

## SUPPLEMENTARY DATA

Region, number of counties	Age-group (years)	Number of Total deaths	Mortality rate per 100,000 inhabitants												
			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Alentejo, n=58 (rural)	<50	151	4.87	4.44	5.35	5.83	8.57	5.90	5.49	3.69	6.98	6.59	4.78	6.79	5.77
	50-64	376	52.48	51.51	32.22	53.42	37.91	41.86	41.49	49.44	40.92	40.54	36.13	39.80	43.11
	≤64	527	16.44	15.83	11.84	17.34	15.70	14.73	14.43	15.18	15.61	15.36	13.02	15.64	15.10
	≥65	1 059	83.53	69.81	80.07	90.27	72.32	89.59	94.24	93.96	79.07	81.77	96.22	101.93	86.13
	Total	1 586	33.21	29.46	29.24	36.10	30.36	34.20	35.29	35.87	32.39	33.04	35.30	38.92	33.60
AMR	-	20.83	19.07	17.02	22.35	18.98	20.01	19.67	19.99	18.40	18.39	18.60	20.73	19.50	
Algarve, n=16 (rural)	<50	113	7.09	5.41	3.81	6.03	7.44	6.63	11.66	5.82	2.89	8.73	11.82	6.73	7.02
	50-64	244	58.93	71.61	56.77	53.10	36.51	40.88	47.44	53.32	51.94	62.71	47.57	44.71	51.92
	≤64	357	18.46	19.93	15.47	16.43	13.90	14.29	19.74	16.40	13.98	21.24	20.29	15.89	17.17
	≥65	520	85.54	121.70	71.60	75.10	80.71	112.49	106.23	92.83	90.72	95.27	98.11	115.20	95.69
	Total	877	32.26	40.80	26.97	28.46	27.61	34.50	37.59	31.98	29.76	36.70	36.83	37.37	33.43
AMR	-	23.89	28.59	19.91	20.88	19.43	21.89	26.02	22.93	20.11	25.36	25.68	22.59	23.12	
Centre, n=100 (rural)	<50	501	5.58	4.64	4.94	6.07	6.11	6.44	5.93	6.69	6.19	6.29	6.25	5.91	5.91
	50-64	1 097	51.79	46.96	45.45	41.98	34.35	33.52	35.28	36.58	42.62	37.87	40.26	38.55	40.35
	≤64	1 598	16.09	14.32	14.26	14.41	12.76	12.90	13.04	14.05	15.32	14.36	15.15	14.65	14.27
	≥65	2 874	84.75	85.74	71.26	71.91	81.93	76.24	88.93	88.47	85.78	87.89	91.04	92.41	84.01
	Total	4 472	31.23	30.20	27.09	27.50	28.65	27.59	30.79	31.63	32.23	32.32	33.90	34.11	30.59
AMR	-	21.68	20.11	18.21	18.53	18.01	17.43	18.57	18.68	19.18	18.55	18.58	18.56	18.85	
Lisbon, n=18 (urban)	<50	727	8.50	7.68	5.98	6.54	4.97	9.47	5.52	6.19	7.09	6.88	7.04	6.30	6.85
	50-64	1 615	57.96	47.92	52.78	45.37	45.84	38.64	44.79	57.86	52.19	40.27	46.95	36.90	47.22
	≤64	2 342	20.06	17.17	17.11	15.86	14.88	16.61	15.20	18.97	18.28	15.18	16.97	13.94	16.68
	≥65	3 570	104.45	109.44	101.12	100.23	107.15	107.23	102.04	100.46	110.03	102.91	110.54	98.09	104.45
	Total	5 912	35.21	33.90	32.56	31.60	32.31	33.96	32.08	35.11	36.90	33.44	36.92	32.33	33.87
AMR	-	26.84	24.83	23.88	22.33	22.17	23.34	21.55	24.25	24.64	21.39	23.06	19.82	23.16	
North, n=86 (intermediate)	<50	767	5.19	5.44	5.08	5.21	4.30	5.06	4.79	5.17	5.58	4.22	6.95	5.42	5.19
	50-64	1 415	33.27	37.78	34.02	34.20	33.36	36.58	38.23	35.45	29.62	35.17	32.54	26.84	33.81
	≤64	2 182	10.61	11.80	10.88	11.16	10.42	11.89	12.24	12.10	11.21	11.67	13.30	10.88	11.51
	≥65	2 738	65.95	68.51	58.59	65.28	56.27	76.24	67.19	62.57	70.95	69.90	72.01	65.16	66.65
	Total	4 920	19.61	21.17	18.89	20.38	18.34	23.15	22.00	21.23	22.27	22.71	24.64	21.60	21.33
AMR	-	16.21	17.52	15.55	16.22	14.55	17.38	16.42	15.46	15.46	15.75	16.75	13.81	15.91	
Azores, n=19 (rural)	<50	46	7.86	2.24	4.47	5.59	10.07	6.75	2.30	1.12	2.25	5.66	1.14	2.29	4.32
	50-64	102	22.52	44.18	64.76	47.54	72.56	40.36	21.09	54.40	43.52	32.86	18.26	52.99	42.83
	≤64	148	10.30	9.31	14.82	12.92	21.17	12.87	5.66	10.93	10.03	10.94	4.56	12.75	11.36
	≥65	244	91.70	86.60	117.00	101.08	110.12	59.62	92.03	85.98	129.87	113.60	122.20	116.71	102.37
	Total	392	22.93	21.25	30.57	26.53	34.98	20.18	18.48	22.38	28.52	26.94	23.04	29.15	25.44
AMR	-	19.08	19.92	27.33	22.60	30.53	17.15	14.50	19.85	21.41	21.49	16.31	22.63	21.07	

Region, number of counties	Age- group (years)	Number of Total deaths	Mortality rate per 100,000 inhabitants												
			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Madeira, n=11 (urban)	<50	69	11.42	5.65	6.73	5.58	6.67	7.76	4.29	4.29	3.23	8.77	7.82	4.55	6.37
	50-64	177	77.42	50.74	69.65	63.29	66.91	51.46	74.79	94.47	61.88	59.41	54.00	63.85	65.54
	≤64	246	23.37	13.86	18.31	16.35	18.05	16.14	18.12	22.31	15.39	19.74	18.19	18.33	18.18
	≥65	285	92.30	115.12	118.70	98.23	87.37	99.55	101.60	91.88	106.89	113.53	116.46	103.38	103.89
	Total	531	34.50	30.22	34.53	29.67	29.42	29.93	32.25	34.17	31.14	36.13	35.63	33.64	32.64
	AMR	-	32.24	25.28	29.46	25.67	26.60	25.02	26.69	29.55	24.92	26.59	26.59	25.60	26.92
Portugal, n=308	<50	2 374	6.40	5.70	5.28	5.83	5.47	6.74	5.45	5.56	5.93	5.88	6.76	5.80	5.90
	50-64	5 026	47.76	45.51	44.08	42.16	39.08	37.42	40.52	45.35	41.44	39.14	39.20	35.15	41.28
	≤64	7 400	15.28	14.3	13.78	13.9	13.1	13.78	13.65	14.99	14.48	14	14.9	13.271	14.12
	≥65	11 290	84.08	86.90	77.52	79.97	80.06	87.09	87.10	84.25	88.35	87.00	92.12	87.78	85.32
	Total	18 690	28.21	28.11	26.04	26.76	26.23	28.35	28.41	29.08	29.81	29.47	31.49	29.61	28.47
	AMR	-	21.45	20.83	19.23	19.36	18.53	19.49	19.18	19.70	19.47	18.80	19.59	17.86	19.46

**Supplementary Table 1. Breast cancer number of deaths, total and age-group breast cancer mortality rate and adjusted mortality rate (AMR, European population) in Portugal and the 7 Portuguese regions in 2002-2013**