

**MORTALITY FROM SMOKING
IN DEVELOPED COUNTRIES
1950–2000**

(2nd edition, revised June 2006:
www.deathsfromsmoking.net)

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PORTUGAL

Raw data (pages 386–87, 388–89)

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PORTUGAL: 2000

		No. of deaths (Source: WHO)			Standardised rates (defined overleaf)			Annual death rates / 100,000 (zero denoted by -)						
		All ages	0-34	35-69	All ages	0-34	35-69	0-4	5-9	10-14	15-19	20-24	25-29	30-34
ALL CAUSES	M	55346	3202	17760	967.7	126.9	945.4	170.0	24.9	30.6	93.3	147.2	183.9	238.2
	F	50467	1180	8991	572.0	51.7	420.4	136.5	20.2	17.5	34.1	41.3	41.0	71.1
Tuberculosis	M	254	15	122	4.6	0.6	6.1	0.3	-	-	-	0.7	0.5	2.4
	F	86	6	23	1.1	0.2	1.0	-	-	-	-	0.5	0.5	0.5
HIV	M	777	360	401	14.9	13.2	17.7	-	-	-	1.7	11.6	34.1	45.3
	F	174	88	82	3.2	3.3	3.3	0.4	-	-	0.6	4.6	6.2	11.2
Other infective and parasitic	M	550	85	200	10.2	3.7	10.3	11.5	1.8	1.7	1.1	1.2	3.4	5.1
	F	484	52	130	6.5	2.5	6.1	10.0	1.9	0.7	0.9	0.8	1.0	2.1
ALL CANCER	M	12706	182	5431	223.5	7.1	294.5	3.1	2.5	3.1	7.1	7.7	11.8	14.3
	F	8755	158	3458	116.1	6.5	161.0	4.4	4.2	4.0	5.3	4.8	8.1	14.4
Mouth and pharynx cancer	M	459	9	341	8.9	0.3	17.6	-	0.4	-	0.3	0.5	0.7	0.5
	F	100	1	43	1.4	0.1	1.9	0.4	-	-	-	-	-	-
Oesophagus cancer	M	424	-	265	7.9	-	13.9	-	-	-	-	-	-	-
	F	103	-	23	1.2	-	1.1	-	-	-	-	-	-	-
Stomach cancer	M	1577	5	710	27.8	0.2	38.1	-	-	-	-	0.2	0.2	0.8
	F	1040	8	354	13.1	0.3	16.5	-	-	0.4	-	0.5	0.7	0.5
Colorectal cancer	M	1598	4	595	27.5	0.2	33.0	-	-	-	-	-	0.2	0.8
	F	1265	9	413	15.7	0.3	19.5	-	-	-	-	-	0.2	2.1
Liver cancer	M	249	2	127	4.4	0.1	7.0	0.3	-	-	-	0.2	-	-
	F	93	3	32	1.2	0.2	1.5	0.4	0.4	0.4	-	-	-	-
Pancreas cancer	M	482	4	216	8.4	0.2	11.8	-	-	-	-	-	-	1.1
	F	397	-	120	4.8	-	5.7	-	-	-	-	-	-	-
Larynx cancer	M	367	-	227	6.8	-	11.9	-	-	-	-	-	-	-
	F	20	-	3	0.2	-	0.1	-	-	-	-	-	-	-
Lung cancer	M	2337	6	1260	41.8	0.2	68.9	-	-	-	-	0.2	0.2	1.1
	F	533	3	257	7.4	0.1	12.0	-	-	-	-	-	0.2	0.5
Malignant melanoma	M	82	4	52	1.5	0.1	2.6	-	-	-	-	0.2	0.2	0.5
	F	77	2	37	1.1	0.1	1.7	-	-	-	-	0.3	0.2	-
Female breast cancer	F	1524	15	798	22.2	0.6	36.5	-	-	0.4	-	-	0.5	3.2
Cervix cancer	F	227	6	140	3.6	0.2	6.2	-	-	-	-	-	0.7	0.8
Other uterine cancer	F	366	2	157	4.9	0.1	7.4	-	-	-	-	-	-	0.5
Ovarian cancer	F	371	7	205	5.4	0.3	9.6	-	-	-	-	0.3	0.5	1.1
Prostate cancer	M	1805	-	269	29.8	-	15.6	-	-	-	-	-	-	-
Bladder cancer	M	456	2	125	7.6	0.1	7.1	-	-	-	-	-	0.2	0.3
	F	190	1	29	2.1	0.1	1.4	-	0.4	-	-	-	-	-
Other and ill-defined cancer sites	M	2003	86	897	35.7	3.4	48.1	1.7	2.2	1.4	3.7	3.7	6.9	4.0
	F	1686	63	555	21.6	2.7	26.2	2.2	1.9	2.6	3.9	2.0	2.5	3.7
Hodgkin's disease	M	33	8	16	0.6	0.3	0.7	-	-	-	0.3	0.5	0.7	0.5
	F	30	5	15	0.4	0.2	0.7	-	-	-	-	0.8	0.5	-
Myeloma and non-Hodgkin lymphomas	M	441	13	190	7.7	0.5	10.5	0.3	-	-	0.6	0.5	-	2.2
	F	451	8	192	6.0	0.3	9.1	0.4	0.4	-	-	0.5	0.7	0.3
Leukaemia	M	393	39	141	6.9	1.5	7.6	0.7	-	1.7	2.3	1.5	2.2	2.4
	F	282	25	85	3.7	1.1	4.0	1.1	1.1	0.4	1.5	0.5	1.2	1.6
Diabetes	M	1293	5	352	21.6	0.2	19.7	-	-	-	-	-	0.2	1.1
	F	1845	3	333	20.4	0.1	16.1	-	-	-	-	-	0.2	0.5
ALL VASCULAR DISEASE	M	18675	146	4392	316.3	5.6	241.8	2.1	0.7	1.7	2.0	4.9	9.1	18.6
	F	22319	69	2208	230.2	2.8	105.4	3.3	-	0.7	1.2	2.8	3.0	8.3
Rheumatic heart disease and fever	M	44	1	20	0.8	0.0	1.0	-	-	0.3	-	-	-	-
	F	141	3	42	1.8	0.1	2.0	-	-	0.4	-	-	0.2	0.3
Hypertensive disease	M	383	1	78	6.5	0.0	4.3	-	-	0.3	-	-	-	-
	F	619	-	58	6.3	-	2.8	-	-	-	-	-	-	-
Ischaemic heart disease	M	4914	37	1720	84.7	1.4	94.0	-	-	-	-	0.7	3.7	5.1
	F	4104	4	622	44.2	0.1	29.8	-	-	-	-	0.3	0.2	0.5
Pulmonary embolism and other venous	M	420	8	115	7.2	0.3	6.3	-	-	-	0.3	0.2	-	1.6
	F	499	8	99	5.6	0.3	4.7	-	-	-	0.3	0.3	0.2	1.3
Cerebrovascular disease	M	9110	49	1753	152.8	1.9	97.2	0.7	0.4	1.0	0.3	2.2	3.2	5.4
	F	11885	30	1026	121.3	1.2	48.9	0.7	-	0.4	0.3	1.5	1.0	4.3
Other vascular disease	M	3804	50	706	64.3	1.9	38.9	1.4	0.4	-	1.4	1.7	2.2	6.5
	F	5071	24	361	51.0	1.0	17.2	2.6	-	-	0.6	0.8	1.2	1.9
Chronic obstructive pulmonary disease	M	1730	5	352	28.7	0.2	19.8	-	-	-	-	0.5	0.5	0.3
	F	892	5	132	9.7	0.2	6.3	0.4	-	-	0.3	0.3	0.2	0.3
Other respiratory disease	M	3863	67	693	65.3	2.7	37.6	5.6	0.4	0.3	1.4	1.5	3.2	6.7
	F	3794	28	304	38.7	1.2	14.4	2.2	0.4	0.7	0.6	1.5	1.7	1.1
Peptic ulcer	M	181	-	58	3.2	-	3.1	-	-	-	-	-	-	-
	F	163	1	19	1.7	0.0	0.9	-	-	-	-	-	0.2	-
Liver cirrhosis	M	1347	32	941	25.5	1.2	49.2	-	-	-	0.3	0.2	1.0	7.0
	F	475	14	305	7.5	0.5	13.8	-	-	-	-	0.3	1.7	1.6
Renal disease	M	753	9	164	12.8	0.3	9.0	0.3	-	-	-	0.2	0.7	1.1
	F	622	7	94	6.8	0.3	4.4	0.4	-	-	-	0.3	0.2	1.1
Pregnancy, birth	F	3	2	1	0.1	0.1	0.0	-	-	-	-	-	-	0.5
Congenital and perinatal causes	M	295	281	14	8.0	13.9	0.7	91.1	2.2	1.0	0.3	0.7	1.0	0.8
	F	213	204	9	6.1	10.6	0.4	70.3	0.4	0.4	0.6	1.3	0.7	0.5
Ill-defined causes	M	6741	725	2330	120.6	28.3	119.4	25.5	5.8	6.6	23.9	32.4	46.6	57.1
	F	6410	195	891	70.4	8.4	41.2	18.1	3.4	2.2	7.7	7.9	7.2	12.0
Other medical causes	M	2714	178	788	47.5	7.5	41.8	14.7	4.0	3.1	7.7	4.0	7.1	11.9
	F	2930	117	544	34.2	5.4	25.4	13.3	5.7	3.6	4.1	5.1	1.5	4.3
ALL NON-MEDICAL CAUSES	M	3467	1112	1522	65.0	42.4	74.5	15.7	7.6	12.9	47.8	81.5	64.7	66.6
	F	1302	231	458	19.3	9.7	20.7	13.7	4.2	5.1	12.7	11.4	8.4	12.6
Road traffic accidents	M	1098	511	431	20.7	19.2	20.7	2.8	3.6	4.2	23.6	46.2	29.7	24.3
	F	278	91	117	4.7	3.7	5.3	2.6	1.5	2.9	5.6	5.8	4.0	3.7
Fire	M	58	8	32	1.1	0.3	1.5	0.7	0.4	-	-	0.5	0.7	-
	F	28	3	9	0.4	0.1	0.4	-	0.4	-	-	0.3	-	0.3
Suicide	M	417	68	197	7.6	2.5	9.8	-	-	-	2.6	4.7	4.4	5.9
	F	107	16	51	1.6	0.6	2.3	-	-	-	0.9	1.0	-	2.4
Homicide	M	67	28	37	1.3	1.0	1.7	0.3	-	-	1.1	2.7	2.0	1.1
	F	30	12	15	0.6	0.5	0.6	0.7	0.4	-	0.3	0.5	0.7	0.8
POPULATION:			M=male											
(1000s; UN, 2004 revision)			F=female											
					4933.6	2386.0	2096.9	286.4	276.6	287.5	351.6	404.9	407.9	371.1
					5291.6	2318.8	2297.0	270.4	262.4	274.5	337.4	394.9	405.0	374.2

2000: PORTUGAL

Annual death rates / 100,000 (zero denoted by -)										9th ICD/10th ICD categories		
35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+/NK			
277.3	347.5	489.3	637.4	962.5	1494.8	2409.2	3893.4	6605.7	15173.0	M	ALL CAUSES	001-999/A00-Y89
102.7	145.4	214.7	306.3	416.2	662.8	1094.5	2078.2	3955.8	12405.3	F		
4.7	4.3	4.3	4.3	7.6	6.3	11.4	16.4	27.9	39.8	M	Tuberculosis	010-018, 137/ A15-A19, B90
0.5	0.5	1.7	0.3	0.7	1.4	2.1	6.6	6.5	12.4	F		
40.0	22.3	19.8	12.8	11.5	9.5	8.0	5.6	2.9	0.9	M	HIV	279.5, 279.6/B20-B24
8.7	7.1	2.3	1.2	2.0	1.4	0.3	0.8	1.0	-	F		
4.7	6.0	7.3	8.2	8.8	15.9	21.1	35.4	50.7	108.1	M	Other infective and parasitic	Rest of 001-139/rest of A00-B99 excl A33,A34
1.6	2.5	3.2	1.8	5.1	10.9	17.7	29.2	37.3	69.9	F		
35.9	70.1	125.2	219.3	351.4	492.9	766.9	1126.1	1527.1	2385.8	M	ALL CANCER	140-208/C00-C97
32.6	57.7	94.7	142.0	187.6	262.7	349.4	517.3	700.9	1102.5	F		
3.0	4.9	18.0	22.0	21.4	26.6	27.0	26.7	15.7	30.3	M	Mouth and pharynx cancer	140-149/C00-C14
0.3	1.1	3.7	2.4	1.0	1.7	3.1	5.8	4.5	14.7	F		
1.9	6.0	7.6	14.1	22.2	17.5	28.3	32.3	28.6	48.4	M	Oesophagus cancer	150/C15
-	-	0.6	1.2	0.7	2.0	3.1	6.2	10.4	19.8	F		
5.8	13.5	17.7	27.3	46.3	62.3	94.2	134.8	206.4	268.2	M	Stomach cancer	151/C16
3.2	5.5	8.1	15.8	20.4	23.6	39.2	58.8	91.9	157.2	F		
2.5	6.3	7.6	18.1	34.4	61.9	100.5	157.9	212.1	340.8	M	Colorectal cancer	153, 154/C18-C21
2.4	5.5	7.8	16.1	23.8	33.8	46.9	71.2	109.3	202.2	F		
0.8	0.6	3.7	3.3	8.4	14.3	17.7	25.6	28.6	26.0	M	Liver cancer	155.0/C22 excl C221
0.3	1.1	0.3	0.3	1.4	3.4	3.8	8.2	6.0	11.5	F		
0.3	2.6	2.4	12.2	13.4	17.1	35.1	48.2	61.4	70.9	M	Pancreas cancer	157/C25
0.5	0.5	2.0	4.6	3.4	12.6	16.3	30.4	38.7	55.6	F		
1.1	2.6	9.7	14.5	14.5	17.5	23.6	26.1	33.6	36.3	M	Larynx cancer	161/C32
-	-	-	-	-	0.3	0.7	0.8	2.5	4.6	F		
5.5	13.2	24.4	48.3	96.0	119.4	175.3	239.4	249.3	220.6	M	Lung cancer	162/C33, C34
2.9	4.1	6.6	10.3	13.6	18.8	27.4	33.9	41.7	46.9	F		
1.4	1.7	1.5	3.3	1.1	4.4	5.1	6.7	5.0	5.2	M	Malignant melanoma	172/C43
0.8	0.8	1.4	1.8	1.7	1.4	3.8	4.3	3.5	9.2	F		
10.0	17.5	27.9	42.9	48.9	57.4	50.7	72.4	106.8	142.5	F	Female breast cancer	174/C50
3.2	5.2	7.5	7.0	7.1	7.9	5.6	12.5	11.4	11.9	F	Cervix cancer	180/C53
1.6	1.6	4.9	3.0	10.9	12.0	17.7	21.8	25.3	46.0	F	Other uterine cancer	179, 182/C54, C55
1.1	3.3	5.2	10.9	10.5	14.3	21.5	20.2	25.3	25.7	F	Ovarian cancer	183/C56, C570-C574
-	0.9	0.9	2.3	10.3	29.4	65.5	138.9	284.3	750.0	M	Prostate cancer	185/C61
0.3	0.6	1.5	2.3	5.7	11.9	27.4	48.7	62.1	127.2	M	Bladder cancer	188/C67
-	0.3	0.3	0.3	1.0	3.8	4.2	11.3	19.4	42.3	F		
8.5	11.2	23.4	42.7	55.4	79.4	116.1	168.1	219.3	333.0	M	Other and ill-defined cancer sites	Rest of 140-199/ rest of C00-C80, C97
3.7	6.0	12.7	15.2	30.9	48.5	66.7	109.0	141.1	231.6	F		
0.8	0.9	0.9	0.7	0.4	1.2	0.4	2.1	2.1	1.7	M	Hodgkin's disease	201/C81
0.5	0.3	0.9	0.3	-	0.3	2.4	1.2	1.0	2.3	F		
1.9	2.6	3.0	3.6	13.4	18.7	30.0	39.5	67.1	58.0	M	Myeloma and non- Hodgkin lymphomas	200, 202-203/ C82-C90, C96
1.3	3.0	2.6	7.3	8.8	14.0	26.4	31.9	37.3	43.2	F	Leukaemia	204-208/C91-C95
2.2	2.9	2.7	4.6	8.4	11.5	20.7	31.3	51.4	69.2	M		
1.1	1.9	2.3	2.4	3.4	6.8	9.7	17.5	24.8	35.4	F		
1.1	3.7	5.8	6.2	17.6	34.9	68.8	120.5	225.7	333.0	M	Diabetes	250/E10-E14
0.8	0.8	2.6	9.4	12.9	24.6	61.5	124.2	205.7	356.6	F		
26.6	49.5	89.5	140.7	217.6	415.5	753.4	1364.9	2672.9	6688.6	M	ALL VASCULAR DISEASE	390-459/I00-I99
13.7	19.9	30.5	56.6	86.3	170.5	360.5	824.1	1853.5	6523.0	F		
0.3	0.3	0.9	1.3	0.4	2.4	1.7	3.6	5.7	6.9	M	Rheumatic heart disease and fever	390-398/I00-I09
0.3	0.8	1.2	1.5	1.7	4.4	3.8	9.0	16.4	18.4	F		
0.5	0.9	1.8	2.6	3.4	7.9	12.7	20.5	53.6	163.5	M	Hypertensive disease	401-405/I10-I15
-	0.3	0.6	0.6	1.7	5.8	10.8	16.7	53.7	188.4	F		
9.6	22.6	37.8	64.1	92.2	152.4	279.6	401.8	657.1	1256.9	M	Ischaemic heart disease	410-414/I20-I25
2.6	3.8	8.6	15.5	27.5	46.8	103.9	209.8	378.5	1000.5	F		
0.5	1.4	1.8	3.9	6.1	11.5	19.0	33.8	57.1	130.6	M	Pulmonary embolism and other venous	415.1, 451-453/ I26, I80-I82
1.3	1.6	2.3	1.8	4.1	6.1	15.3	20.6	47.7	111.7	F		
9.1	16.9	34.1	48.3	82.2	174.2	315.9	662.7	1397.9	3510.4	M	Cerebrovascular disease	430-438/I60-I69
6.6	9.3	13.2	30.1	40.1	74.5	168.8	421.6	1011.4	3543.2	F		
6.6	7.4	13.1	20.4	33.3	67.1	124.6	242.4	501.4	1620.2	M	Other vascular disease	Rest of 390-459/ rest of I00-I99
2.9	4.1	4.6	7.0	11.2	32.8	58.0	146.4	345.8	1660.8	F		
1.4	4.6	3.0	8.2	16.1	30.2	75.2	166.1	282.9	564.9	M	Chronic obstructive pulmonary disease	490-496/ J40-J47, J67
0.3	0.8	3.7	4.3	5.1	8.2	21.5	45.5	77.5	221.5	F		
10.7	15.5	14.3	15.8	20.3	63.5	123.3	240.4	508.6	1662.6	M	Other respiratory disease	Rest of 460-519/ rest of J00-J98
3.9	3.8	3.7	6.4	12.2	24.3	46.5	122.2	277.7	1189.8	F		
0.5	1.1	2.1	1.0	4.2	6.3	6.3	10.3	19.3	65.7	M	Peptic ulcer	531-533/K25-K27
0.3	0.5	0.6	0.9	0.7	0.7	2.4	7.4	15.9	42.3	F		
11.5	17.5	37.8	40.8	65.8	79.8	91.6	95.3	76.4	70.1	M	Liver cirrhosis	571/K70, K74
5.8	6.8	12.4	16.4	15.6	23.2	16.3	25.3	23.8	19.8	F		
1.6	2.0	2.4	4.9	10.3	16.7	24.9	46.6	95.7	307.1	M	Renal disease	580-590/N00-N19
0.8	0.8	2.6	2.1	3.7	8.5	12.5	31.5	51.2	154.9	F		
0.3	-	-	-	-	-	-	-	-	-	F	Pregnancy, birth	630-676/A34,000-099
0.8	0.3	0.9	0.7	0.8	1.2	-	-	-	-	M	Congenital and perinatal causes	740-779/A33, P00-P96, Q00-Q99
0.8	0.5	0.3	0.3	0.3	-	0.3	-	-	-	F	Ill-defined causes	780-799/R00-R99
64.5	67.8	84.3	87.8	117.0	173.0	241.6	352.1	604.3	1862.5	M		
14.5	21.0	25.3	27.7	38.4	62.2	99.0	171.3	373.1	1899.4	F		
12.9	15.5	25.0	26.0	44.7	59.9	109.0	185.5	352.9	771.6	M	Other medical causes	Rest of 001-799/ rest of A00-R99
6.3	10.1	14.4	17.6	24.1	36.2	68.8	124.2	253.4	661.8	F		
60.3	67.3	67.6	60.8	68.8	89.3	107.7	128.1	158.6	312.3	M	ALL NON- MEDICAL CAUSES	E800-E999/V01-Y89
11.8	12.3	16.7	19.2	21.4	28.0	35.4	48.7	78.5	151.7	F		
17.3	23.8	19.8	18.7	18.0	23.4	24.1	32.8	29.3	44.1	M	Road traffic accidents	E810-E819, E826-E829/ part of V01-V99, Y850
2.6	4.1	3.2	6.7	5.4	6.1	8.7	6.2	12.4	13.3	F		
1.9	1.1	1.2	1.6	1.9	-	3.0	2.1	1.4	10.4	M	Fire	E890-E899/X00-X09
-	0.3	0.3	-	-	1.0	1.4	1.6	2.0	3.7	F		
6.6	10.6	5.8	6.9	5.4	17.1	16.5	24.1	32.9	51.0	M	Suicide	E950-E959/X60-X84
1.6	0.5	2.6	1.5	2.4	3.8	3.8	3.5	6.0	8.7	F		
1.9	2.6	2.1	0.3	2.3	0.8	2.1	-	-	1.7	M	Homicide	E960-E969/ X85-X99, Y00-Y09
0.3	0.5	1.2	1.2	-	1.4	-	0.4	0.5	0.5	F		
364.6	349.4	328.4	304.2	261.5	252.0	236.8	195.1	140.0	115.6	M	POPULATION	
379.9	366.0	347.4	328.8	294.3	292.7	287.9	256.9	201.3	217.6	F	(1000s; UN, 2004 revision)	

PORTUGAL: 1995, 2000

Male smoking-attributed deaths (Sm.) and total deaths (Total)

		ALL CAUSES	ALL CANCER	Lung cancer	Upper aero-digestive ca. (see below)	Other cancer	COPD	Other respiratory	Vascular disease	Liver cirrhosis	Other medical	Non-medical
1995												
0-34	Sm.	-	-	-	-	-	-	-	-	-	-	-
	Total	3980	193	11	7	175	16	93	151	46	1824	1657
35-69	Sm.	3881	1757	1054	384	319	276	112	936	-	800	-
	Total	18742 (21%)	5367 (33%)	1206 (87%)	755 (51%)	3406 (9%)	422 (65%)	606 (18%)	5245 (18%)	1176	4076 (20%)	1850
70+	Sm.	3182	1154	722	136	296	713	117	828	-	370	-
	Total	31712 (10%)	6033 (19%)	885 (82%)	341 (40%)	4807 (6%)	1300 (55%)	2124 (6%)	14487 (6%)	438	6462 (6%)	868
Any age	Sm.	7063	2911	1776	520	615	989	229	1764	-	1170	-
	Total	54434 (13%)	11593 (25%)	2102 (84%)	1103 (47%)	8388 (7%)	1738 (57%)	2823 (8%)	19883 (9%)	1660	12362 (9%)	4375
2000												
0-34	Sm.	-	-	-	-	-	-	-	-	-	-	-
	Total	3202	182	6	9	167	5	67	146	32	1658	1112
35-69	Sm.	3933	1854	1103	434	317	228	125	804	-	922	-
	Total	17760 (22%)	5431 (34%)	1260 (88%)	833 (52%)	3338 (9%)	352 (65%)	693 (18%)	4392 (18%)	941	4429 (21%)	1522
70+	Sm.	3657	1423	887	170	366	768	178	838	-	450	-
	Total	34384 (11%)	7093 (20%)	1071 (83%)	408 (42%)	5614 (7%)	1373 (56%)	3103 (6%)	14137 (6%)	374	7471 (6%)	833
Any age	Sm.	7590	3277	1990	604	683	996	303	1642	-	1372	-
	Total	55346 (14%)	12706 (26%)	2337 (85%)	1250 (48%)	9119 (7%)	1730 (58%)	3863 (8%)	18675 (9%)	1347	13558 (10%)	3467

To be conservative, no deaths before age 35, and none from liver cirrhosis or non-medical causes, were attributed to smoking

Male death rates used for calculations: ICD codes as on previous page

	All ages	0-34	35-69	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+/ <i>NK</i>
POPULATION (1000s; UN, 2004 revision)													
1995	4833.6	2459.4	1978.5	342.0	324.5	305.2	266.3	262.9	254.1	223.5	180.4	111.6	103.7
2000	4933.6	2386.0	2096.9	364.6	349.4	328.4	304.2	261.5	252.0	236.8	195.1	140.0	115.6
NUMBER OF DEATHS (Source: WHO)													
All causes													
1995	54434	3980	18742	1016	1159	1517	1803	2848	4339	6060	7714	7873	16125
2000	55346	3202	17760	1011	1214	1607	1939	2517	3767	5705	7596	9248	17540
Lung cancer													
1995	2102	11	1206	21	42	83	99	225	335	401	363	279	243
2000	2337	6	1260	20	46	80	147	251	301	415	467	349	255
ANNUAL DEATH RATE / 100,000 (*The rates for the age groups 0-34 and 35-69 are the means of seven five-yearly rates, but the all-ages rates are standardised to the conventional "European" age distribution)													
All causes													
1995	1046.9*	158.4*	1047.2*	297.1	357.2	497.1	677.1	1083.3	1707.6	2711.4	4276.1	7054.7	15549.7
2000	967.7*	126.9*	945.4*	277.3	347.5	489.3	637.4	962.5	1494.8	2409.2	3893.4	6605.7	15173.0
All cancer													
1995	222.7*	7.6*	304.9*	37.4	65.0	128.1	193.8	339.3	543.5	826.8	1122.5	1526.0	2222.8
2000	223.5*	7.1*	294.5*	35.9	70.1	125.2	219.3	351.4	492.9	766.9	1126.1	1527.1	2385.8
Lung cancer													
1995	40.7*	0.4*	68.6*	6.1	12.9	27.2	37.2	85.6	131.8	179.4	201.2	250.0	234.3
2000	41.8*	0.2*	68.9*	5.5	13.2	24.4	48.3	96.0	119.4	175.3	239.4	249.3	220.6
Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)													
1995	22.3*	0.3*	41.9*	4.7	12.0	25.2	45.4	47.2	74.4	84.6	82.0	75.3	105.1
2000	23.7*	0.3*	43.4*	6.0	13.5	35.3	50.6	58.1	61.5	79.0	85.1	77.9	115.1
Other cancer													
1995	159.8*	6.9*	194.3*	26.6	40.1	75.7	111.2	206.5	337.3	562.9	839.2	1200.7	1883.3
2000	158.0*	6.5*	182.2*	24.4	43.5	65.5	120.3	197.3	311.9	512.7	801.6	1200.0	2050.2
Chronic obstructive pulmonary disease (COPD)													
1995	32.5*	0.6*	24.6*	1.8	2.2	6.9	9.8	21.7	48.0	81.9	179.0	289.4	630.7
2000	28.7*	0.2*	19.8*	1.4	4.6	3.0	8.2	16.1	30.2	75.2	166.1	282.9	564.9
Other respiratory disease													
1995	53.8*	3.8*	34.2*	8.8	11.4	11.1	23.3	32.3	54.3	98.4	194.6	386.2	1294.1
2000	65.3*	2.7*	37.6*	10.7	15.5	14.3	15.8	20.3	63.5	123.3	240.4	508.6	1662.6
Vascular disease													
1995	375.1*	5.8*	302.0*	32.7	59.2	100.6	161.1	279.6	525.0	955.7	1724.5	3209.7	7515.9
2000	316.3*	5.6*	241.8*	26.6	49.5	89.5	140.7	217.6	415.5	753.4	1364.9	2672.9	6688.6
Liver cirrhosis													
1995	33.6*	1.8*	64.5*	14.9	25.9	39.3	58.6	84.1	107.0	121.7	109.8	129.0	92.6
2000	25.5*	1.2*	49.2*	11.5	17.5	37.8	40.8	65.8	79.8	91.6	95.3	76.4	70.1
Other medical causes													
1995	242.7*	75.8*	221.9*	118.7	108.5	126.8	147.2	224.0	322.7	505.6	782.7	1328.9	3439.7
2000	243.4*	67.7*	227.9*	130.8	123.1	151.9	151.9	222.6	323.8	491.1	772.4	1379.3	3488.8
All non-medical causes													
1995	86.5*	62.9*	95.1*	82.7	85.1	84.2	83.4	102.3	107.0	121.3	163.0	185.5	353.9
2000	65.0*	42.4*	74.5*	60.3	67.3	67.6	60.8	68.8	89.3	107.7	128.1	158.6	312.3

Rates and calculations for some earlier years are in Peto, Lopez et al, 1994

1995, 2000: PORTUGAL

Female smoking-attributed deaths (Sm.) and total deaths (Total)

		ALL CAUSES	ALL CANCER	Lung cancer	Upper aero-digestive ca. (see below)	Other cancer	COPD	Other respiratory	Vascular disease	Liver cirrhosis	Other medical	Non-medical
1995												
0-34	Sm.	-	-	-	-	-	-	-	-	-	-	-
	Total	1486	188	4	2	182	8	39	81	25	737	408
35-69	Sm.	114	41	34	2	5	12	2	33	-	26	-
	Total	9534	3467	216	56	3195	139	231	2752	390	1992	563
		(1%)	(1%)	(16%)	(4%)	(0%)	(9%)	(1%)	(1%)		(1%)	
70+	Sm.	78	21	16	2	3	14	3	27	-	13	-
	Total	38485	4759	251	139	4369	696	2281	20807	175	9184	583
		(0%)	(0%)	(6%)	(1%)	(0%)	(2%)	(0%)	(0%)		(0%)	
Any age	Sm.	192	62	50	4	8	26	5	60	-	39	-
	Total	49505	8414	471	197	7746	843	2551	23640	590	11913	1554
		(0%)	(1%)	(11%)	(2%)	(0%)	(3%)	(0%)	(0%)		(0%)	
2000												
0-34	Sm.	-	-	-	-	-	-	-	-	-	-	-
	Total	1180	158	3	1	154	5	28	69	14	675	231
35-69	Sm.	209	82	66	6	10	22	5	49	-	51	-
	Total	8991	3458	257	69	3132	132	304	2208	305	2126	458
		(2%)	(2%)	(26%)	(9%)	(0%)	(17%)	(2%)	(2%)		(2%)	
70+	Sm.	267	59	44	7	8	71	14	81	-	42	-
	Total	40296	5139	273	153	4713	755	3462	20042	156	10129	613
		(1%)	(1%)	(16%)	(5%)	(0%)	(9%)	(0%)	(0%)		(0%)	
Any age	Sm.	476	141	110	13	18	93	19	130	-	93	-
	Total	50467	8755	533	223	7999	892	3794	22319	475	12930	1302
		(1%)	(2%)	(21%)	(6%)	(0%)	(10%)	(1%)	(1%)		(1%)	

To be conservative, no deaths before age 35, and none from liver cirrhosis or non-medical causes, were attributed to smoking

Female death rates used for calculations

	All ages	0-34	35-69	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+/ <i>NK</i>
POPULATION (1000s; UN, 2004 revision)													
1995	5196.9	2408.0	2191.6	357.7	343.2	328.0	294.9	296.4	296.2	275.2	235.0	162.5	199.8
2000	5291.6	2318.8	2297.0	379.9	366.0	347.4	328.8	294.3	292.7	287.9	256.9	201.3	217.6
NUMBER OF DEATHS (Source: WHO)													
All causes													
1995	49505	1486	9534	342	540	680	948	1421	2225	3378	5534	7349	25602
2000	50467	1180	8991	390	532	746	1007	1225	1940	3151	5339	7963	26994
Lung cancer													
1995	471	4	216	5	12	22	25	34	56	62	80	55	116
2000	533	3	257	11	15	23	34	40	55	79	87	84	102
ANNUAL DEATH RATE / 100,000 (*The rates for the age groups 0-34 and 35-69 are the means of seven five-yearly rates, but the all-ages rates are standardised to the conventional "European" age distribution)													
All causes													
1995	620.7*	64.3*	462.8*	95.6	157.3	207.3	321.5	479.4	751.2	1227.5	2354.9	4522.5	12813.8
2000	572.0*	51.7*	420.4*	102.7	145.4	214.7	306.3	416.2	662.8	1094.5	2078.2	3955.8	12405.3
All cancer													
1995	121.2*	7.5*	167.2*	33.0	67.6	86.6	146.5	200.1	268.1	368.5	548.9	739.1	1135.1
2000	116.1*	6.5*	161.0*	32.6	57.7	94.7	142.0	187.6	262.7	349.4	517.3	700.9	1102.5
Lung cancer													
1995	6.9*	0.2*	10.4*	1.4	3.5	6.7	8.5	11.5	18.9	22.5	34.0	33.8	58.1
2000	7.4*	0.1*	12.0*	2.9	4.1	6.6	10.3	13.6	18.8	27.4	33.9	41.7	46.9
Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)													
1995	2.6*	0.1*	2.7*	-	0.9	0.9	2.7	3.7	5.7	5.1	14.0	20.3	36.5
2000	2.8*	0.1*	3.2*	0.3	1.1	4.3	3.6	1.7	4.1	6.9	12.8	17.4	39.1
Other cancer													
1995	111.7*	7.3*	154.0*	31.6	63.2	79.0	135.3	184.9	243.4	340.8	500.9	684.9	1040.5
2000	105.9*	6.3*	145.8*	29.5	52.5	83.8	128.0	172.3	239.8	315.0	470.6	641.8	1016.5
Chronic obstructive pulmonary disease (COPD)													
1995	10.3*	0.3*	6.8*	0.6	1.5	1.2	7.1	7.8	13.2	16.4	48.1	96.6	213.2
2000	9.7*	0.2*	6.3*	0.3	0.8	3.7	4.3	5.1	8.2	21.5	45.5	77.5	221.5
Other respiratory disease													
1995	29.1*	1.6*	11.3*	2.5	2.6	5.5	4.4	10.5	16.9	36.7	101.7	225.8	838.3
2000	38.7*	1.2*	14.4*	3.9	3.8	3.7	6.4	12.2	24.3	46.5	122.2	277.7	1189.8
Vascular disease													
1995	272.4*	3.1*	136.0*	12.3	20.4	37.2	62.7	119.1	239.0	461.5	1054.9	2392.0	7227.7
2000	230.2*	2.8*	105.4*	13.7	19.9	30.5	56.6	86.3	170.5	360.5	824.1	1853.5	6523.0
Liver cirrhosis													
1995	9.8*	0.9*	18.6*	3.4	10.2	13.4	16.6	26.0	28.4	32.3	26.4	35.1	28.0
2000	7.5*	0.5*	13.8*	5.8	6.8	12.4	16.4	15.6	23.2	16.3	25.3	23.8	19.8
Other medical causes													
1995	152.3*	34.2*	96.5*	29.4	35.5	44.5	59.3	87.4	149.9	269.3	520.0	949.5	3212.7
2000	150.6*	30.8*	98.8*	34.5	44.0	53.0	61.4	88.0	145.9	264.7	495.1	943.9	3197.2
All non-medical causes													
1995	25.5*	16.6*	26.4*	14.5	19.5	18.9	24.8	28.7	35.8	42.9	54.9	84.3	158.7
2000	19.3*	9.7*	20.7*	11.8	12.3	16.7	19.2	21.4	28.0	35.4	48.7	78.5	151.7

Rates and calculations for some earlier years are in Peto, Lopez et al, 1994

PORTUGAL: 2000

Relative importance of deaths in MIDDLE age (35–69) in the year 2000

Age range (years)	Deaths attributed to SMOKING /total deaths (thousands)		Mean years lost PER DEATH FROM SMOKING
	Male	Female	
0–34	– / 3.2	– / 1.2	–
35–69	3.9 / 18	0.2 / 9.0	23 years
70+	3.7 / 34	0.3 / 40	8 years
All ages	7.6 / 55	0.5 / 50	16 years

Deaths, by cause, attributed to SMOKING / total deaths (thousands) in the year 2000

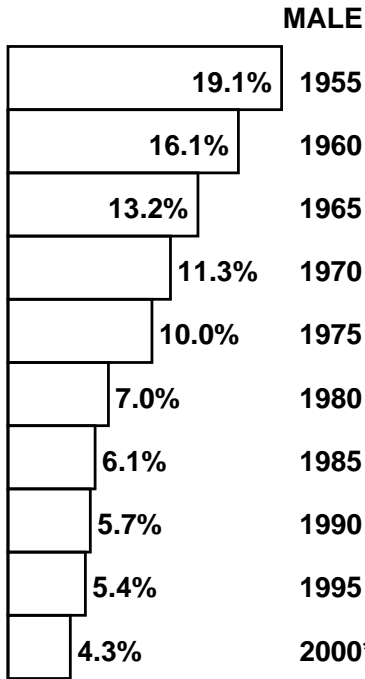
Cause	Male (by age)				Female (by age)			
	0–34	35–69	70+	All	0–34	35–69	70+	All
Lung Cancer	–/0.0	1.1/1.3	0.9/1.1	2.0/2.3	–/0.0	0.1/0.3	0.0/0.3	0.1/0.5
All Cancer	–/0.2	1.9/5.4 (34%)	1.4/7.1 (20%)	3.3/13	–/0.2	0.1/3.5 (2%)	0.1/5.1 (1%)	0.1/8.8
Vascular	–/0.1	0.8/4.4	0.8/14	1.6/19	–/0.1	0.0/2.2	0.1/20	0.1/22
Respiratory	–/0.1	0.4/1.0	0.9/4.5	1.3/5.6	–/0.0	0.0/0.4	0.1/4.2	0.1/4.7
All Other	–/2.8	0.9/6.9	0.4/8.7	1.4/18	–/0.9	0.1/2.9	0.0/11	0.1/15
All Causes	–/3.2	3.9/18 (22%)	3.7/34 (11%)	7.6/55	–/1.2	0.2/9.0 (2%)	0.3/40 (0.7%)	0.5/50

**Cancer deaths, and all deaths,
attributed to SMOKING / total deaths (thousands) in the year 2000**

Cause	Male	Female	Male + Female
All Cancer	3.3 / 13 (26%)	0.1 / 8.8 (2%)	3.4 / 21 (16%)
All Causes	7.6 / 55 (14%)	0.5 / 50 (0.9%)	8.1 / 106 (8%)

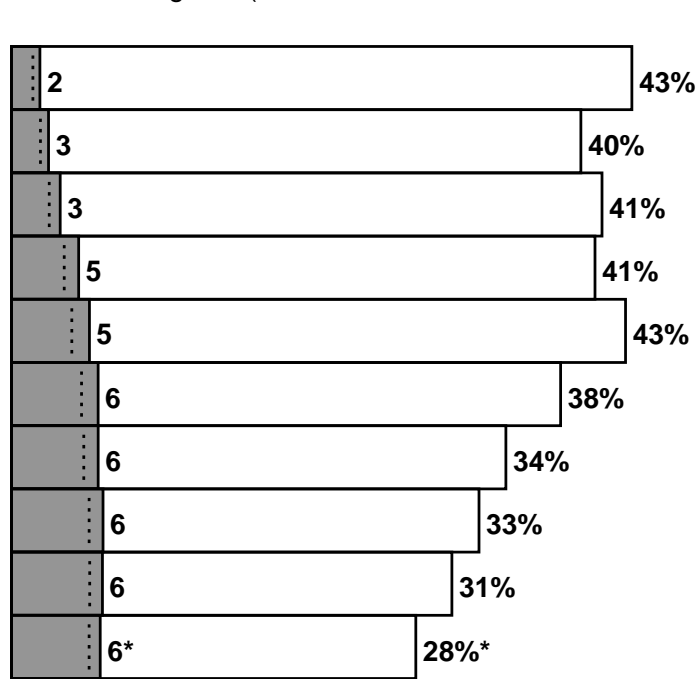
1955-2000: PORTUGAL

Population risk of dying at ages 0-34



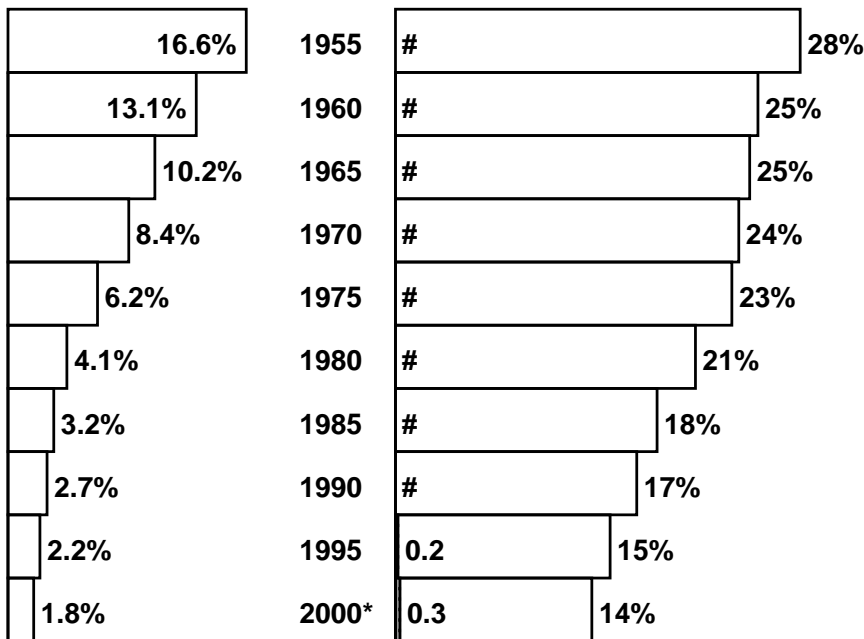
Population risk of a 35-year-old dying at ages 35-69 from smoking (shaded) or from any cause (shaded and white)

*eg, at year 2000 male death rates, out of 100 men aged 35, 28 would die before age 70 (with 6 of these deaths attributed to smoking)



Note: Most of those killed by smoking would otherwise have survived beyond age 70, but a minority (shaded area to right of dotted line) would have died by 70 anyway

FEMALE



Real risk too low to estimate reliably

PORTUGAL: 1950-2000

Numbers of deaths attributed to smoking / total deaths (thousands)

Year	Male (by age)				Female (by age)			
	0-34	35-69	70+	All	0-34	35-69	70+	All
1950
1955	-/18	0.8/17 (5%)	0.3/16 (2%)	1.1/50	-/15	0.0/12	0.0/22	0.0/49
1960	-/15	1.1/16 (7%)	0.2/17 (0.9%)	1.2/48	-/12	0.0/11	0.0/23	0.0/47
1965	-/13	1.5/18 (8%)	0.4/18 (2%)	2.0/49	-/9.5	0.0/12	0.0/25	0.0/46
1970	-/9.5	2.1/18 (12%)	0.7/20 (3%)	2.8/47	-/7.0	0.0/12	0.0/27	0.0/46
1975	-/8.0	2.7/21 (13%)	1.2/22 (5%)	3.9/51	-/5.0	0.0/12	0.0/29	0.0/47
1980	-/6.0	3.1/19 (16%)	1.6/24 (7%)	4.7/50	-/3.3	0.0/11	0.0/31	0.0/45
1985	-/4.8	3.4/19 (18%)	2.3/27 (9%)	5.7/51	-/2.3	0.0/10	0.0/34	0.0/46
1990	-/4.2	3.8/19 (20%)	2.8/30 (9%)	6.6/53	-/1.8	0.0/10	0.0/37	0.0/50
1995	-/4.0	3.9/19 (21%)	3.2/32 (10%)	7.1/54	-/1.5	0.1/9.5 (1%)	0.1/38 (0.2%)	0.2/50
2000	-/3.2	3.9/18 (22%)	3.7/34 (11%)	7.6/55	-/1.2	0.2/9.0 (2%)	0.3/40 (0.7%)	0.5/50

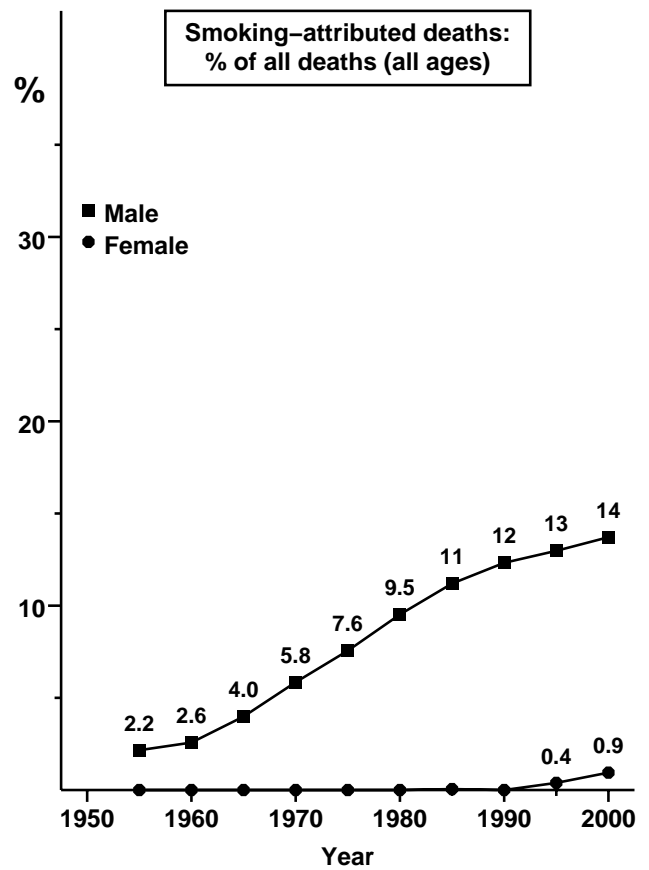
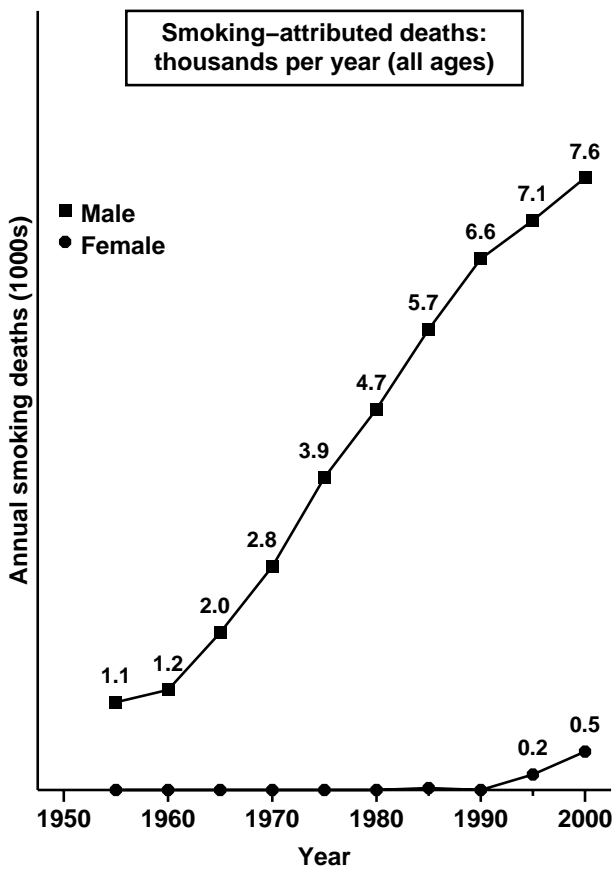
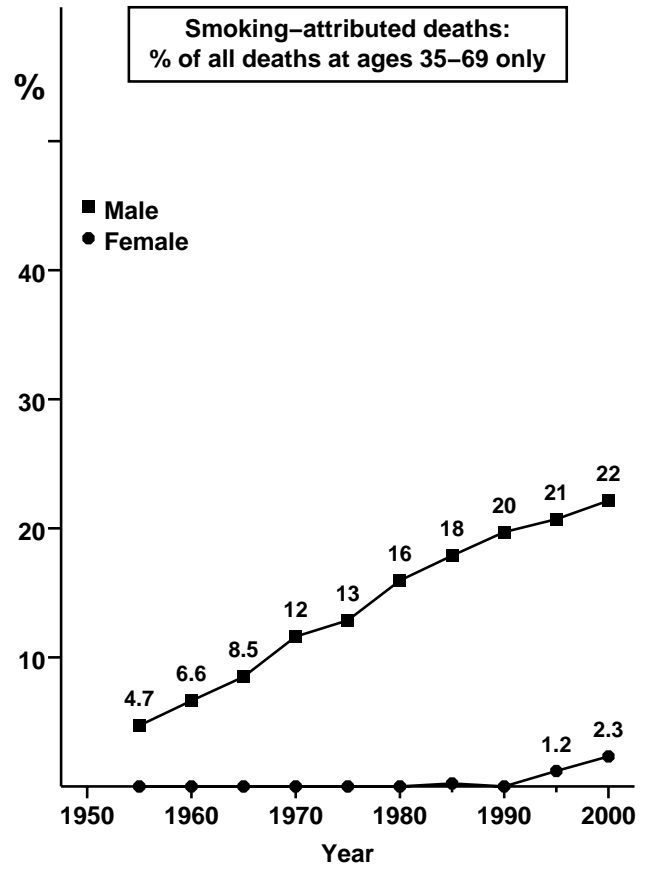
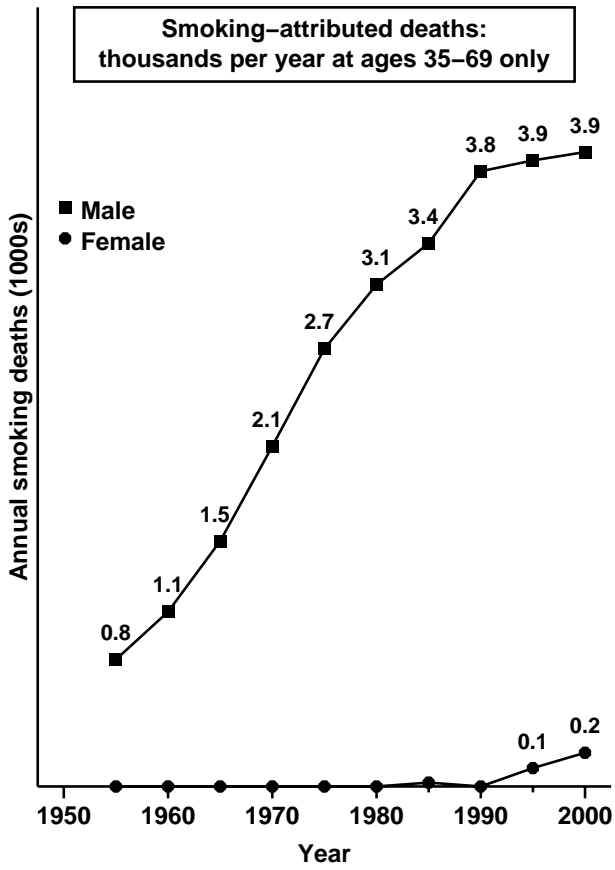
50-year total* (thousands), mid-1950 to mid-2000: 199 / 4939

1950-2000 by age & sex:

-/476	123/933 (13%)	74/1152 (6%)	197/2560	-/335	1.4/561 (0.2%)	0.8/1482 (0.1%)	2.2/2379
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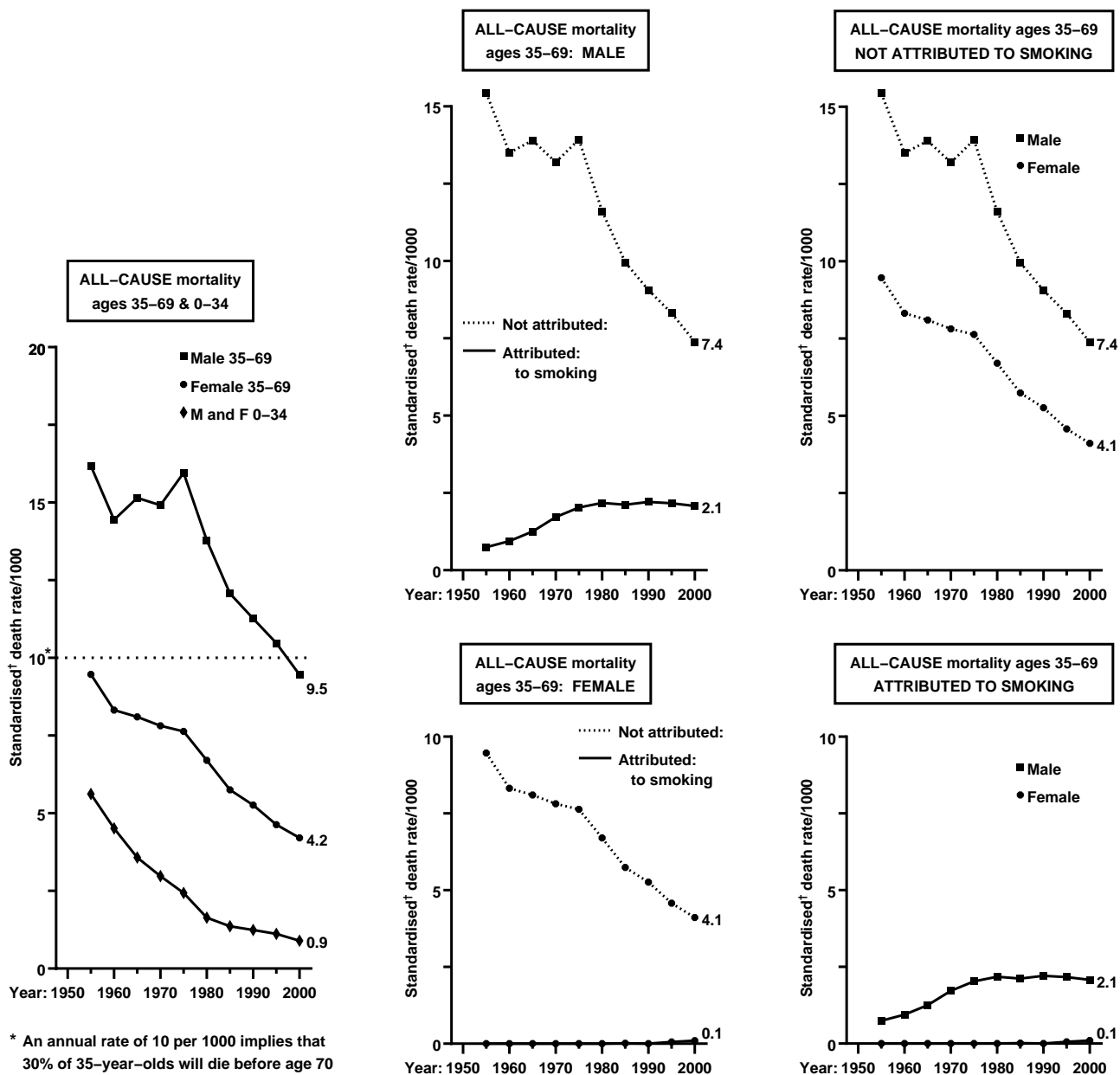
*Estimated as 10 times the sum of the annual numbers for 1955, 1965, 1975, 1985 & 1995

1955-2000: PORTUGAL



PORTUGAL: 1955-2000

ALL-CAUSE mortality rates attributed and not attributed to smoking



* An annual rate of 10 per 1000 implies that 30% of 35-year-olds will die before age 70

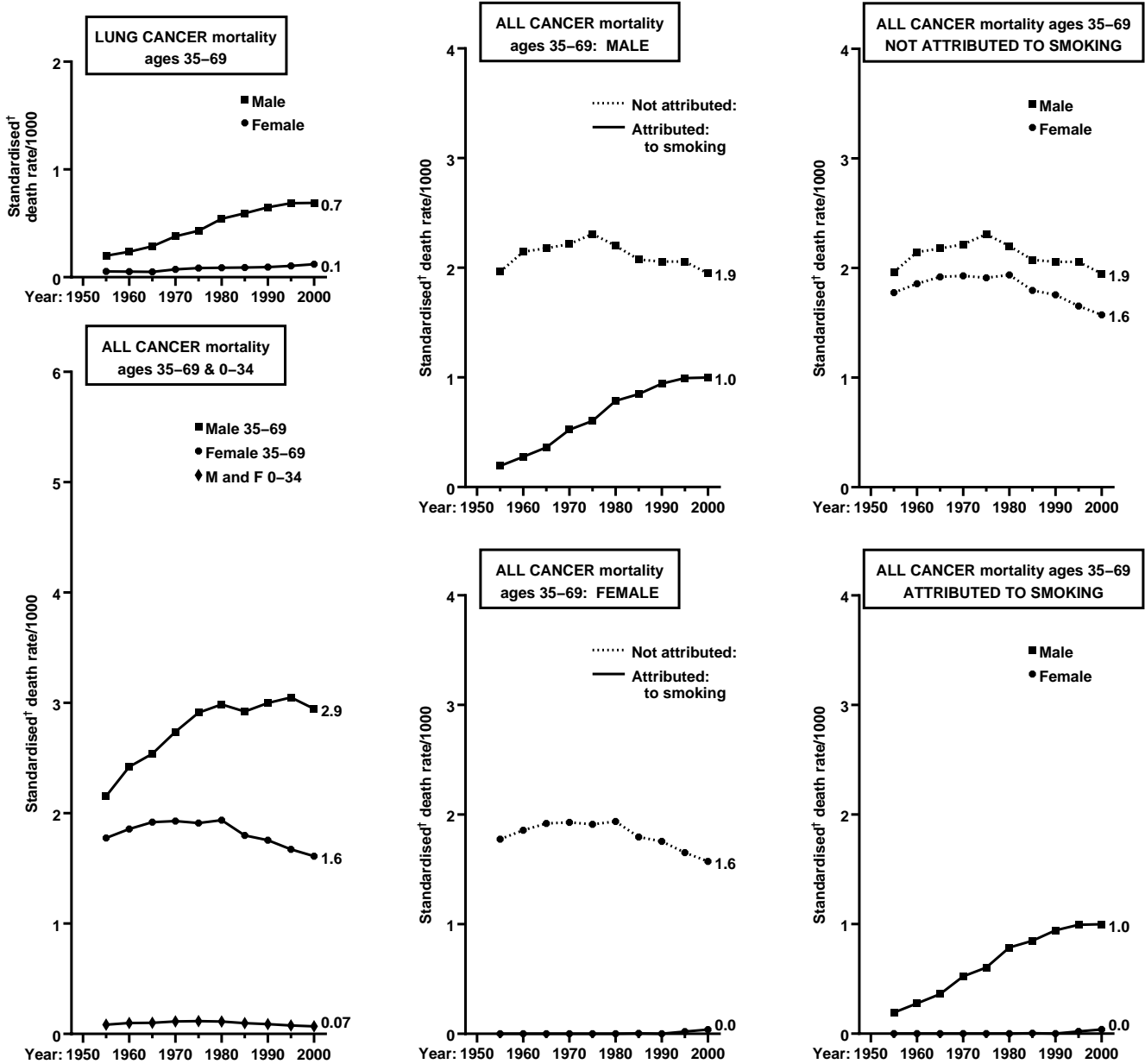
† Mean of 7 age-specific rates, ages 35-69 (or ages 0-34)

Year	MALE all-cause mortality (annual rate/1000, by age)								FEMALE all-cause mortality (annual rate/1000, by age)									
	0-34		35-69		70-79		0-34		35-69		70-79		0-34		35-69		70-79	
	Attributed to smoking?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
1950	
1955	-	6.04	0.74	15.4	1.98	91.6	-	5.19	0.00	9.46	0.00	67.8	-	5.19	0.00	9.46	0.00	67.8
1960	-	5.00	0.94	13.5	0.93	80.3	-	4.02	0.00	8.32	0.00	60.3	-	4.02	0.00	8.32	0.00	60.3
1965	-	4.06	1.25	13.9	2.19	78.2	-	3.08	0.00	8.10	0.00	56.4	-	3.08	0.00	8.10	0.00	56.4
1970	-	3.43	1.72	13.2	3.25	78.6	-	2.51	0.00	7.81	0.00	57.5	-	2.51	0.00	7.81	0.00	57.5
1975	-	3.02	2.03	13.9	5.41	88.6	-	1.84	0.00	7.63	0.00	59.2	-	1.84	0.00	7.63	0.00	59.2
1980	-	2.07	2.17	11.6	5.38	67.5	-	1.20	0.00	6.70	0.00	50.7	-	1.20	0.00	6.70	0.00	50.7
1985	-	1.79	2.12	9.95	6.45	61.4	-	0.93	0.01	5.74	0.00	41.2	-	0.93	0.01	5.74	0.00	41.2
1990	-	1.69	2.21	9.06	6.92	56.0	-	0.79	0.00	5.26	0.00	39.1	-	0.79	0.00	5.26	0.00	39.1
1995	-	1.58	2.16	8.31	6.48	50.2	-	0.64	0.05	4.57	0.17	34.2	-	0.64	0.05	4.57	0.17	34.2
2000	-	1.27	2.07	7.38	6.70	45.8	-	0.52	0.10	4.11	0.27	29.9	-	0.52	0.10	4.11	0.27	29.9

0-34 and 35-69 = means of 7 age-specific rates; 70-79 = mean of 2 rates (70-74 & 75-79)

1955-2000: PORTUGAL

ALL CANCER mortality rates attributed and not attributed to smoking



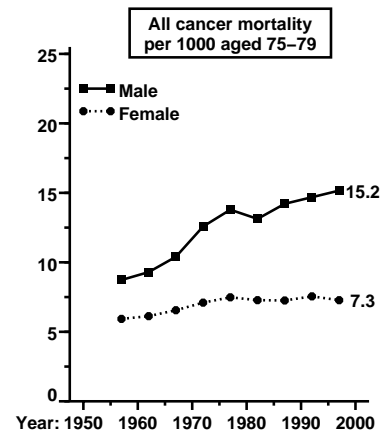
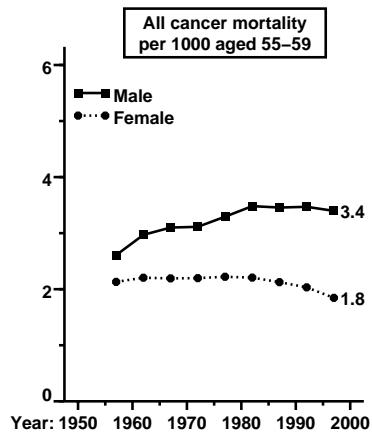
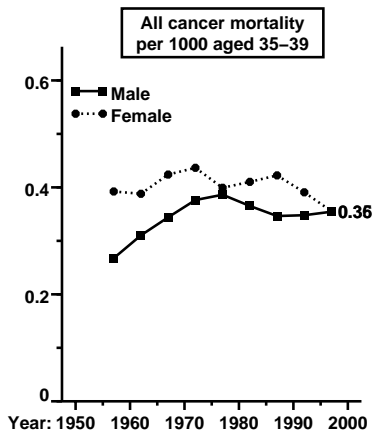
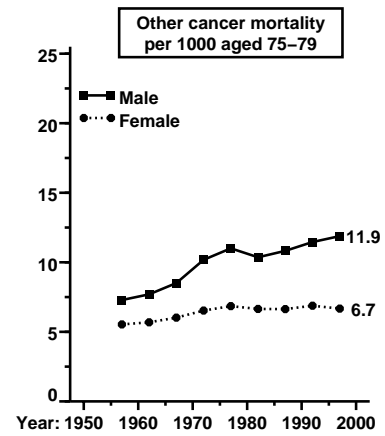
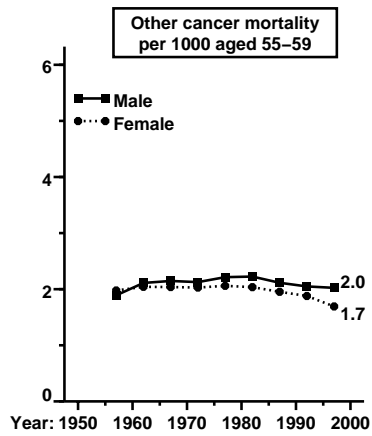
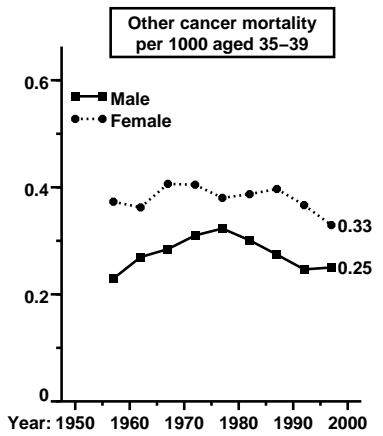
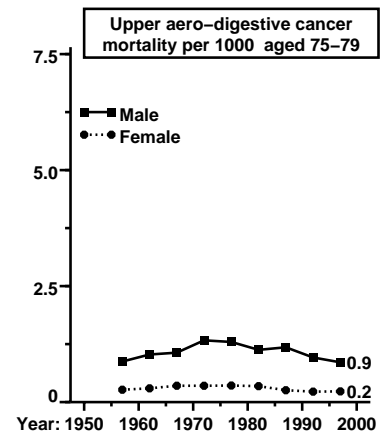
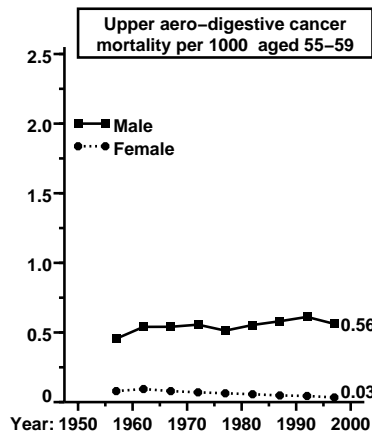
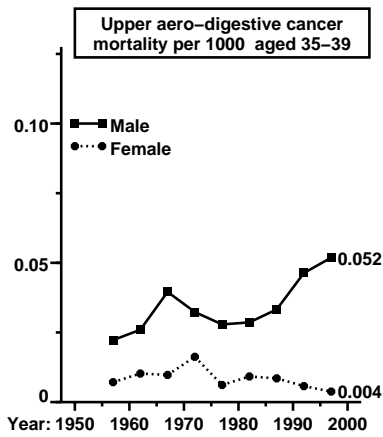
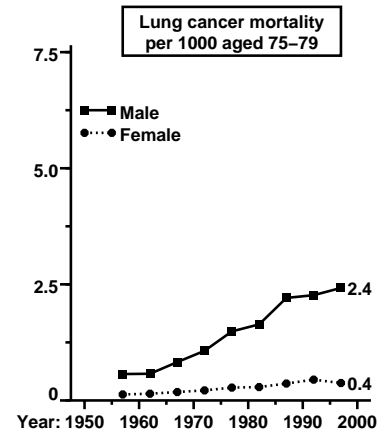
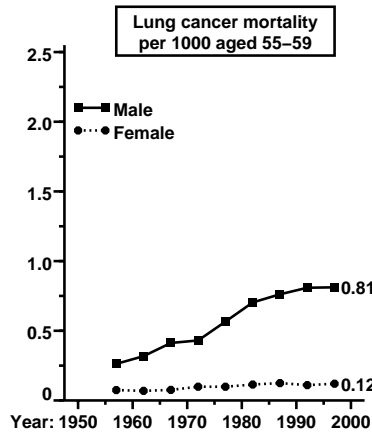
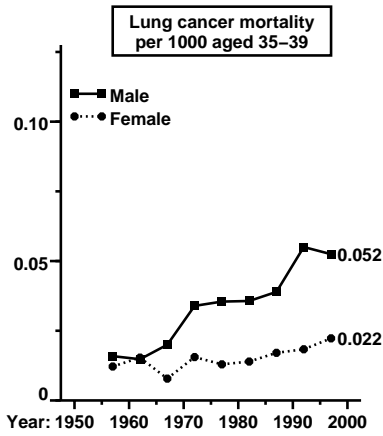
† Mean of 7 age-specific rates, ages 35-69 (or ages 0-34)

Year	MALE cancer mortality (annual rate/1000, by age)								FEMALE cancer mortality (annual rate/1000, by age)					
	0-34		35-69		70-79		0-34		35-69		70-79			
	Attributed to smoking?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No			
1950		
1955	-	0.08	0.19	1.96	0.47	7.43	-	0.08	0.00	1.77	0.00	5.51		
1960	-	0.11	0.28	2.14	0.23	8.09	-	0.09	0.00	1.86	0.00	5.28		
1965	-	0.11	0.36	2.18	0.58	8.55	-	0.09	0.00	1.92	0.00	5.95		
1970	-	0.11	0.52	2.22	0.87	9.39	-	0.11	0.00	1.93	0.00	6.04		
1975	-	0.12	0.60	2.31	1.43	10.7	-	0.11	0.00	1.91	0.00	6.65		
1980	-	0.12	0.79	2.20	1.77	9.98	-	0.11	0.00	1.94	0.00	6.51		
1985	-	0.10	0.85	2.07	2.36	9.87	-	0.09	0.00	1.79	0.00	6.02		
1990	-	0.09	0.94	2.06	2.71	9.90	-	0.09	0.00	1.75	0.00	6.68		
1995	-	0.08	0.99	2.06	2.79	10.5	-	0.08	0.02	1.65	0.04	6.40		
2000	-	0.07	1.00	1.95	3.05	10.2	-	0.06	0.04	1.57	0.08	6.01		

0-34 and 35-69 = means of 7 age-specific rates; 70-79 = mean of 2 rates (70-74 & 75-79)

PORTUGAL: 1955-2000

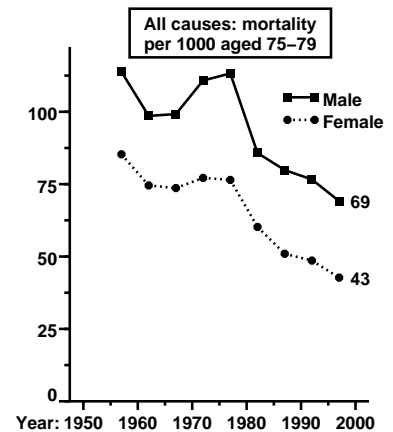
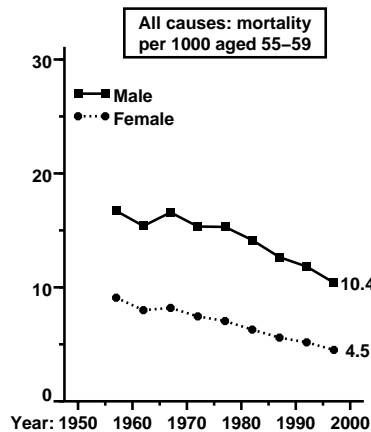
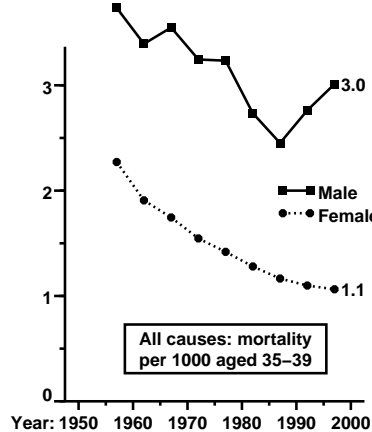
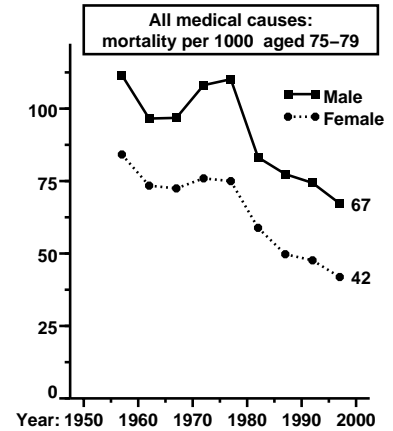
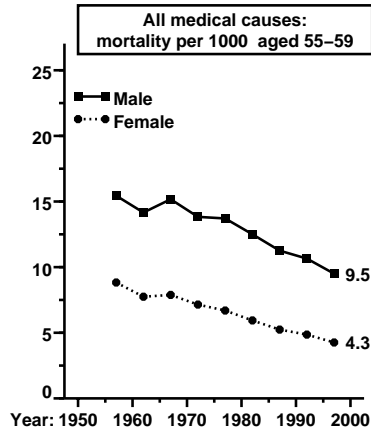
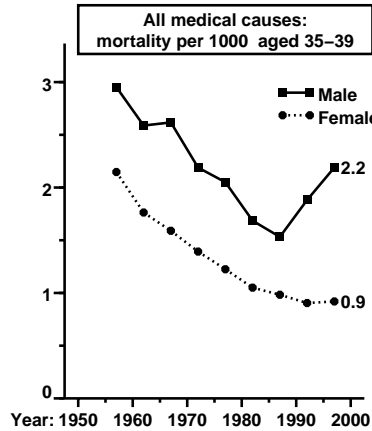
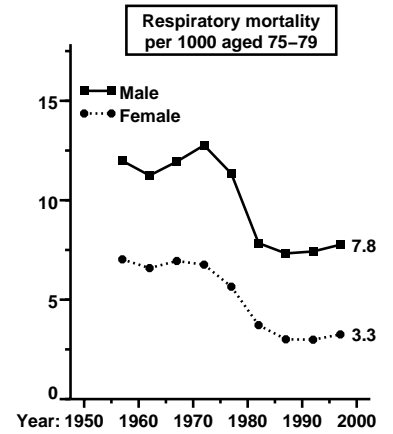
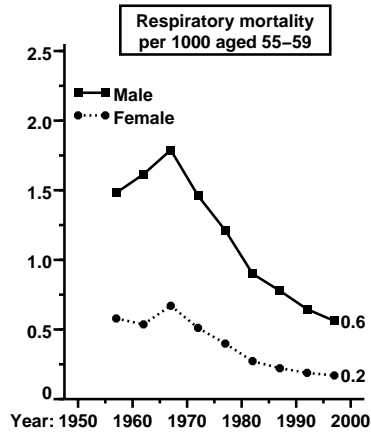
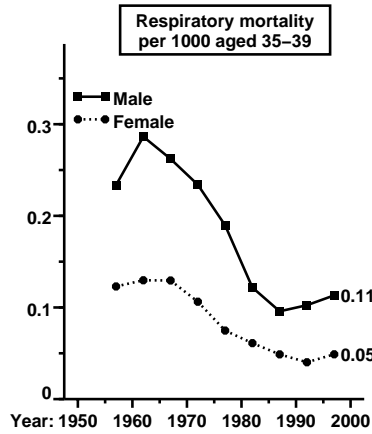
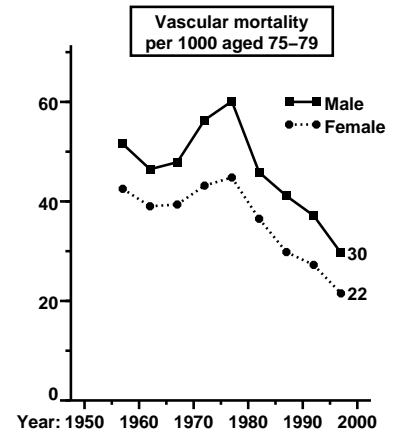
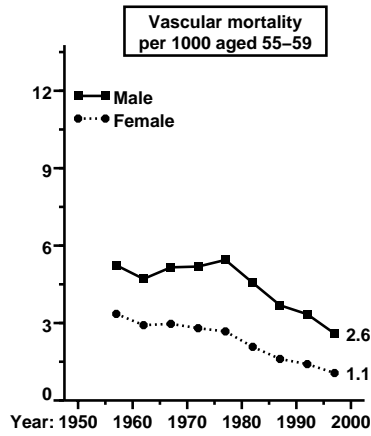
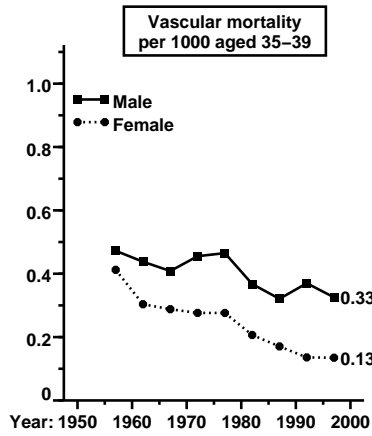
Mortality* trends at selected ages: 35-39, 55-59 & 75-79



* Annual mortality per 1000: averages of years available in 1955-59,.....,1995-99; year 2000 on pages 386-387

1955-2000: PORTUGAL

Mortality* trends at selected ages: 35-39, 55-59 & 75-79



* Annual mortality per 1000: averages of years available in 1955-59,.....,1995-99; year 2000 on pages 386-387