | 0.45 | 1.30 | 0.13 | 0.40 | 0.35 |
| $25-29$ | 0.60 | 1.05 | 2.08 | 0.51 | 0.73 | 0.77 |
| $30-34$ | 1.04 | 1.52 | 2.43 | 0.93 | 1.06 | 1.12 |
| $35-39$ | 1.35 | 1.72 | 2.67 | 1.20 | 1.28 | 1.41 |
| $40-44$ | 1.45 | 1.78 | 2.76 | 1.33 | 1.46 | 1.57 |
| $45-49$ | 1.46 | 1.82 | 2.81 | 1.37 | 1.46 | 1.62 |
| $50-54$ | 1.55 | 1.93 | 2.92 | 1.41 | 1.61 | 1.66 |
| $55-59$ | 1.70 | 2.12 | 3.17 | 1.48 | 1.79 | 1.82 |
| $60-64$ | 1.81 | 2.25 | 3.38 | 1.56 | 1.72 | 1.90 |
| $65-69$ | 1.85 | 2.40 | 3.49 | 1.63 | 1.79 | 2.00 |
| $70+$ | 1.82 | 2.71 | 3.55 | 1.80 | 2.02 | 2.00 |

The distribution by religion shows that the average number of live births is highest among Muslim women- 1.83 children.

Among professing Christian faiths, the average number of children is highest among Protestants -1.82, followed by other Christian (1.63), Eastern Orthodox (1.43), Catholic (1.36) and Armenian Apostolic (1.26).

For women who indicated that they had no religion, the average number of children was 1.40.
Fig. 6. Average number of children by religion of the mother as of September 7, 2021


There are significant differences in the number of children between the districts. In all districts, women with two children predominate, and the relative share of women with two children varies from $53.4 \%$ for the Smolyan district to $36.1 \%$ for the Sofia (stolitsa) district.

The highest relative share of women with one child is in the district of Gabrovo (32.1\%), and the lowest - in the district of Kardzhali (16.1\%).

For women with three or more children, the highest relative share is in the districts of Kardzhali (21.1\%), Sliven (15.5\%), Targovishte (14.6\%) and Razgrad (14.2\%), and the lowest - in the districts of Gabrovo $(6.0 \%)$ ), Pernik ( $5.9 \%$ ) and Sofia (stolitsa) - $4.6 \%$ of all women aged 12 and over in the district.

Fig. 7. Relative share of women according to the number of their children by district as of September 7, 2021


There are also differences in the average number of children by district. It is highest in the districts of Kardzhali (1.81) and Sliven (1.70). In total, in 23 districts, this indicator is above the national average (1.47). 5 districts are below the average for the country, with the lowest number of children in the Sofia district (the capital) - 1.18 children.

Fig. 8. Average number of children by district as of September 7, 2021


Table 3. Women aged 12 and over by number of live births, place of residence and age as of September 7, 2021

| Place of residence Age | Total | Women by number of live births |  |  |  |  | Number of live births | Average number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With one child | With two children | With three children | With four and more children | Without children |  |  |
| Total | 3033104 | 747717 | 1352748 | 204187 | 78382 | 650070 | 4443529 | 1.47 |
| 12-14 | 95571 | 119 | 2 | - | - | 95450 | 123 | 0.00 |
| 15-19 | 138524 | 6329 | 1437 | 136 | 12 | 130610 | 9660 | 0.07 |
| 20-24 | 130006 | 16964 | 7215 | 1701 | 496 | 103630 | 38593 | 0.30 |
| 25-29 | 146236 | 42480 | 21035 | 4618 | 2132 | 75971 | 108038 | 0.74 |
| 30-34 | 195302 | 69877 | 55610 | 8547 | 3956 | 57312 | 225539 | 1.15 |
| 35-39 | 208862 | 70006 | 84064 | 12247 | 5088 | 37457 | 299890 | 1.44 |
| 40-44 | 230476 | 78687 | 99906 | 14579 | 6112 | 31192 | 352683 | 1.53 |
| 45-49 | 245484 | 90181 | 105688 | 14625 | 6235 | 28755 | 376677 | 1.53 |
| 50-54 | 238406 | 80115 | 113267 | 16074 | 6667 | 22283 | 387735 | 1.63 |
| 55-59 | 230017 | 57438 | 128647 | 19562 | 7636 | 16734 | 410543 | 1.78 |
| 60-64 | 249431 | 49896 | 150627 | 25110 | 9519 | 14279 | 471923 | 1.89 |
| 65-69 | 259130 | 47970 | 162462 | 27152 | 9545 | 12001 | 500055 | 1.93 |
| 70+ | 665659 | 137655 | 422788 | 59836 | 20984 | 24396 | 1262070 | 1.90 |
| Urban areas | 2242644 | 608821 | 966782 | 115140 | 36460 | 515441 | 3061645 | 1.37 |
| 12-14 | 71096 | 80 | 1 | - | - | 71015 | 82 | 0.00 |
| 15-19 | 102178 | 3444 | 757 | 60 | 4 | 97913 | 5155 | 0.05 |
| 20-24 | 98634 | 10373 | 3634 | 802 | 227 | 83598 | 21008 | 0.21 |
| 25-29 | 111961 | 31963 | 12718 | 2327 | 982 | 63971 | 68774 | 0.61 |
| 30-34 | 153960 | 57962 | 39989 | 4820 | 1886 | 49303 | 161224 | 1.05 |
| 35-39 | 165444 | 59079 | 64202 | 8020 | 2530 | 31613 | 223703 | 1.35 |
| 40-44 | 181938 | 66208 | 77112 | 9899 | 3032 | 25687 | 264866 | 1.46 |
| 45-49 | 191241 | 75470 | 79783 | 9662 | 3184 | 23142 | 279582 | 1.46 |
| 50-54 | 179477 | 66985 | 81987 | 9837 | 3310 | 17358 | 276588 | 1.54 |
| 55-59 | 169011 | 48173 | 92909 | 11416 | 3744 | 12769 | 286185 | 1.69 |
| 60-64 | 181251 | 41708 | 109122 | 14579 | 4896 | 10946 | 326848 | 1.80 |
| 65-69 | 184816 | 39702 | 116355 | 14861 | 4636 | 9262 | 338965 | 1.83 |
| 70+ | 451637 | 107674 | 288213 | 28857 | 8029 | 18864 | 808665 | 1.79 |
| Rural areas | 790460 | 138896 | 385966 | 89047 | 41922 | 134629 | 1381884 | 1.75 |
| 12-14 | 24475 | 39 | 1 | - | - | 24435 | 41 | 0.00 |
| 15-19 | 36346 | 2885 | 680 | 76 | 8 | 32697 | 4505 | 0.12 |
| 20-24 | 31372 | 6591 | 3581 | 899 | 269 | 20032 | 17585 | 0.56 |
| 25-29 | 34275 | 10517 | 8317 | 2291 | 1150 | 12000 | 39264 | 1.15 |
| 30-34 | 41342 | 11915 | 15621 | 3727 | 2070 | 8009 | 64315 | 1.56 |
| 35-39 | 43418 | 10927 | 19862 | 4227 | 2558 | 5844 | 76187 | 1.75 |
| 40-44 | 48538 | 12479 | 22794 | 4680 | 3080 | 5505 | 87817 | 1.81 |
| 45-49 | 54243 | 14711 | 25905 | 4963 | 3051 | 5613 | 97095 | 1.79 |
| 50-54 | 58929 | 13130 | 31280 | 6237 | 3357 | 4925 | 111147 | 1.89 |
| 55-59 | 61006 | 9265 | 35738 | 8146 | 3892 | 3965 | 124358 | 2.04 |
| 60-64 | 68180 | 8188 | 41505 | 10531 | 4623 | 3333 | 145075 | 2.13 |
| 65-69 | 74314 | 8268 | 46107 | 12291 | 4909 | 2739 | 161090 | 2.17 |
| 70+ | 214022 | 29981 | 134575 | 30979 | 12955 | 5532 | 453405 | 2.12 |

Table 4. Women aged 12 and over by number of live births, place of residence and degree of completed education as of September 7, 2021

| Place of residence Education | Total | Women by number of live births |  |  |  |  | Number of live births | Average number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With one child | With two children | With <br> three children | With four and more children | Without children |  |  |
| Total | 3033104 | 747717 | 1352748 | 204187 | 78382 | 650070 | 4443529 | 1.47 |
| Higher | 932127 | 321788 | 380117 | 26027 | 2039 | 202156 | 1168726 | 1.25 |
| Secondary | 1366808 | 342093 | 685393 | 68824 | 11323 | 259175 | 1969237 | 1.44 |
| Elementary | 526811 | 67909 | 238990 | 72994 | 29821 | 117097 | 904153 | 1.72 |
| Primary | 151263 | 10656 | 35591 | 23936 | 18871 | 62209 | 247068 | 1.63 |
| No education | 56095 | 5271 | 12657 | 12406 | 16328 | 9433 | 154345 | 2.75 |
| Urban areas | 2242644 | 608821 | 966782 | 115140 | 36460 | 515441 | 3061645 | 1.37 |
| Higher | 832257 | 292811 | 335023 | 22414 | 1705 | 180304 | 1037289 | 1.25 |
| Secondary | 1025888 | 271205 | 497413 | 46821 | 7261 | 203188 | 1438333 | 1.40 |
| Elementary | 275163 | 36766 | 112510 | 30807 | 12775 | 82305 | 413945 | 1.50 |
| Primary | 82698 | 5324 | 15644 | 9401 | 7449 | 44880 | 101591 | 1.23 |
| No education | 26638 | 2715 | 6192 | 5697 | 7270 | 4764 | 70487 | 2.65 |
| Rural areas | 790460 | 138896 | 385966 | 89047 | 41922 | 134629 | 1381884 | 1.75 |
| Higher | 99870 | 28977 | 45094 | 3613 | 334 | 21852 | 131437 | 1.32 |
| Secondary | 340920 | 70888 | 187980 | 22003 | 4062 | 55987 | 530904 | 1.56 |
| Elementary | 251648 | 31143 | 126480 | 42187 | 17046 | 34792 | 490208 | 1.95 |
| Primary | 68565 | 5332 | 19947 | 14535 | 11422 | 17329 | 145477 | 2.12 |
| No education | 29457 | 2556 | 6465 | 6709 | 9058 | 4669 | 83858 | 2.85 |

Table 5. Women aged 12 and over by number of live births, place of residence and ethnicity as of September 7, 2021

| Place of residence Ethnicity | Total | Women by number of live births |  |  |  |  | Number of live births | Average number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With one child | With two children |  | With four and more children | Without children |  |  |
| Total | 3033104 | 747717 | 1352748 | 204187 | 78382 | 650070 | 4443529 | 1.47 |
| Bulgarian | 2445276 | 643539 | 1131169 | 128970 | 34068 | 507530 | 3451820 | 1.41 |
| Turkish | 231229 | 37029 | 101702 | 34930 | 14756 | 42812 | 414564 | 1.79 |
| Roma | 107035 | 13870 | 29652 | 20555 | 20547 | 22411 | 240614 | 2.25 |
| Other | 38927 | 7151 | 13628 | 3486 | 1120 | 13542 | 49907 | 1.28 |
| I cannot determine | 5466 | 921 | 1545 | 482 | 254 | 2264 | 6695 | 1.22 |
| I do not want to answer | 27267 | 5811 | 9676 | 2233 | 1040 | 8507 | 36947 | 1.36 |
| Nonindicated | 177904 | 39396 | 65376 | 13531 | 6597 | 53004 | 242982 | 1.37 |
| Urban areas | 2242644 | 608821 | 966782 | 115140 | 36460 | 515441 | 3061645 | 1.37 |
| Bulgarian | 1903572 | 538172 | 843364 | 81423 | 16990 | 423623 | 2547147 | 1.34 |
| Turkish | 88440 | 17479 | 37258 | 10328 | 4330 | 19045 | 143332 | 1.62 |
| Roma | 56234 | 7747 | 16684 | 10706 | 9601 | 11496 | 121792 | 2.17 |
| Other | 22999 | 5088 | 7551 | 1223 | 306 | 8831 | 25242 | 1.10 |
| I cannot determine | 3260 | 636 | 844 | 210 | 85 | 1485 | 3367 | 1.03 |
| I do not want to answer | 19458 | 4647 | 6706 | 1173 | 422 | 6510 | 23604 | 1.21 |
| Nonindicated | 148681 | 35052 | 54375 | 10077 | 4726 | 44451 | 197161 | 1.33 |
| Rural areas | 790460 | 138896 | 385966 | 89047 | 41922 | 134629 | 1381884 | 1.75 |
| Bulgarian | 541704 | 105367 | 287805 | 47547 | 17078 | 83907 | 904673 | 1.67 |
| Turkish | 142789 | 19550 | 64444 | 24602 | 10426 | 23767 | 271232 | 1.90 |
| Roma | 50801 | 6123 | 12968 | 9849 | 10946 | 10915 | 118822 | 2.34 |
| Other | 15928 | 2063 | 6077 | 2263 | 814 | 4711 | 24665 | 1.55 |
| I cannot determine | 2206 | 285 | 701 | 272 | 169 | 779 | 3328 | 1.51 |
| I do not want to answer | 7809 | 1164 | 2970 | 1060 | 618 | 1997 | 13343 | 1.71 |
| Nonindicated | 29223 | 4344 | 11001 | 3454 | 1871 | 8553 | 45821 | 1.57 |

Table 6. Women aged 12 and over by number of live births and districts as of September 7, 2021

| Districts | Total | Women by number of live births |  |  |  |  | Number of live births | Average number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With one child | With two children | With <br> three children | With four and more children | Without children |  |  |
| Total for the country | 3033104 | 747717 | 1352748 | 204187 | 78382 | 650070 | 4443529 | 1.47 |
| Blagoevgrad | 133816 | 22841 | 65162 | 13920 | 4267 | 27626 | 214805 | 1.61 |
| Burgas | 175180 | 39868 | 80702 | 12178 | 4989 | 37443 | 261869 | 1.49 |
| Varna | 199687 | 52206 | 84971 | 11484 | 3726 | 47300 | 274198 | 1.37 |
| Veliko Turnovo | 97942 | 25541 | 45087 | 6127 | 2277 | 18910 | 144996 | 1.48 |
| Vidin | 35852 | 9373 | 17149 | 2244 | 1010 | 6076 | 55338 | 1.54 |
| Vratsa | 70502 | 15863 | 33600 | 5182 | 2391 | 13466 | 110343 | 1.57 |
| Gabrovo | 47410 | 15197 | 20399 | 2170 | 698 | 8946 | 65773 | 1.39 |
| Dobrich | 70799 | 15993 | 33993 | 5419 | 2253 | 13141 | 110973 | 1.57 |
| Kardzhali | 65173 | 10524 | 29430 | 9345 | 4386 | 11488 | 118226 | 1.81 |
| Kyustendil | 52809 | 12492 | 26578 | 2969 | 831 | 9939 | 78525 | 1.49 |
| Lovech | 54084 | 14398 | 24539 | 3382 | 1900 | 9865 | 83261 | 1.54 |
| Montana | 55858 | 13364 | 26454 | 4171 | 2180 | 9689 | 89614 | 1.60 |
| Pazardzhik | 106002 | 21201 | 51490 | 9797 | 3892 | 19622 | 172120 | 1.62 |
| Pernik | 53776 | 14457 | 25579 | 2477 | 714 | 10549 | 76408 | 1.42 |
| Pleven | 105862 | 24079 | 51609 | 7303 | 3442 | 19429 | 166197 | 1.57 |
| Plovdiv | 296157 | 74067 | 133202 | 18032 | 6575 | 64281 | 426406 | 1.44 |
| Razgrad | 48363 | 9484 | 23423 | 5186 | 1658 | 8612 | 79694 | 1.65 |
| Ruse | 92059 | 24835 | 42100 | 5710 | 1863 | 17551 | 134933 | 1.47 |
| Silistra | 45722 | 9234 | 23167 | 4425 | 1554 | 7342 | 76269 | 1.67 |
| Sliven | 76967 | 15971 | 34380 | 7034 | 4864 | 14718 | 130689 | 1.70 |
| Smolyan | 46035 | 8173 | 24575 | 4494 | 1115 | 7678 | 75877 | 1.65 |
| Sofia | 106051 | 23537 | 51280 | 7379 | 2952 | 20903 | 162392 | 1.53 |
| Sofia (stolitsa) | 595953 | 181220 | 215290 | 22437 | 5155 | 171851 | 703179 | 1.18 |
| Stara Zagora | 137246 | 35695 | 62599 | 8777 | 4217 | 25958 | 208055 | 1.52 |
| Targovishte | 45496 | 8976 | 21569 | 4746 | 1895 | 8310 | 75299 | 1.66 |
| Haskovo | 97924 | 22894 | 47256 | 7309 | 3044 | 17421 | 154044 | 1.57 |
| Shumen | 70305 | 14920 | 32878 | 6863 | 2622 | 13022 | 113569 | 1.62 |
| Yambol | 50074 | 11314 | 24287 | 3627 | 1912 | 8934 | 80477 | 1.61 |


[^0]:    ${ }^{1}$ Average number of children a woman would bear during her entire fertile period. Source: Current Demographic Statistics.

[^1]:    ${ }^{2}$ Ratio of the number of live births/adopted children to the total number of women aged 12 and over.

