RELEASE *58/2023*

# Population estimates and main demographic indicators

## *2022*

The purpose of producing population estimates is to obtain the data necessary for the analysis of natural changes of population in Montenegro and municipalities, natality, fertility, and other indicators.

According to the population estimates:

- Number of inhabitants in Montenegro in mid-2022 is 617 213;
- Number of children (aged 0-17) in Montenegro in mid-2022 is 132 606 or 21.5% of the total population;
- Working age population or the population aged 15-64 years is 406 741 or 65.9% of the total population;
- Population aged 65+ years is 99 951 or 16.2% of the total population;
- In Montenegro, on the basis of natural increase per 1 000 inhabitants, the population number decreases for 0.1 person;
- The 1 000 population per year made 5.3 marriages, which is the rate of marriages, and the divorce rate is 1.1;
- The rate of migration in Montenegro is 11.3 which means that for each of 1 000 inhabitants 11 persons changes their place of residence within the borders of Montenegro;
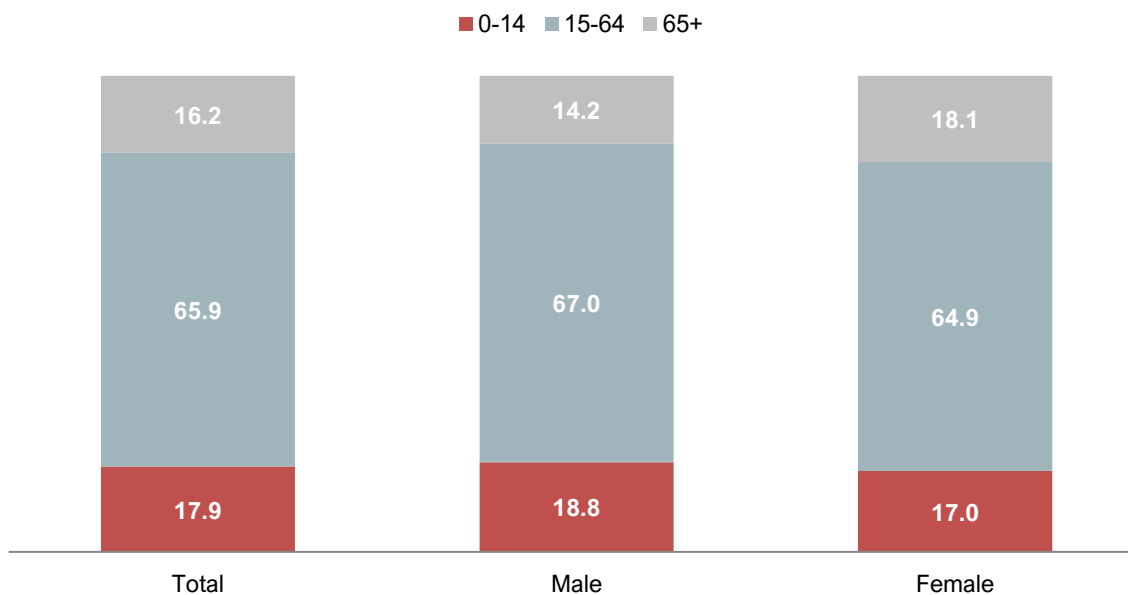- Life expectancy at birth in 2022 is 76.2 years.

**Table 1.** Main demographic indicators 2022

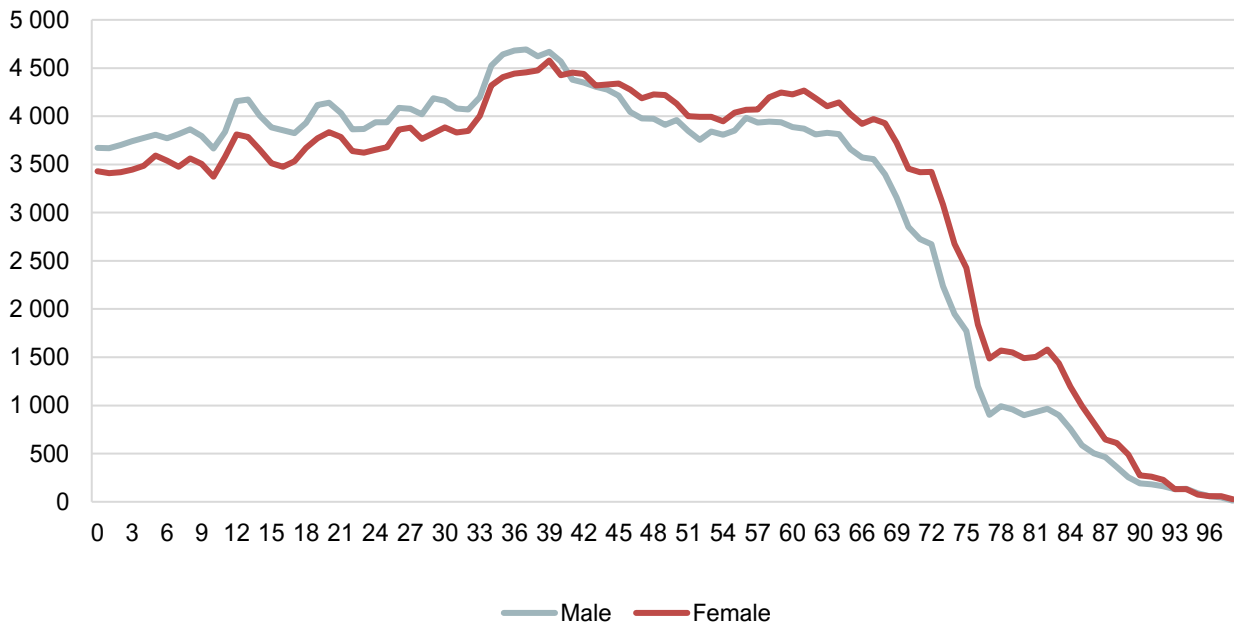| | | | | | |
|---|---|---|---|---|---|
| Birth rate | 11.4 | Infant mortality rate | 3.6 | Life expectancy - total | 76.2 |
| Death rate | 11.5 | Under five mortality rate | 4.4 | Life expectancy - male | 73.7 |
| Rate of natural increase | -0.1 | Vital index of birth per 100 deaths | 99.3 | Life expectancy - female | 78.8 |
| Rate of marriages | 5.3 | Masculinity rate of live births | 106.5 | Total fertility rate | 1.8 |
| Rate of divorces | 1.1 | Masculinity rate of deaths | 107.4 | Rate of migrations | 11.3 |

**POPULATION ESTIMATES**

**Table 2.** Population in Montenegro at beginning, middle, and end of 2022, by age groups

| | 1 January 2022 | | | Mid-year 2022 | | | 31 December 2022 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| **Total** | **617 683** | **305 174** | **312 509** | **617 213** | **304 958** | **312 255** | **616 695** | **304 691** | **312 004** |
| 0-14 | 110 803 | 57 639 | 53 164 | 110 521 | 57 456 | 53 065 | 110 230 | 57 265 | 52 965 |
| 15-64 | 408 032 | 204 782 | 203 250 | 406 741 | 204 175 | 202 566 | 405 428 | 203 547 | 201 881 |
| 65+ | 98 848 | 42 753 | 56 095 | 99 951 | 43 327 | 56 624 | 101 037 | 43 879 | 57 158 |
| 0-17 | 132 855 | 69 142 | 63 713 | 132 606 | 69 020 | 63 586 | 132 348 | 68 889 | 63 459 |
| 18+ | 484 828 | 236 032 | 248 796 | 484 607 | 235 938 | 248 669 | 484 347 | 235 802 | 248 545 |

**Graph 1.** Age structure of population by sex, mid-year 2022, in %



■ 0-14  ■ 15-64  ■ 65+

| | Total | Male | Female |
|---|---|---|---|
| 65+ | 16.2 | 14.2 | 18.1 |
| 15-64 | 65.9 | 67.0 | 64.9 |
| 0-14 | 17.9 | 18.8 | 17.0 |

**Graph 2.** Population by single age and sex, mid-year 2022



Legend: ── Male ── Female

**Graph 3.** Population by single age at the start, and the end of 2022



Legend: ── 1-Jan-21 ── 31-Dec-21
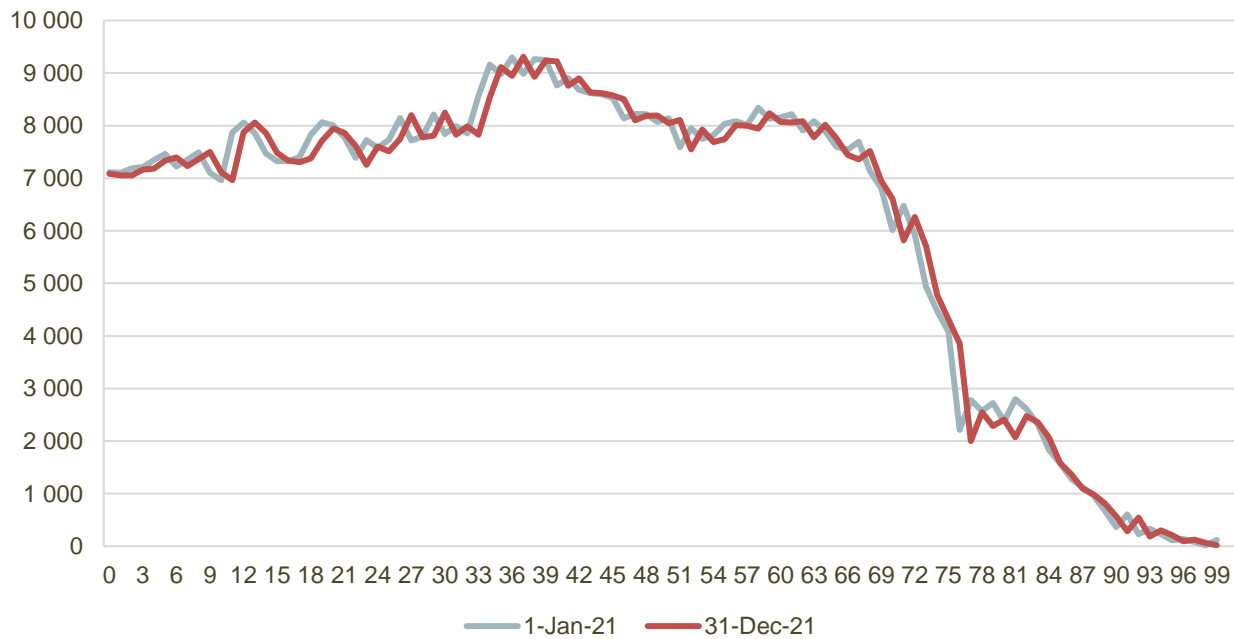
## DEMOGRAPHIC INDICATORS

**Table 3.** Indicators of vital statistics 2022

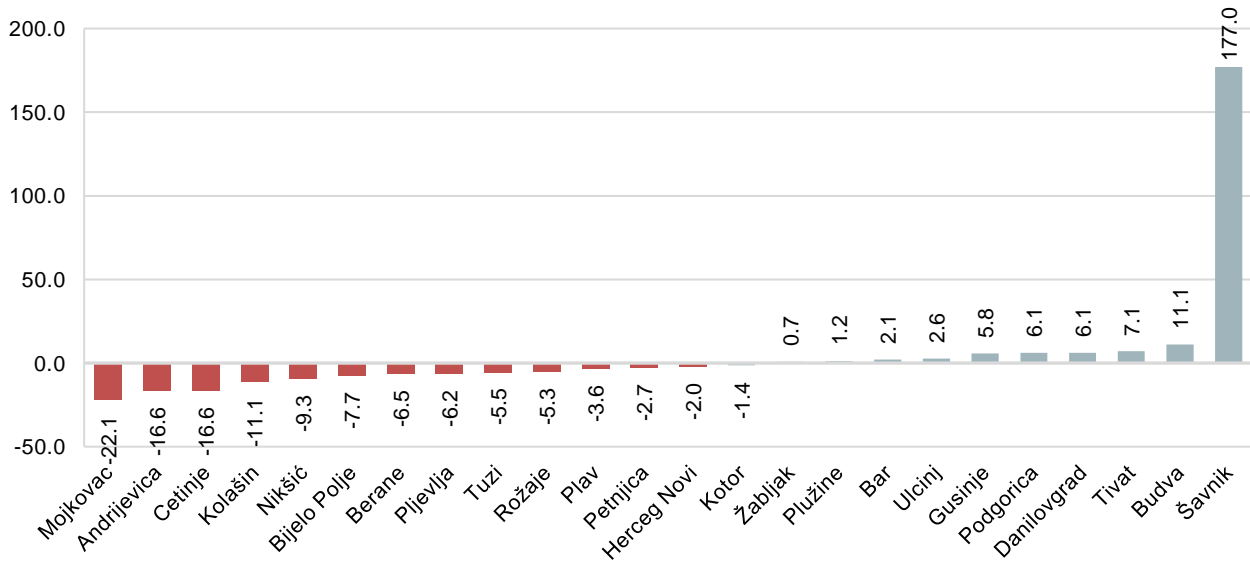|  | Natural increase rate | Birth rate | Death rate |
|---|---:|---:|---:|
| **MONTENEGRO** | **-0.1** | **11.4** | **11.5** |
| Andrijevica | -10.3 | 7.7 | 18.0 |
| Bar | -1.3 | 10.3 | 11.6 |
| Berane | -3.2 | 10.6 | 13.8 |
| Bijelo Polje | -2.0 | 10.3 | 12.3 |
| Budva | 6.2 | 14.6 | 8.4 |
| Cetinje | -6.7 | 10.1 | 16.9 |
| Danilovgrad | -1.0 | 10.1 | 11.2 |
| Gusinje | -2.0 | 9.3 | 11.3 |
| Herceg Novi | -1.7 | 10.6 | 12.3 |
| Kolasin | -10.3 | 7.7 | 18.0 |
| Kotor | -3.1 | 9.8 | 13.0 |
| Mojkovac | -13.1 | 7.6 | 20.7 |
| Niksic | -2.3 | 9.9 | 12.2 |
| Petnjica | -3.3 | 7.1 | 10.3 |
| Plav | 2.2 | 13.6 | 11.4 |
| Pljevlja | -10.9 | 6.8 | 17.8 |
| Pluzine | -14.3 | 5.7 | 20.0 |
| Podgorica | 4.0 | 13.3 | 9.3 |
| Rozaje | 5.2 | 12.6 | 7.4 |
| Savnik | -14.2 | 5.9 | 20.1 |
| Tivat | 4.5 | 14.0 | 9.6 |
| Tuzi | 3.3 | 13.6 | 10.3 |
| Ulcinj | 0.3 | 11.6 | 11.3 |
| Zabljak | -9.5 | 6.1 | 15.6 |

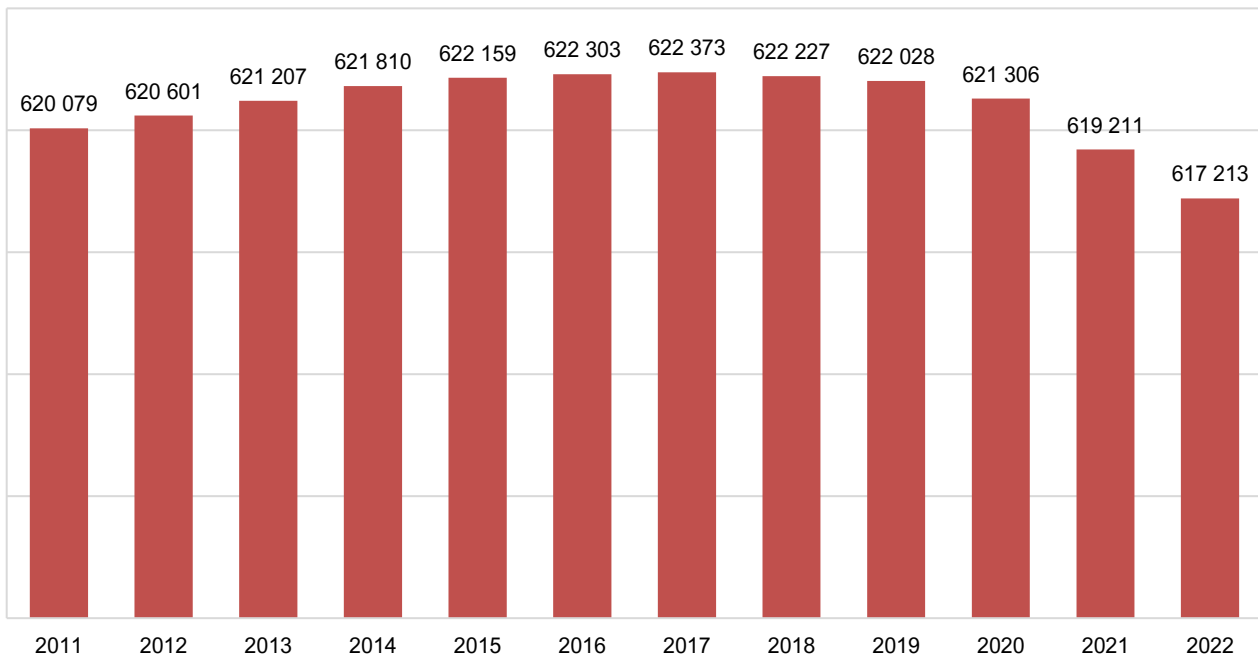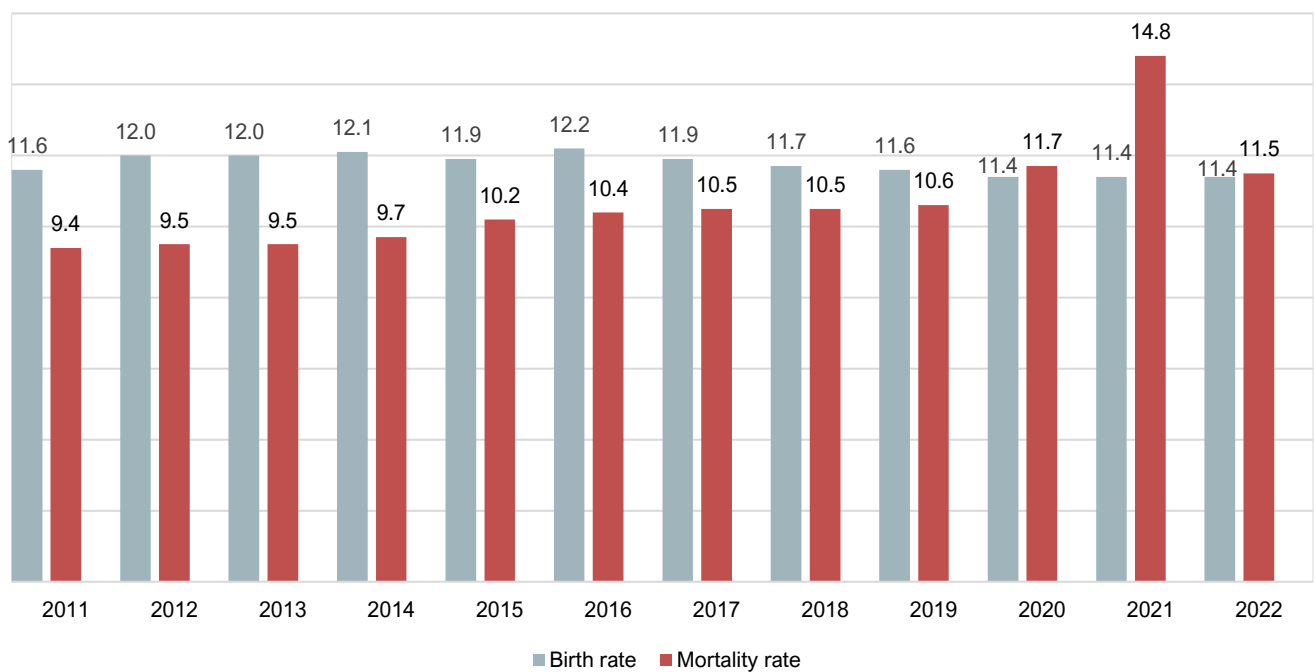**Graph 4.** Birth and death rate by municipality, 2022
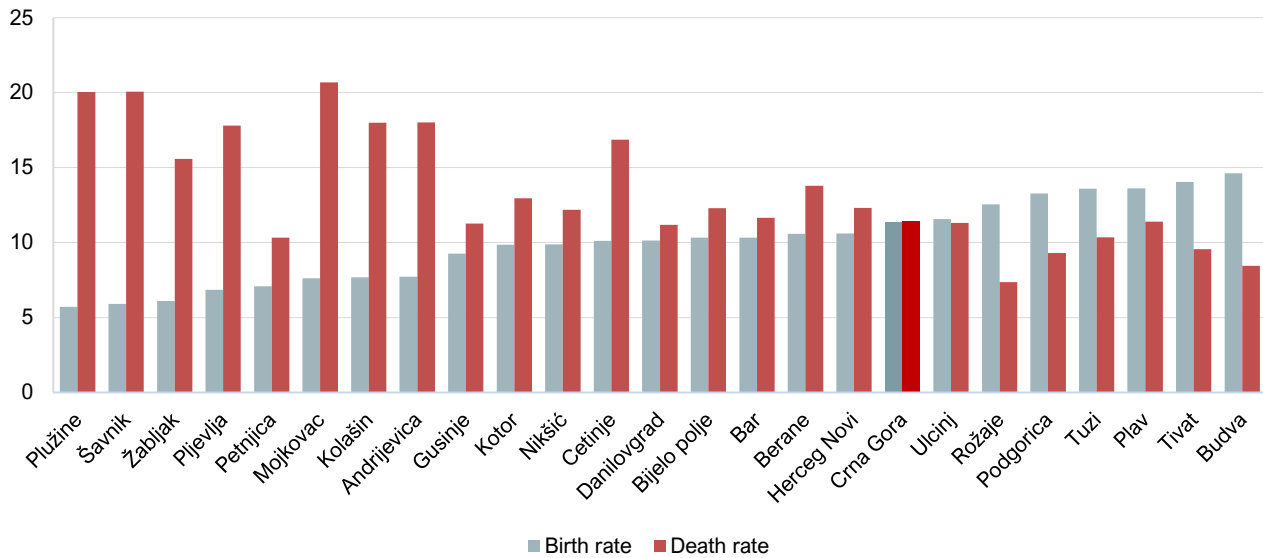


**Graph 5.** Natural increase rate by municipality, 2022
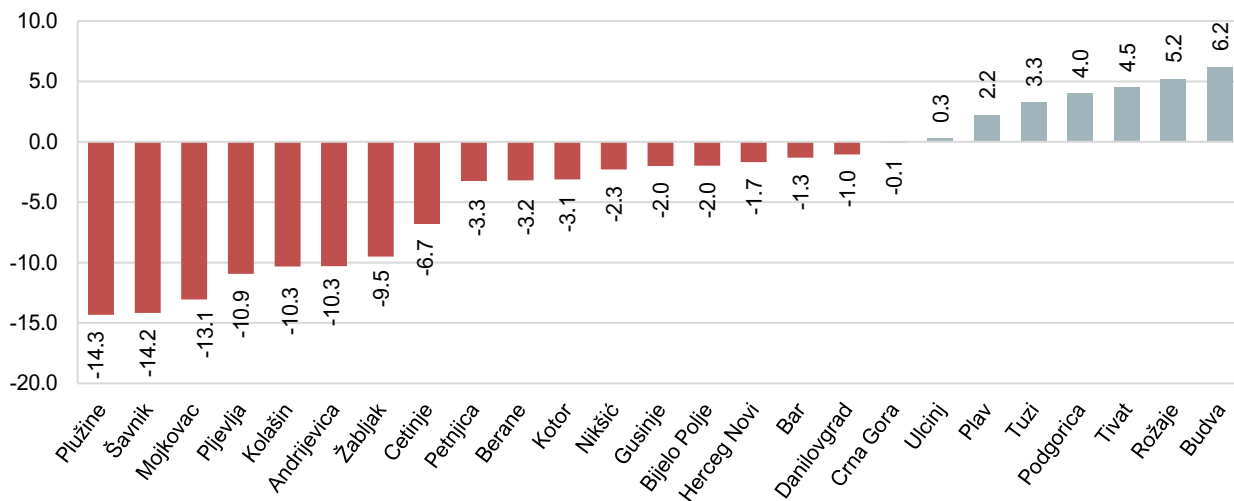


**Graph 6.** Migration balance rates by municipality, 2022

**Graph 7.** Mid-year population estimates, 2011 - 2022

| Year | Population |
|------|-----------|
| 2011 | 620 079 |
| 2012 | 620 601 |
| 2013 | 621 207 |
| 2014 | 621 810 |
| 2015 | 622 159 |
| 2016 | 622 303 |
| 2017 | 622 373 |
| 2018 | 622 227 |
| 2019 | 622 028 |
| 2020 | 621 306 |
| 2021 | 619 211 |
| 2022 | 617 213 |

**Graph 8.** Birth and death rate, 2011 - 2022

| Year | Birth rate | Mortality rate |
|------|-----------|----------------|
| 2011 | 11.6 | 9.4 |
| 2012 | 12.0 | 9.5 |
| 2013 | 12.0 | 9.5 |
| 2014 | 12.1 | 9.7 |
| 2015 | 11.9 | 10.2 |
| 2016 | 12.2 | 10.4 |
| 2017 | 11.9 | 10.5 |
| 2018 | 11.7 | 10.5 |
| 2019 | 11.6 | 10.6 |
| 2020 | 11.4 | 11.7 |
| 2021 | 11.4 | 14.8 |
| 2022 | 11.4 | 11.5 |

■ Birth rate  ■ Mortality rate

## METHODOLOGICAL NOTES

### Population estimates

Estimated number of populations refers to start, middle, and end of the year. The data that relate to the middle of the year are used in the calculation of demographic indicators, as well as for reporting to the United Nations. On other hand, the population at the start of the year is requested by Eurostat.

Population according to the census is a basis for the annual estimation of population. This number is then corrected according to the results of vital statistics (natural increase), and migration flows. Results of vital statistics are presented through natural increase. In case of positive natural increase, the number of populations increases, in case of negative natural population growth, the number of populations decreases. Migration movements of inhabitants inside Montenegro are considered, and they affect the population estimates at the level of municipalities. When estimating the population, it is assumed that international migration is a constant number calculated on the basis on the 2003 Census, then natural growth for the period 2003-2011, as well as the 2011 Census. Using these sources, so called profile international net migrants per sex, and aged for a period of one year is calculated. This profile is used as a statistical adjustment in the period between censuses. The application of methods of statistical adjustment for estimates of the number of populations is the need to show the real inhabitants annually.

### Demographic indicators

Based on the estimated number of the population, the number of births, deaths, marriages, divorces, as well as data on internal migration, the following demographic indicators are calculated:

**Birth rate** is the ratio number of live births and estimated number of mid-year population, expressed in per mill (per 1 000 inhabitants).

**Death rate** is the ratio of number of deaths and estimated number of mid-year population, expressed in per mill (per 1 000 inhabitants).

**Natural increase rate** is the ratio of natural increase and estimate number of mid-year population. It is expressed in per mill (per 1 000 inhabitants).

**Marriage rate** is the ratio of number of marriages and estimate number of mid-year population. It is expressed in per mill (per 1 000 inhabitants).

**Divorce rate** is the ratio of divorces and estimated number of mid-year population. It is expressed in per mill (per 1 000 inhabitants).

**Infant death rate** is the ratio of number of dead infants and live born children expressed in per mill (per 1000 live born).

**Child death rate under 5 years of age** is the ratio of child deaths at age up to 5 years, and expressed in per mill (per 1 000 live born).

**Vital index** is the ratio of live births to 100 deaths.

**Masculinity rate** is the ratio of number of males per 100 females in observed events.

**Total fertility rate, i.e. total number of live births per one woman**, i.e. the sum of appropriate specific fertility rate, is calculated for the age interval from 15 to 49 by five-year period.

**Migration balance rate** is the ratio of annual net migration on the estimated mid-year population. The rate of migration balance can be obtained as the difference between immigration rates and emigration rates (per 1 000 inhabitants).

When using the data, state:
"Data source: Statistical Office - MONSTAT"

*More data, as well as detailed methodological notes can be found in the section: **Population estimations***

**Department:** Demography and Migration Statistics Department
contact@monstat.org

Contact for media:
mediji@monstat.org ✉

@monstat_me 🐦

MONSTAT – Statistical Office of Montenegro 🔗