Online Supplementary Appendix

Table A1. List of causes of death considered in the analyses with the correspondence to the items of the ICD-10

Name	ICD-10		
All causes of death	A00-Y98		
Infectious diseases	A00-B99		
HIV	B20-B24		
Neoplasms	C00-D48		
Lung cancer	C32-C34		
Diseases of the circulatory system	100–199, G45		
Diseases of the respiratory system	J00–J98, U04		
Diseases of the digestive system	K00-K93		
External causes	V01–Y98		
Accidents	V01–V99, W00–W99,X00–X59, Y40–Y98		
Suicides	X60-X84		
Other external causes of death	X85–Y09, Y35, Y36,Y10–Y34		
III-defined and unspecified causes of death	R00-R54, R56-R99		
Other (residual) causes of death	REST		

Table A2. Internally displaced persons (IDPs) by oblast of Ukraine as on 05.01.2017

	Oblast		Total	Share of IDPs in:	
		IDPs as on 05.01.2017	population as on 01.01.2017	total population	total IDP population
1	Vinnytsya	14342	1583272	0.9	0.9
2	Volyn	4770	1038226	0.5	0.3
3	Dnipropetrovsk	77268	3227102	2.4	4.7
4	Donetsk	562339	4231172	13.3	34.0
5	Zhytomyr	12176	1241251	1.0	0.7
6	Zakarpattya	3546	1255944	0.3	0.2
7	Zaporizhzhya	93165	1738699	5.4	5.6
8	Ivano-Frankivsk	4833	1377189	0.4	0.3
9	Kyiv	57032	1728692	3.3	3.4
10	Kirovohrad	14905	959341	1.6	0.9
11	Luhansk	292088	2190693	13.3	17.7
12	Lviv	12118	2515657	0.5	0.7
13	Mykolayiv	8605	1149411	0.7	0.5
14	Odesa	42665	2375456	1.8	2.6
15	Poltava	29959	1418990	2.1	1.8
16	Rivne	3,204	1161703	0.3	0.2
17	Sumy	16257	1102337	1.5	1.0
18	Ternopyl	2515	1055941	0.2	0.2
19	Kharkiv	194040	2685552	7.2	11.7
20	Kherson	16,667	1054217	1.6	1.0
21	Khmelnytskiy	6930	1282104	0.5	0.4
22	Cherkasy	13855	1227578	1.1	0.8
23	Chernivtsi	3433	905055	0.4	0.2
24	Chernihiv	9609	1024870	0.9	0.6
25	Kyiv-city	156963	2884453	5.4	9.5
	Ukraine	1653284	42414905	3.9	100.0

Note: Data on IDPs comes from Ukraine's Ministry of Social Policy. The population figure for Ukraine as of January 1, 2017, is the official estimate provided by the State Statistics Service of Ukraine. This estimate includes the Donetsk and Luhansk regions but excludes the Republic of Crimea, which was annexed by Russia in 2014. Data for the Donetsk and Luhansk regions may be less reliable due to incomplete vital and migration statistics. Population estimates for these regions consider only officially registered births, deaths, and migration reported to Ukrainian statistical authorities, potentially excluding a part of the events recorded in the temporarily occupied territories of Donbas

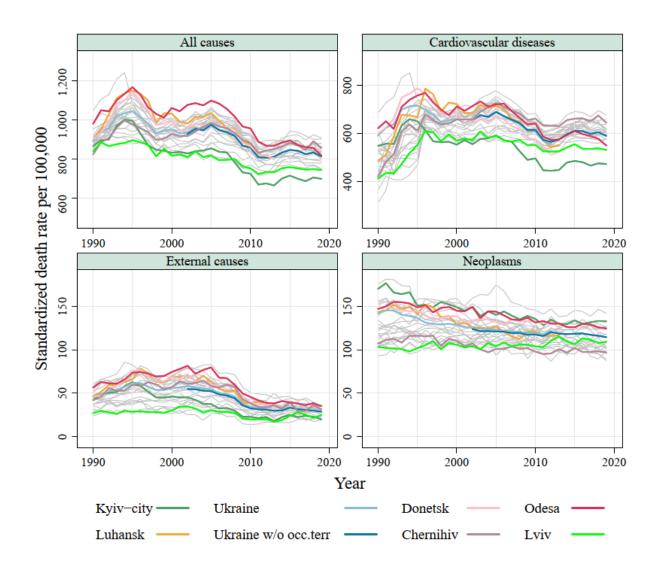


Figure A1. Mortality from leading causes of death by Ukrainian regions; females, 1990-2019

Note: Lines in grey colour are individual regions

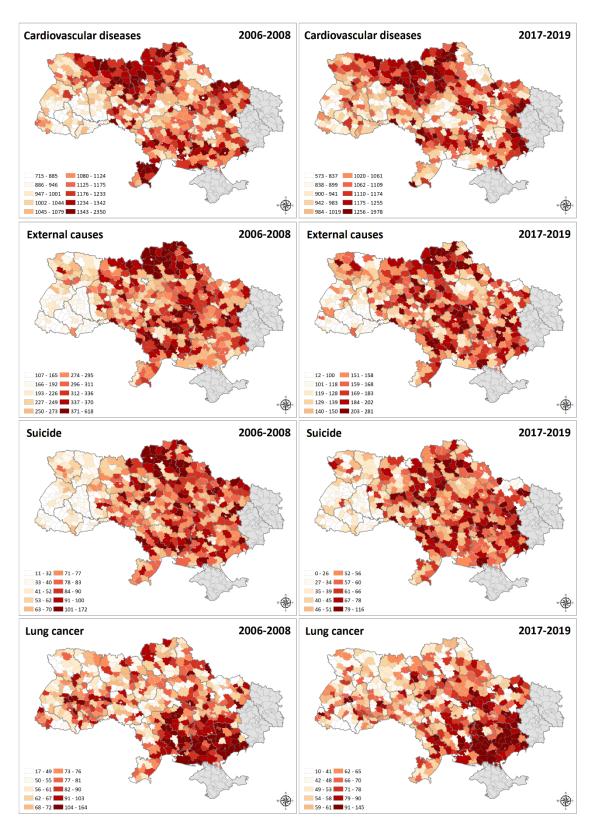


Figure A2. Spatial distribution of mortality from selected causes of death; Ukraine, males, 2006–2008 and 2017–2019

Notes: 1) Standardized Death Rate (SDR) per 100 000

2) Donetsk, Luhansk, and Crimea (grey colour) regions are excluded from the district-level analysis

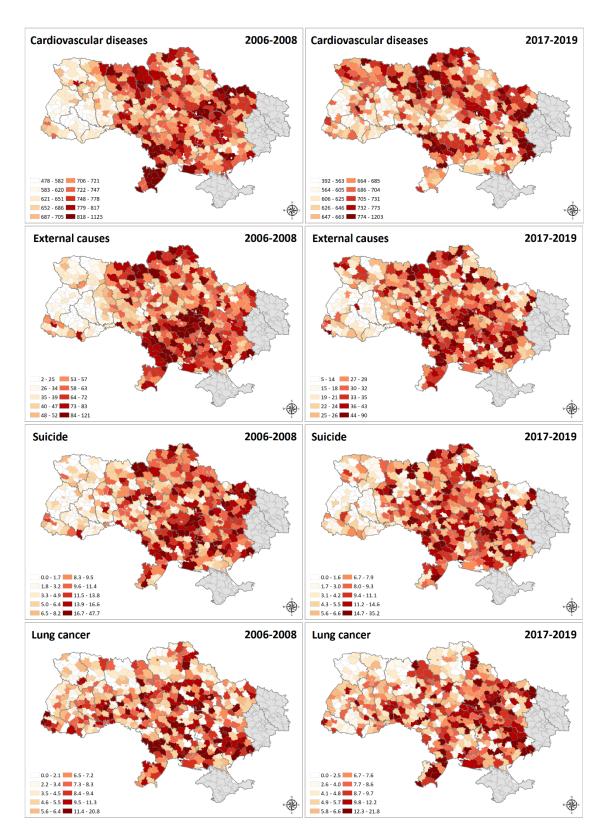


Figure A3. Spatial distribution of mortality from selected causes of death; Ukraine, females, 2006–2008 and 2017–2019

Notes: 1) Standardized Death Rate (SDR) per 100 000

2) Donetsk, Luhansk, and Crimea (grey colour) regions are excluded from the district-level analysis

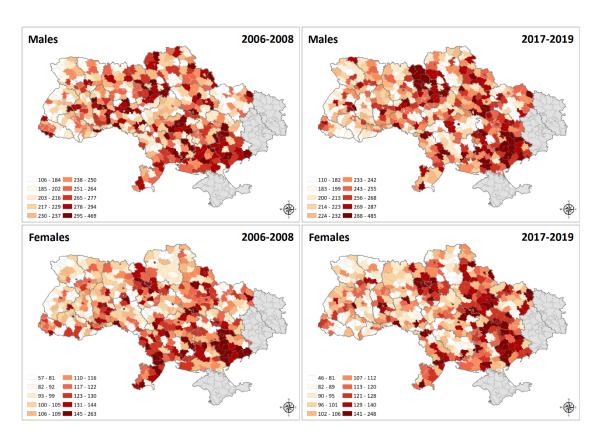


Figure A4. Spatial distribution of mortality from neoplasms; Ukraine, 2006–2008 and 2017–2019

Notes: 1) Standardized Death Rate (SDR) per 100 000

2) Donetsk, Luhansk, and Crimea (grey colour) regions are excluded from the district-level analysis