

**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
	M	F													
ALL CAUSES	55346	50467	3202	17760	967.7	572.0	126.9	420.4	170.0	24.9	30.6	93.3	147.2	183.9	238.2
Tuberculosis	M	F	254	15	122	4.6	0.6	6.1	0.3	-	-	-	0.7	0.5	2.4
HIV	M	F	777	174	401	14.9	3.2	13.2	3.3	17.7	-	-	1.7	11.6	34.1
Other infective and parasitic	M	F	550	484	200	10.2	3.7	10.3	11.5	1.8	1.7	1.1	1.2	3.4	5.1
ALL CANCER	M	F	12706	8755	182	5431	223.5	7.1	294.5	3.1	2.5	3.1	7.1	7.7	11.8
Mouth and pharynx cancer	M	F	459	100	9	341	116.1	6.5	161.0	4.4	4.2	4.0	5.3	4.8	8.1
Oesophagus cancer	M	F	424	103	-	265	7.9	-	13.9	0.4	0.4	-	0.3	0.5	0.7
Stomach cancer	M	F	1577	1040	5	710	27.8	0.2	38.1	-	-	-	-	0.2	0.2
Colorectal cancer	M	F	1598	1265	4	595	27.5	0.2	33.0	-	-	-	-	0.2	0.8
Liver cancer	M	F	249	93	2	127	4.4	0.1	7.0	0.3	-	-	-	0.2	-
Pancreas cancer	M	F	482	397	4	216	8.4	0.2	11.8	-	-	-	-	-	1.1
Larynx cancer	M	F	367	20	-	227	6.8	-	11.9	-	-	-	-	-	-
Lung cancer	M	F	2337	533	6	1260	41.8	0.2	68.9	-	-	-	-	0.2	0.2
Malignant melanoma	M	F	82	77	4	52	1.5	0.1	2.6	-	-	-	-	0.2	0.5
Female breast cancer	M	F	1524	1524	15	798	22.2	0.6	36.5	-	-	0.4	-	0.5	3.2
Cervix cancer	M	F	227	227	6	140	3.6	0.2	6.2	-	-	-	-	0.7	0.8
Other uterine cancer	M	F	366	371	2	157	4.9	0.1	7.4	-	-	-	-	-	0.5
Ovarian cancer	M	F	371	1805	7	205	5.4	0.3	9.6	-	-	-	-	0.3	0.5
Prostate cancer	M	F	-	-	269	29.8	-	15.6	-	-	-	-	-	-	-
Bladder cancer	M	F	456	190	2	125	7.6	0.1	7.1	-	-	-	-	0.2	0.3
Other and ill-defined cancer sites	M	F	2003	1686	86	897	35.7	3.4	48.1	1.7	2.2	1.4	3.7	3.7	6.9
Hodgkin's disease	M	F	33	30	8	16	0.6	0.3	0.7	-	-	-	0.3	0.5	0.7
Myeloma and non-Hodgkin lymphomas	M	F	441	451	13	190	7.7	0.5	10.5	0.3	-	-	0.6	0.5	-
Leukaemia	M	F	393	282	39	141	6.9	1.5	7.6	0.7	-	1.7	2.3	1.5	2.2
Diabetes	M	F	1293	1845	5	352	21.6	0.2	19.7	-	-	-	-	0.2	1.1
ALL VASCULAR DISEASE	M	F	18675	22319	146	4392	316.3	5.6	241.8	2.1	0.7	1.7	2.0	4.9	9.1
Rheumatic heart disease and fever	M	F	44	141	1	20	0.8	0.0	1.0	-	-	0.3	-	-	0.3
Hypertensive disease	M	F	383	619	1	78	6.5	0.0	4.3	-	-	0.3	-	-	-
Ischaemic heart disease	M	F	4914	4104	37	1720	84.7	1.4	94.0	-	-	-	-	0.7	3.7
Pulmonary embolism and other venous disease	M	F	420	499	8	115	7.2	0.3	6.3	-	-	-	0.3	0.2	-
Cerebrovascular disease	M	F	9110	11885	49	1753	152.8	1.9	97.2	0.7	0.4	1.0	0.3	2.2	3.2
Other vascular disease	M	F	-	-	58	6.3	-	2.8	-	-	-	-	0.4	0.3	1.0
Chronic obstructive pulmonary disease	M	F	1730	892	5	352	28.7	0.2	19.8	-	-	-	-	0.5	0.3
Other respiratory disease	M	F	3863	3794	67	693	65.3	2.7	37.6	5.6	0.4	0.3	1.4	1.5	3.2
Peptic ulcer	M	F	-	-	58	3.2	-	3.1	-	-	-	-	-	-	-
Liver cirrhosis	M	F	1347	475	32	941	25.5	1.2	49.2	-	-	-	0.3	0.2	1.0
Renal disease	M	F	753	622	9	164	12.8	0.3	9.0	0.3	-	-	-	0.2	1.1
Pregnancy, birth and congenital and perinatal causes	M	F	3	295	2	1	0.1	0.1	0.0	-	-	-	-	-	0.5
Ill-defined causes	M	F	213	213	204	9	6.1	10.6	0.4	70.3	0.4	0.4	0.6	1.3	0.7
Other medical causes	M	F	6741	6410	725	2330	120.6	28.3	119.4	25.5	5.8	6.6	23.9	32.4	46.6
ALL NON-MEDICAL CAUSES	M	F	3467	1302	1112	1522	65.0	42.4	74.5	15.7	7.6	12.9	47.8	81.5	64.7
Road traffic accidents	M	F	1098	278	511	431	20.7	19.2	20.7	2.8	3.6	4.2	23.6	46.2	29.7
Fire	M	F	2714	2930	178	788	47.5	7.5	41.8	14.7	4.0	3.1	7.7	4.0	7.1
Suicide	M	F	417	107	68	197	7.6	2.5	9.8	-	-	-	2.6	4.7	4.4
Homicide	M	F	67	30	28	37	1.3	1.0	1.7	0.3	-	-	1.1	2.7	2.0
POPULATION: (1000s; UN, 2004 revision)	M=male		4933.6	5291.6	2386.0	2318.8	2096.9	2297.0	286.4	276.6	287.5	351.6	404.9	407.9	371.1
	F=female								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	M	ALL CAUSES	001-999/A00-Y89
277.3	347.5	489.3	637.4	962.5	1494.8	2409.2	3893.4	6605.7	15173.0	F	Tuberculosis	010-018, 137/ A15-A19, B90
102.7	145.4	214.7	306.3	416.2	662.8	1094.5	2078.2	3955.8	12405.3	F	HIV	279.5, 279.6/B20-B24
4.7	4.3	4.3	4.3	7.6	6.3	11.4	16.4	27.9	39.8	M	Other infective and parasitic	Rest of 001-139/rest of A00-B99 excl A33,A34
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		
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		
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	Oesophagus cancer	150/C15
1.9	6.0	7.6	14.1	22.2	17.5	28.3	32.3	28.6	48.4	M		
-	-	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	Hodgkin's disease	201/C81
0.8	0.9	0.9	0.7	0.4	1.2	0.4	2.1	2.1	1.7	M		
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	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 Congenital and perinatal causes	630-676/A34,000-099
0.8	0.3	0.9	0.7	0.8	1.2	-	-	-	-	M	III-defined causes	740-779/A33, P00-P96, Q00-Q99 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	—	—	—	—	—	—	—	—	—	—	—
35-69	Sm. Total	3881 (21%)	1757 (33%)	1054 (87%)	384 (51%)	319 (9%)	276 (65%)	112 (18%)	936 (18%)	— (18%)	800 (20%)	— (20%)
70+	Sm. Total	3182 (10%)	1154 (19%)	722 (82%)	136 (40%)	296 (6%)	713 (55%)	117 (6%)	828 (6%)	— (6%)	370 (6%)	— (6%)
Any age	Sm. Total	7063 54434 (13%)	2911 11593 (25%)	1776 2102 (84%)	520 1103 (47%)	615 8388 (7%)	989 1738 (57%)	229 2823 (8%)	1764 19883 (9%)	— 1660 (9%)	1170 12362 (9%)	— 4375
2000												
0-34	Sm. Total	— 3202	— 182	— 6	— 9	— 167	— 5	— 67	— 146	— 32	— 1658	— 1112
35-69	Sm. Total	3933 (22%)	1854 (34%)	1103 (88%)	434 (52%)	317 (9%)	228 (65%)	125 (18%)	804 (18%)	— (18%)	922 (21%)	— (21%)
70+	Sm. Total	3657 (11%)	1423 (20%)	887 (83%)	170 (42%)	366 (7%)	768 (56%)	178 (6%)	838 (6%)	— (6%)	450 (6%)	— (6%)
Any age	Sm. Total	7590 55346 (14%)	3277 12706 (26%)	1990 2337 (85%)	604 1250 (48%)	683 9119 (7%)	996 1730 (58%)	303 3863 (8%)	1642 18675 (9%)	— 1347 (9%)	1372 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+/NK	
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)														
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.	—	—	—	—	—	—	—	—	—	—	—
0-34 Total	1486	188	4	2	182	8	39	81	25	737	408
35-69 Sm.	114	41	34	2	5	12	2	33	—	26	—
35-69 Total	9534	3467	216	56	3195	139	231	2752	390	1992	563
(1%)	(1%)	(16%)	(4%)	(0%)	(9%)	(1%)	(1%)	(1%)		(1%)	
70+ Sm.	78	21	16	2	3	14	3	27	—	13	—
70+ Total	38485	4759	251	139	4369	696	2281	20807	175	9184	583
(0%)	(0%)	(6%)	(1%)	(0%)	(2%)	(0%)	(0%)	(0%)		(0%)	
Any age Sm.	192	62	50	4	8	26	5	60	—	39	—
Any age Total	49505	8414	471	197	7746	843	2551	23640	590	11913	1554
(0%)	(1%)	(11%)	(2%)	(0%)	(3%)	(0%)	(0%)	(0%)		(0%)	
2000											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
0-34 Total	1180	158	3	1	154	5	28	69	14	675	231
35-69 Sm.	209	82	66	6	10	22	5	49	—	51	—
35-69 Total	8991	3458	257	69	3132	132	304	2208	305	2126	458
(2%)	(2%)	(26%)	(9%)	(0%)	(17%)	(2%)	(2%)	(2%)		(2%)	
70+ Sm.	267	59	44	7	8	71	14	81	—	42	—
70+ Total	40296	5139	273	153	4713	755	3462	20042	156	10129	613
(1%)	(1%)	(16%)	(5%)	(0%)	(9%)	(0%)	(0%)	(0%)		(0%)	
Any age Sm.	476	141	110	13	18	93	19	130	—	93	—
Any age Total	50467	8755	533	223	7999	892	3794	22319	475	12930	1302
(1%)	(2%)	(21%)	(6%)	(0%)	(10%)	(1%)	(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+/NK	
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)														
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**

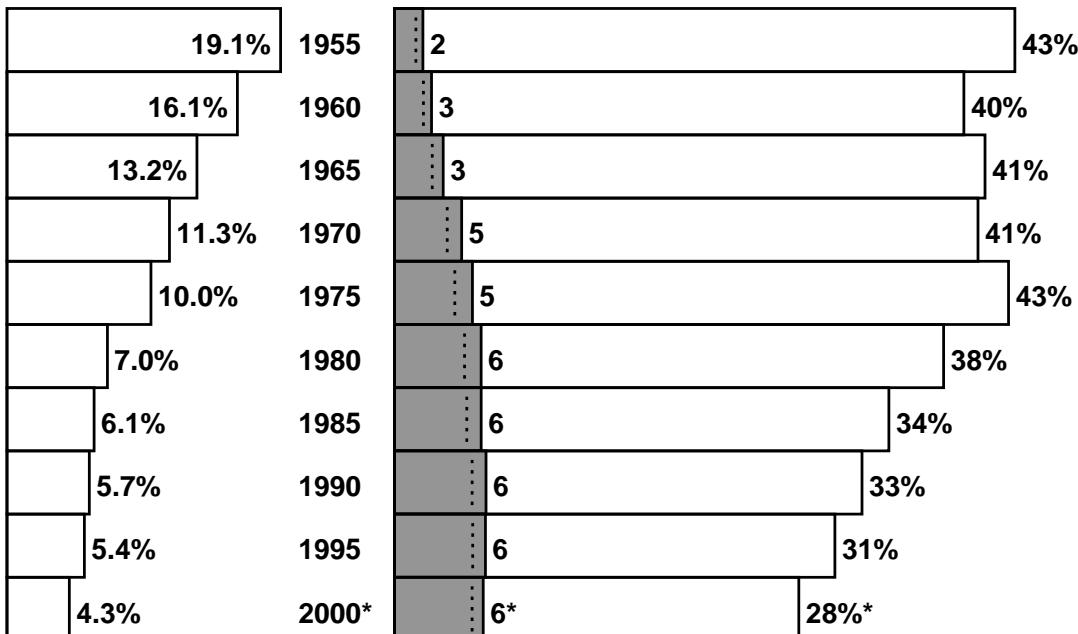
Cause	Male	Female	Male + Female
All Cancer	3.3 / 13 (26%)	0.1 / 8.8 (2%)	3.4 / 21 (16%)
All Causes	7.6 / 55 (14%)	0.5 / 50 (0.9%)	8.1 / 106 (8%)

1955-2000: PORTUGAL

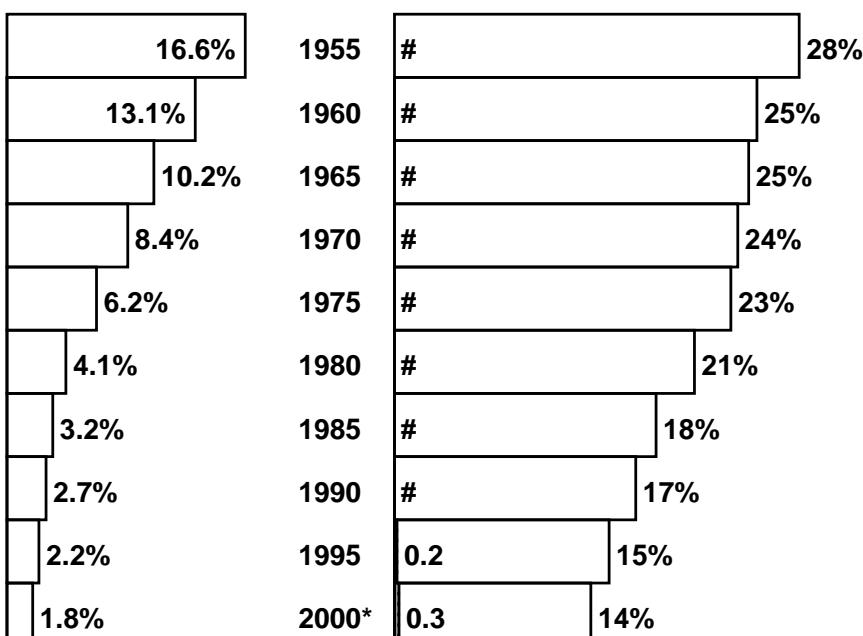
Population risk of dying at ages 0–34

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)

MALE

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

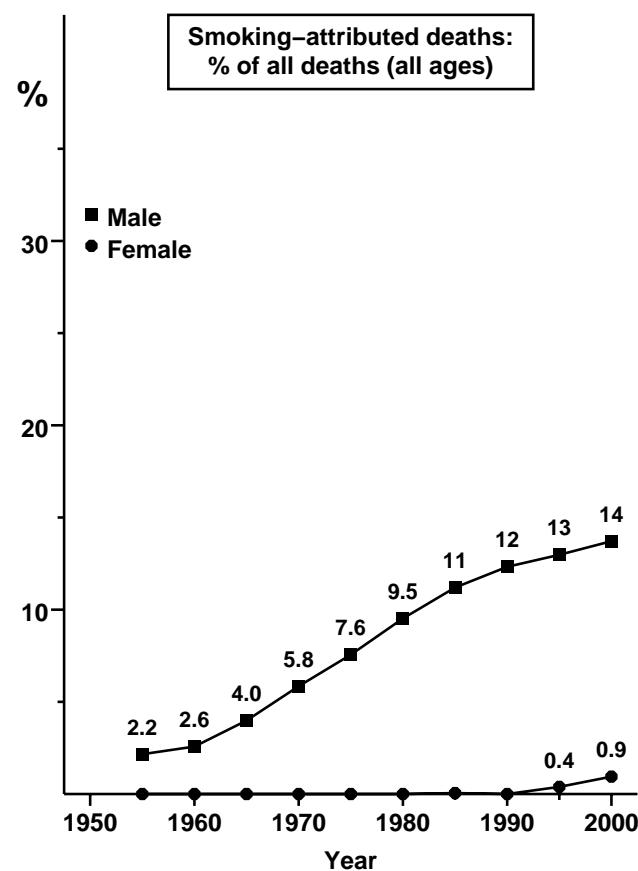
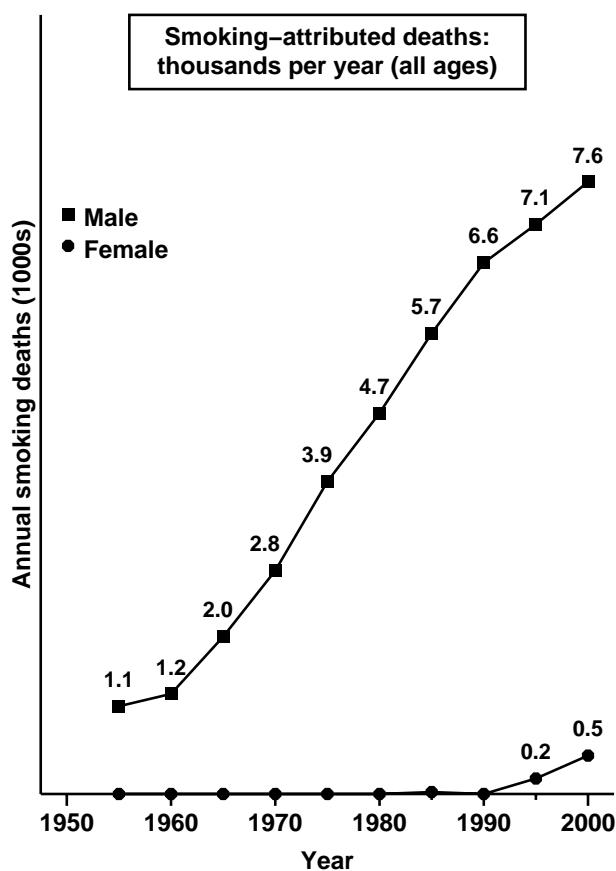
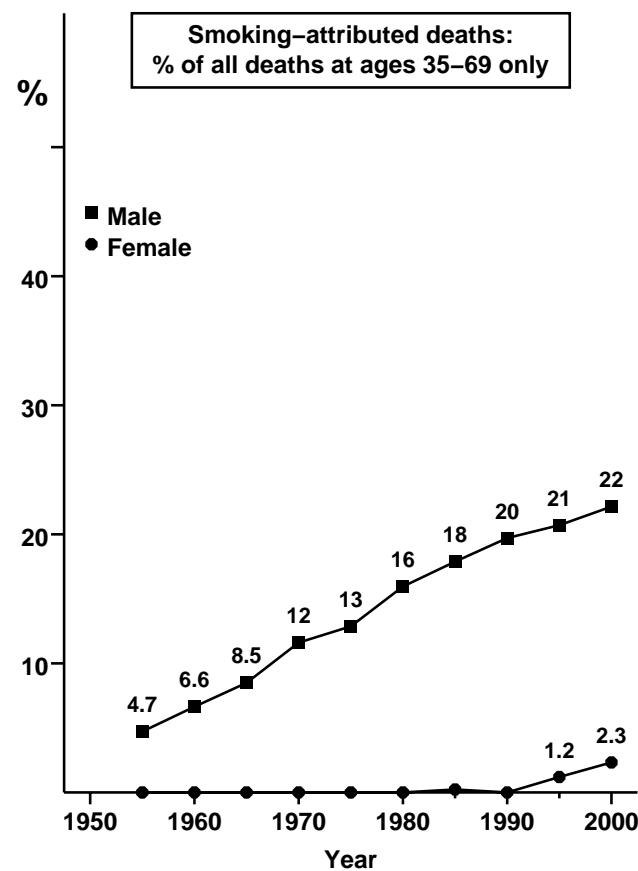
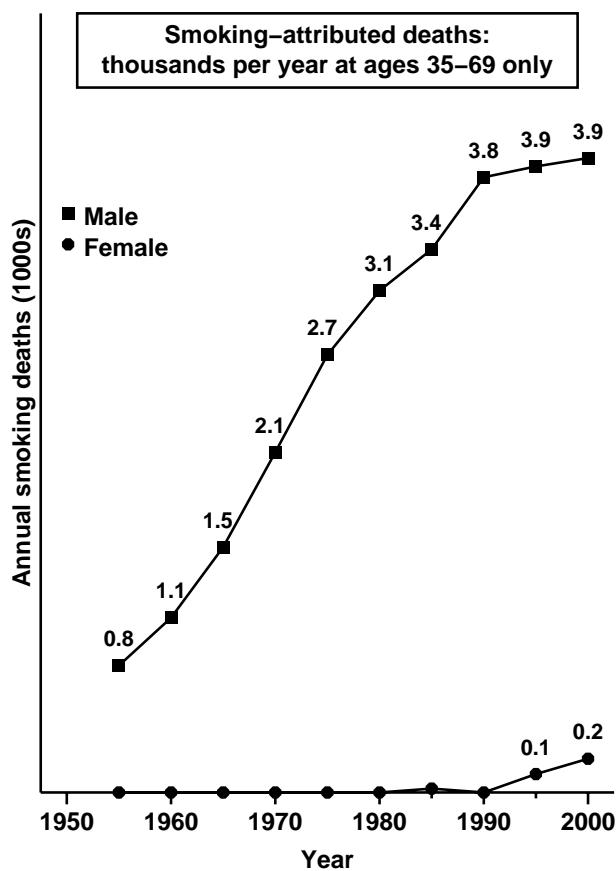
PORTUGAL: 1950-2000**Numbers of deaths attributed to smoking / total deaths (thousands)**

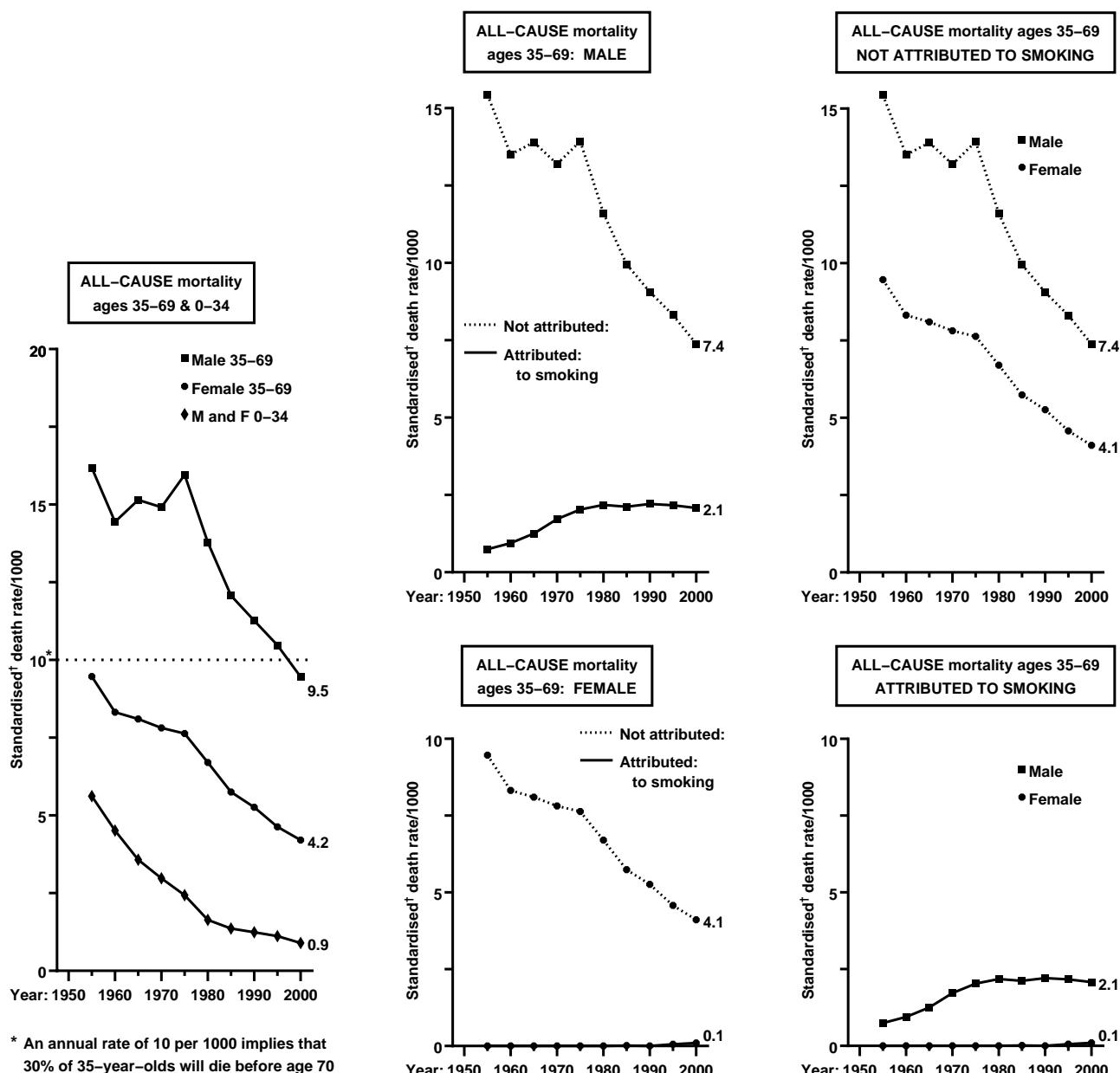
Year	Male (by age)				Female (by age)			
	0-34	35-69	70+	All	0-34	35-69	70+	All
1950
1955	-/18	0.8/17 (5%)	0.3/16 (2%)	1.1/50	-/15	0.0/12	0.0/22	0.0/49
1960	-/15	1.1/16 (7%)	0.2/17 (0.9%)	1.2/48	-/12	0.0/11	0.0/23	0.0/47
1965	-/13	1.5/18 (8%)	0.4/18 (2%)	2.0/49	-/9.5	0.0/12	0.0/25	0.0/46
1970	-/9.5	2.1/18 (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**

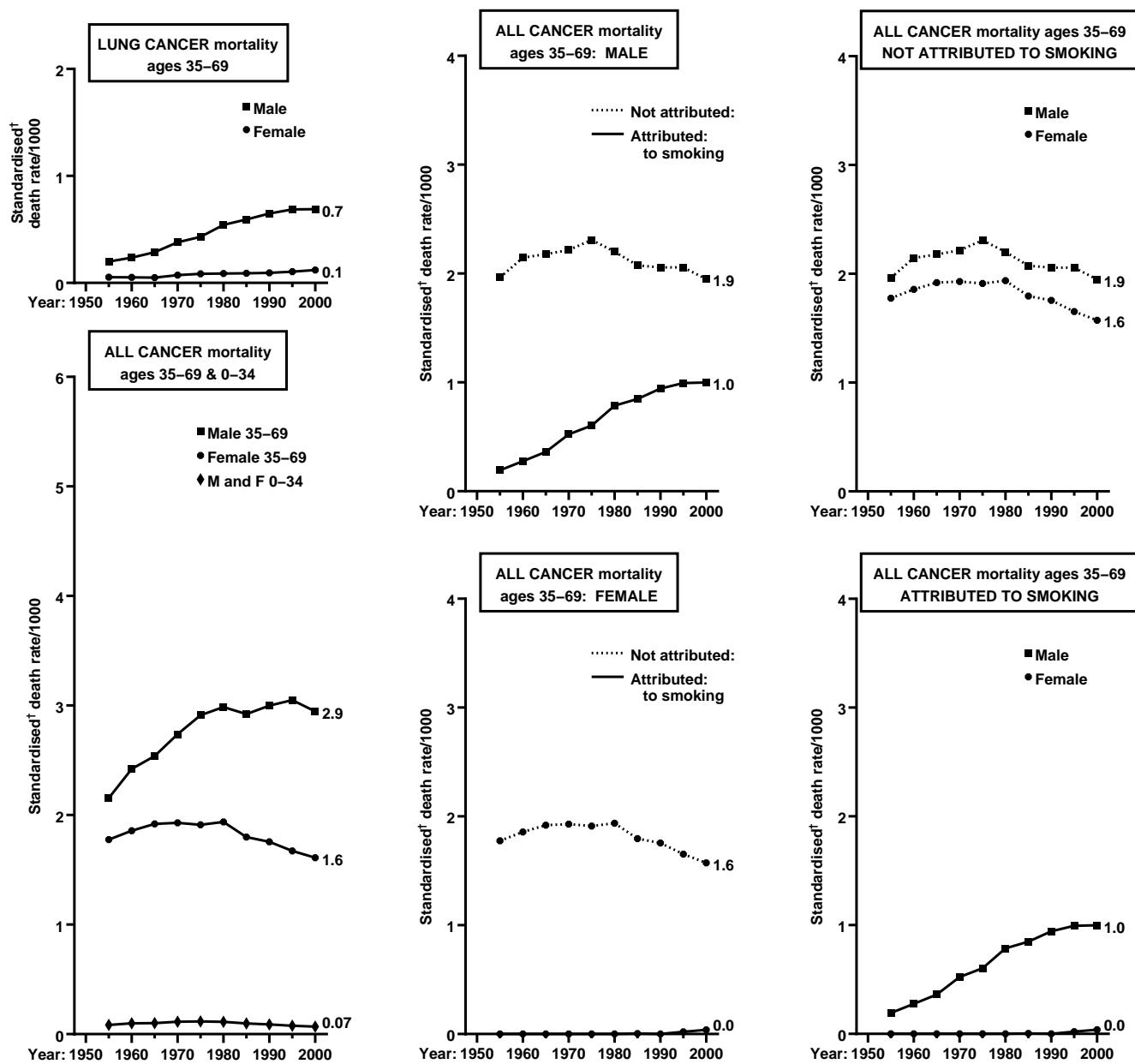
[†] Mean of 7 age-specific rates, ages 35-69 (or ages 0-34)

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

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

1955-2000: PORTUGAL

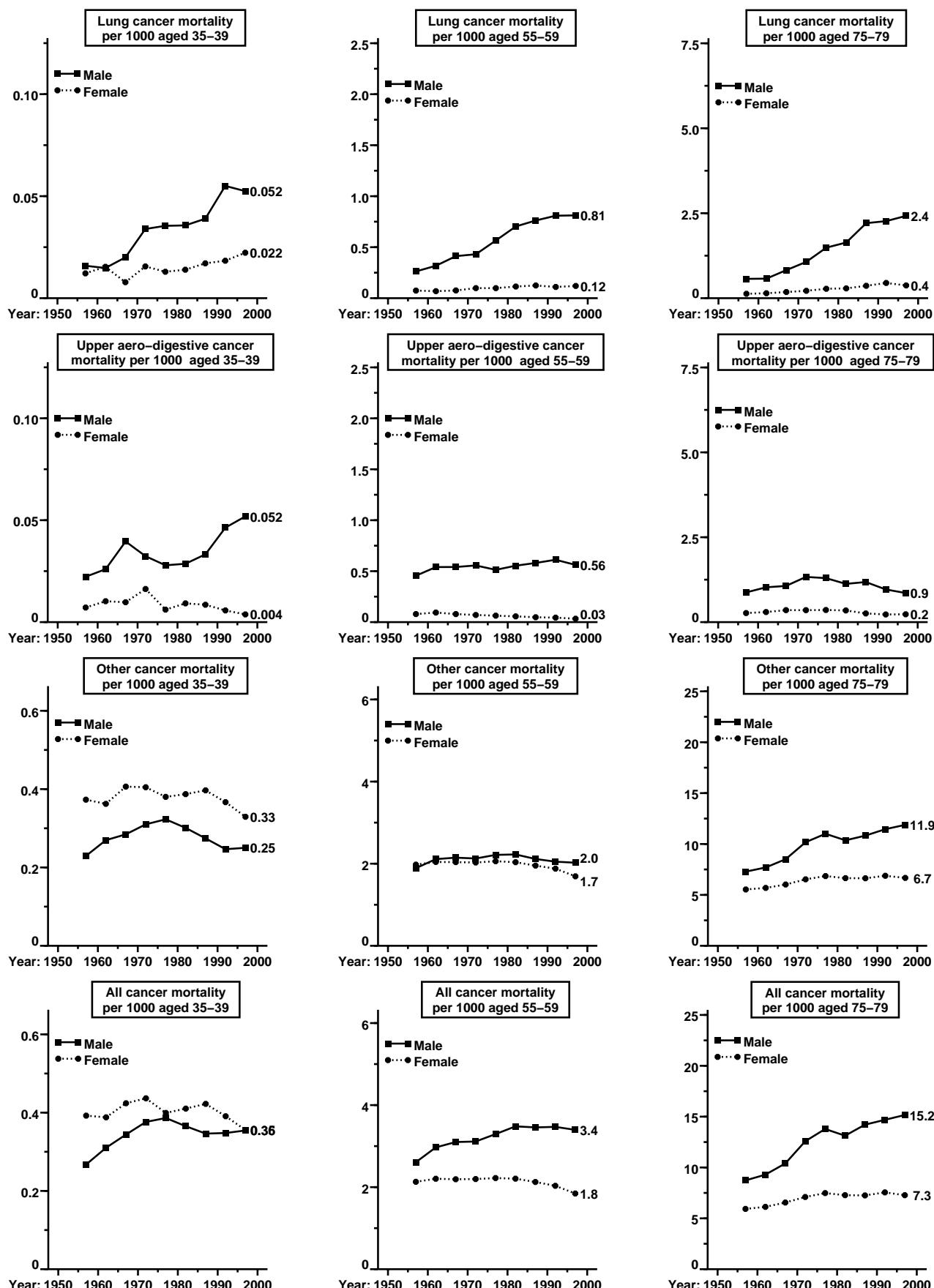
ALL CANCER mortality rates attributed and not attributed to smoking



[†] 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)								
	Attributed to smoking?	0–34		35–69		70–79		Yes	No	0–34		35–69		70–79	
		Yes	No	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		

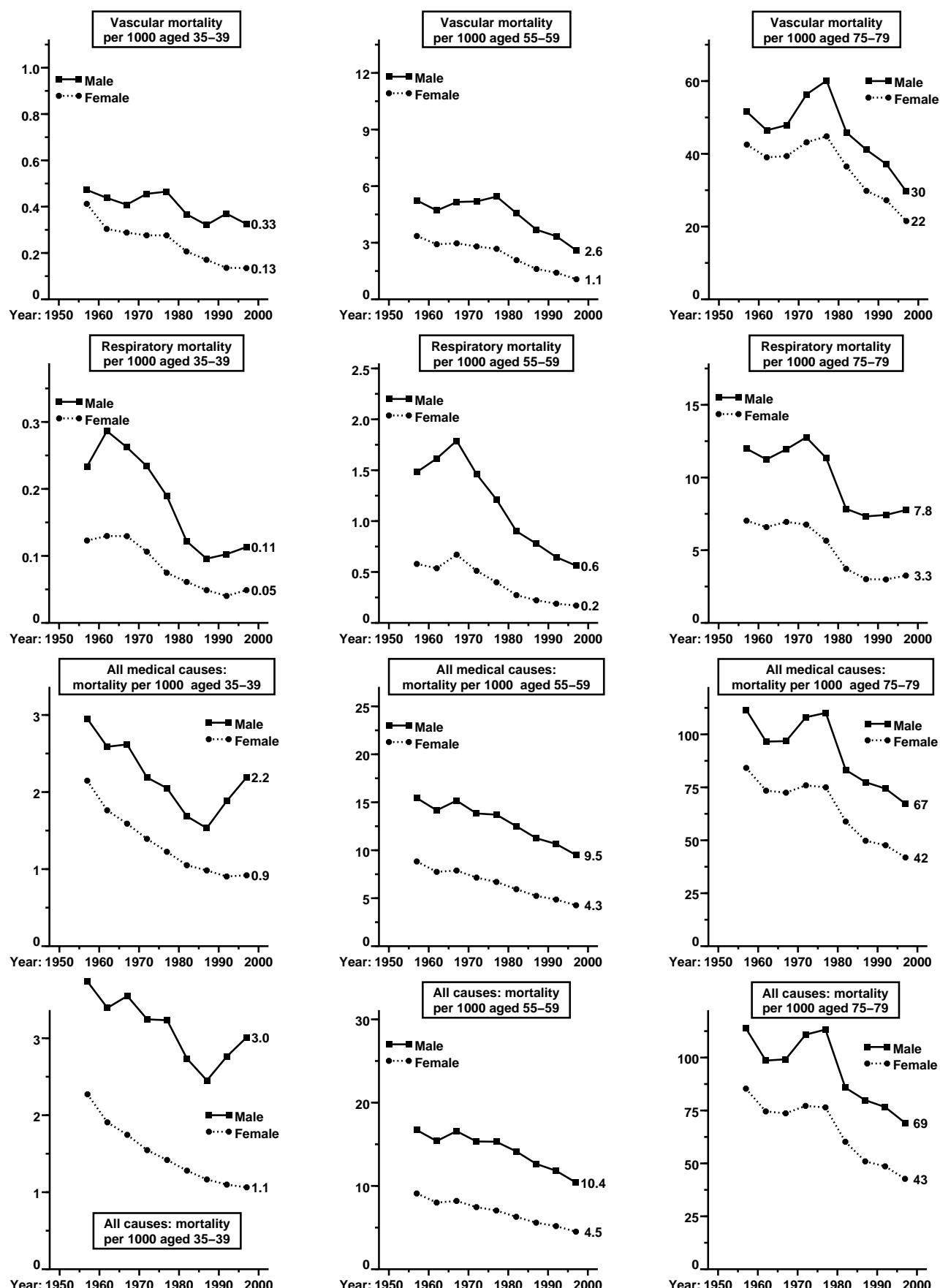
0–34 and 35–69 = means of 7 age-specific rates; 70–79 = mean of 2 rates (70–74 & 75–79)

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