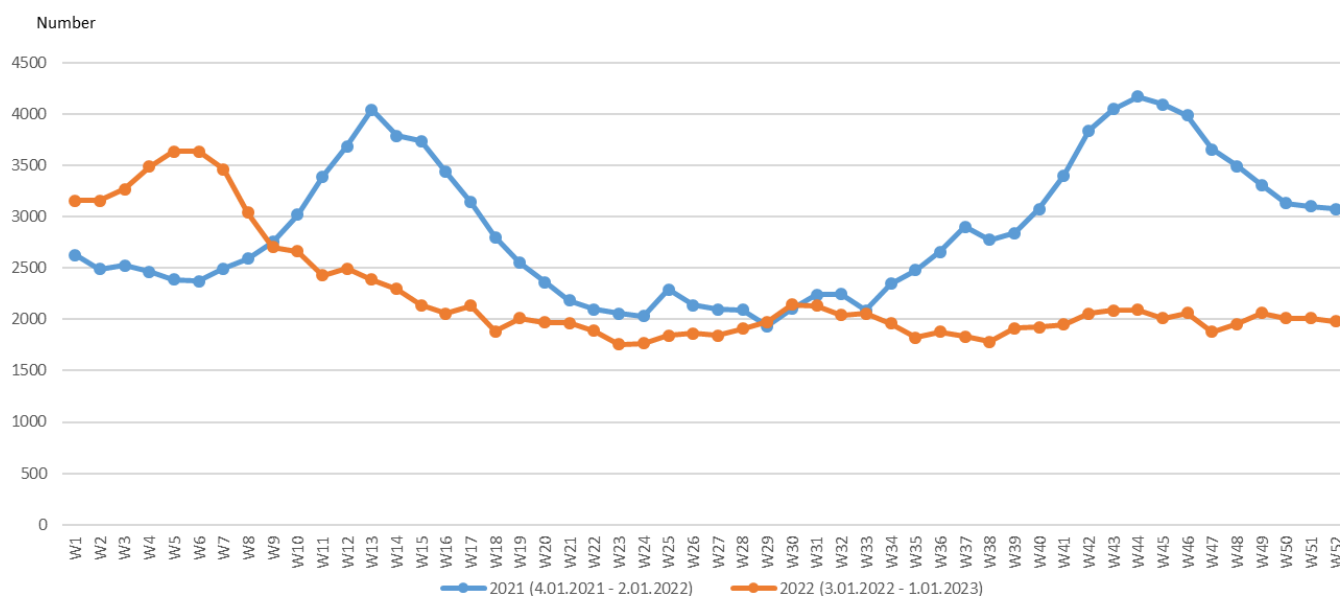


DEATHS IN THE FOURTH QUARTER OF 2022 (PRELIMINARY DATA)

The number of deaths in the fourth quarter of 2022 (40th - 52nd week) is **26 078** and the crude mortality rate¹ is **15.3%**. Mortality among males (16.4%) is higher than among females (14.3%). Compared to the same period of the previous year, the number of deaths has decreased by 20 305, or 43.8%. According to the third quarter of 2022, mortality increased by 783 or by 3.1%.

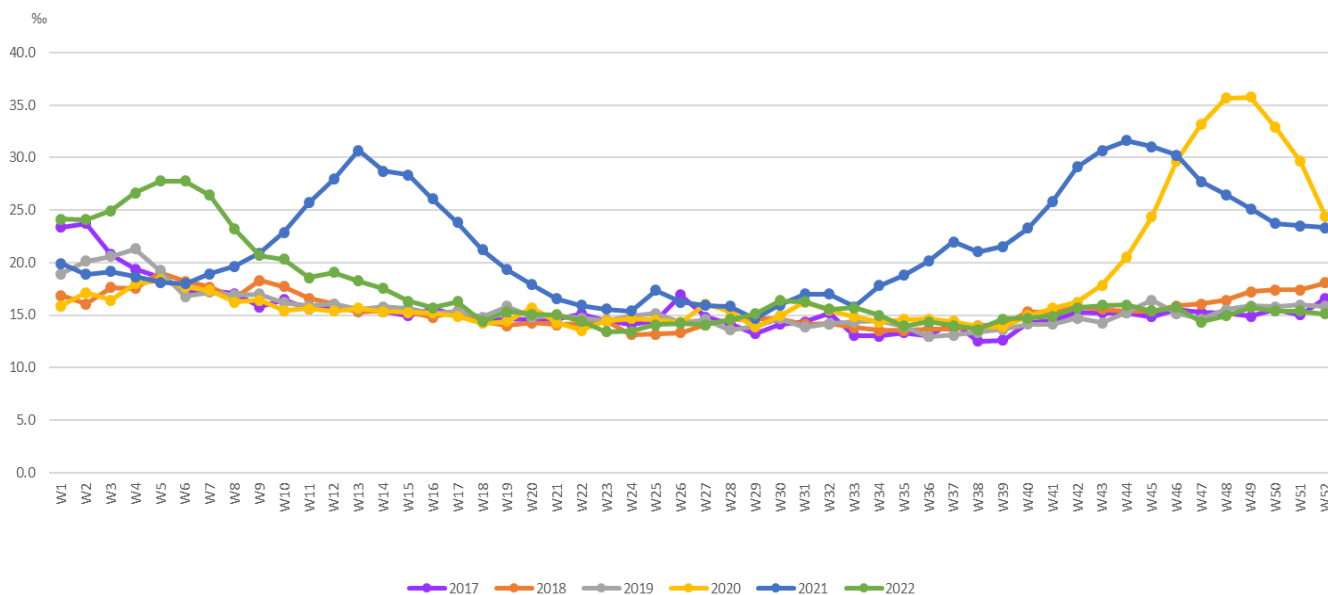
**Figure 1. Deaths in Bulgaria by weeks in 2021 and 2022
(1st – 52nd week)**



The highest mortality in the fourth quarter of 2022 was registered in the 44th week (31st October - 6th November) - 2 090, or 16.0 per 1 000 people of the average annual population. The lowest number of deaths in the fourth quarter of 2022 was in the 47th week - 1 879 people, or 14.4%.

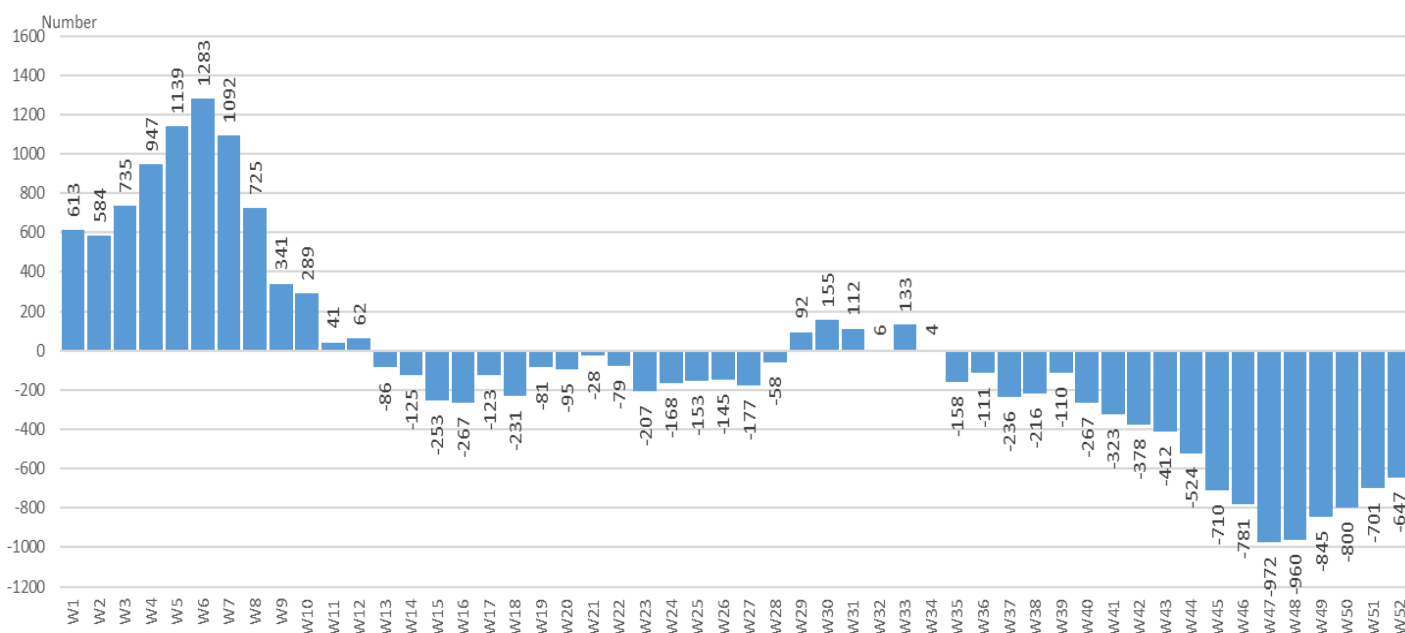
¹ Represents the ratio of the number of deaths during the respective period (quarter) to the average annual population multiplied by 365 and divided by the number of days during the same period.

Figure 2. Weekly crude mortality rates in the period 2017 - 2022



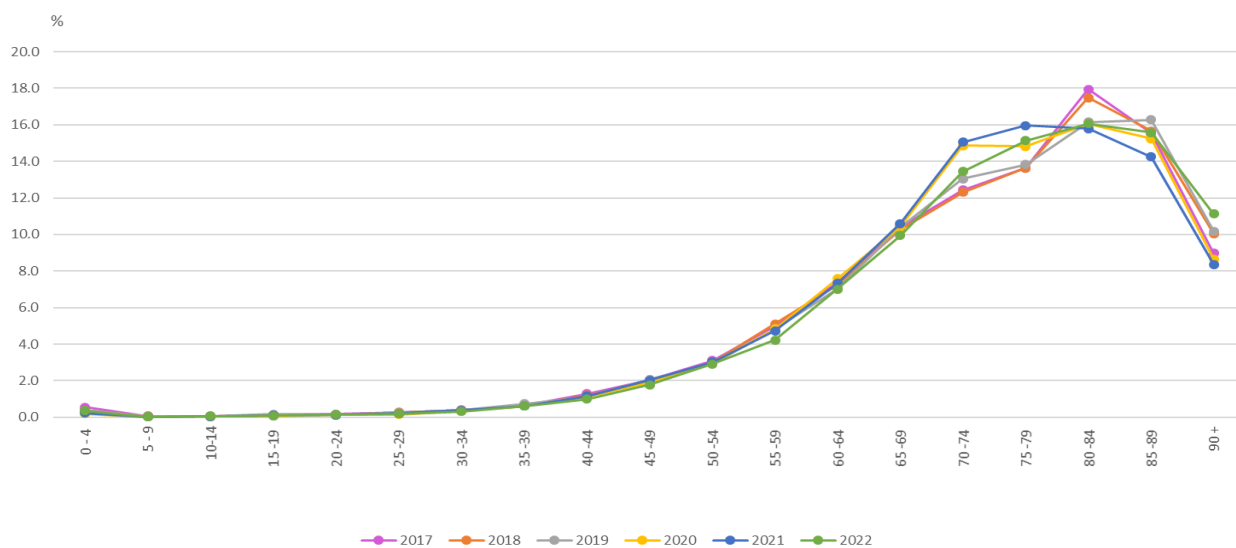
The change of deaths by weeks in the fourth quarter of 2022 compared to the average deaths for the period 2017 - 2021 fluctuates from (-252) to (-972) numbers. The highest decrease of deaths is in the 47th week - 972 cases or mortality declines by 14.4% compared to the base period (2017 - 2021).

Figure 3. Change of the deaths by weeks in 2022 compared to the average deaths for the period 2017 – 2021



In the fourth quarter of the period 2017 - 2022, the age distribution of the deaths remains relatively even in the age groups. There is a slight decrease in the share of deaths in age groups from 40 to 69 years

Figure 4. Share of deaths by age in the fourth quarter of the period 2017 - 2022



In the fourth quarter of 2022 compared to the same period of 2021, there is a decrease in the number of deaths in all districts. The highest decrease is Vidin (-51.1%), Blagoevgrad (-51.0%) and Montana (-49.4%) and the lowest decrease is in Kardzhali (-32.3%) Smolyan (-37.8%) and Burgas (-37.9%).

1. Deaths in the fourth quarter of 2021 and 2022 by districts

Districts	2021 (number)	2022 (number)	Deaths growth (number)	Deaths growth (%)
Total	46383	26078	-20305	-43.8
Blagoevgrad	1924	943	-981	-51.0
Burgas	2145	1332	-813	-37.9
Varna	2644	1452	-1192	-45.1
Veliko Tarnovo	1743	958	-785	-45.0
Vidin	930	455	-475	-51.1
Vratsa	1351	759	-592	-43.8
Gabrovo	1011	561	-450	-44.5
Dobrich	1166	653	-513	-44.0
Kardzhali	767	519	-248	-32.3
Kyustendil	1051	606	-445	-42.3
Lovech	1022	613	-409	-40.0
Montana	1323	669	-654	-49.4
Pazardzhik	1739	940	-799	-45.9
Pernik	1097	632	-465	-42.4
Pleven	1777	1092	-685	-38.5
Plovdiv	4285	2375	-1910	-44.6
Razgrad	875	467	-408	-46.6
Ruse	1625	940	-685	-42.2
Silistra	831	448	-383	-46.1
Sliven	1192	663	-529	-44.4
Smolyan	661	411	-250	-37.8
Sofia (stolitsa)	6936	3887	-3049	-44.0
Sofia	1773	1032	-741	-41.8
Stara Zagora	2163	1219	-944	-43.6
Targovishte	795	420	-375	-47.2
Haskovo	1581	928	-653	-41.3
Shumen	1116	585	-531	-47.6
Yambol	860	519	-341	-39.7

There is an increase in the number of deaths in the fourth quarter of 2022 compared to the third quarter of the same year in nineteen districts of the country. The highest is the increase in the districts of Kardzhali (24.8%), Pernik (16.8%) and Lovech (15.7%). In the rest nine districts there was a decrease in the number of deaths. The lowest is the decrease in the districts - Dobrich (-8.4%), Targovishte (-7.3) and Razgrad (-6.0%).

2. Deaths in the third and fourth quarter of 2022 by districts

Districts	III quarter 2022 (number)	IV quarter 2022 (number)	Deaths growth (number)	Deaths growth (%)
Total	25295	26078	783	3.1
Blagoevgrad	978	943	-35	-3.6
Burgas	1339	1332	-7	-0.5
Varna	1493	1452	-41	-2.7
Veliko Tarnovo	913	958	45	4.9
Vidin	407	455	48	11.8
Vratsa	721	759	38	5.3
Gabrovo	503	561	58	11.5
Dobrich	713	653	-60	-8.4
Kardzhali	416	519	103	24.8
Kyustendil	538	606	68	12.6
Lovech	530	613	83	15.7
Montana	609	669	60	9.9
Pazardzhik	987	940	-47	-4.8
Pernik	541	632	91	16.8
Pleven	1080	1092	12	1.1
Plovdiv	2315	2375	60	2.6
Razgrad	497	467	-30	-6.0
Ruse	887	940	53	6.0
Silistra	422	448	26	6.2
Sliven	701	663	-38	-5.4
Smolyan	388	411	23	5.9
Sofia (stolitsa)	3742	3887	145	3.9
Sofia	960	1032	72	7.5
Stara Zagora	1210	1219	9	0.7
Targovishte	453	420	-33	-7.3
Haskovo	854	928	74	8.7
Shumen	618	585	-33	-5.3
Yambol	480	519	39	8.1

Methodological notes

Coverage

The total number of deaths includes all people whose usual place of residence (current address) is in the Republic of Bulgaria, regardless of their place of death.

Definition

Death means a termination of all vital functions without a possibility to be recovered.

Geographical scope (territory)

Data on deaths are distributed in regional aspect (settlements, municipalities, districts and statistical regions) in accordance with the administrative-territorial division of the country as of 31.12. of the respective year by persons' current address.

Data source

The source of data on deaths is the Unified System for Civil Registration and Administrative Services (ESGRAON). Deaths are registered through a common USCRASP-CDS 'Death notification'. Based on it and not later than 48 hours after the death, the Death Act is created. Electronic death certificates are sent monthly (from April 2020 - weekly) by DG GRAO at the Ministry of Regional Development and Public Works to the NSI. The data are processed, edited and validated through the Information System Demography in accordance with the rules set in the system for validation and control in the processing of demographic events. This ensures full coverage of death events for Bulgaria in one calendar year in accordance with the definitions and requirements of Regulation (EU) № 1260/2013 of the European Parliament and of the Council on European demographic statistics.

Main indicators

Crude mortality rate (‰)

Represents the ratio of the number of deaths during the year to the average annual population in that year expressed per 1 000 inhabitants.

Total mortality rate for parts of the year (‰)

Represents the ratio of the number of deaths during the respective period (weeks, months, quarters) to the average annual population multiplied by 365 and divided by the number of days during the same period.

Change of the death (Excess mortality)

Change in the number of deaths in the reporting year compared to the average number of deaths for the previous 5 years is calculated as an absolute difference between the number of deaths in a given week of the reporting year and the average number of deaths for the corresponding week of the 5-year period before the reporting year.