

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

(2nd edition, revised June 2006:  
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**SPAIN**

**Raw data** (pages 446–47, 448–49)

**Analyses** (pages 450–51, 452–53, 454–55)

**Appendix** (pages 456–57)

**SPAIN: 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													
<b>ALL CAUSES</b>	189468	7972	58662		815.1	77.1	801.1		119.8	18.5	20.3	64.2	89.5	98.0	129.2
	170923	3324	25082		458.2	37.3	316.4		101.4	12.7	14.1	26.4	28.3	30.2	47.9
Tuberculosis	337	11	110		1.4	0.1	1.5		-	-	-	-	0.1	0.1	0.5
	183	6	26		0.5	0.1	0.3		-	0.1	-	-	0.1	0.1	0.1
HIV	1391	380	984		6.4	3.2	10.0		0.2	0.1	-	-	0.8	4.4	16.7
	320	125	192		1.4	1.1	1.9		0.1	-	0.2	-	0.2	2.1	5.0
Other infective and parasitic	1982	117	653		8.6	1.3	8.7		3.4	0.9	0.3	0.8	0.4	0.8	2.3
	2065	85	392		6.0	1.1	5.0		4.4	0.9	0.1	1.2	0.4	0.3	0.5
<b>ALL CANCER</b>	57525	623	24207		250.9	5.9	337.9		3.8	3.7	3.2	6.0	6.4	7.2	11.3
	34321	526	11883		111.0	5.1	149.8		1.6	3.2	3.1	3.8	4.0	6.4	13.6
Mouth and pharynx cancer	1838	15	1277		8.9	0.1	17.2		0.1	-	-	0.1	0.3	0.2	0.3
	348	8	138		1.2	0.1	1.7		-	-	-	-	-	0.1	0.4
Oesophagus cancer	1555	7	941		7.2	0.1	13.1		-	-	-	-	0.1	0.1	0.2
	235	-	72		0.7	-	0.9		-	-	-	-	-	-	-
Stomach cancer	3747	18	1551		16.2	0.2	21.6		-	-	-	0.1	0.2	0.2	0.6
	2345	11	642		7.0	0.1	8.1		-	-	-	0.1	0.2	0.2	0.4
Colorectal cancer	6464	23	2311		27.5	0.2	32.7		-	-	-	0.1	0.3	0.3	0.6
	5189	29	1407		15.4	0.2	17.9		-	-	-	0.2	0.5	1.0	
Liver cancer	2495	20	1032		10.7	0.2	14.7		0.1	-	0.1	0.1	0.1	0.3	0.6
	1174	6	287		3.4	0.1	3.7		-	0.1	-	0.2	0.1	0.1	-
Pancreas cancer	2077	9	994		9.2	0.1	14.0		-	-	-	0.1	-	0.1	0.4
	1923	5	594		5.9	0.0	7.7		-	-	-	0.1	0.1	0.1	0.2
Larynx cancer	1770	3	1053		8.2	0.0	14.5		-	-	-	-	0.1	0.1	0.1
	46	-	23		0.2	-	0.3		-	-	-	-	-	-	-
Lung cancer	15477	29	7724		68.6	0.2	108.0		-	-	-	-	0.2	0.3	1.2
	1886	10	870		6.7	0.1	10.7		-	-	-	0.1	0.2	0.4	
Malignant melanoma	391	20	208		1.8	0.2	2.7		-	-	0.1	-	0.3	0.3	0.5
	310	16	131		1.1	0.1	1.6		-	0.1	-	0.2	0.1	0.3	0.4
Female breast cancer	5677	71	2756		20.6	0.6	34.2		-	-	-	-	0.3	0.4	3.6
Cervix cancer	597	19	365		2.4	0.2	4.3		-	-	-	-	0.2	1.0	
Other uterine cancer	1206	3	420		3.9	0.0	5.4		-	-	-	-	0.1	0.1	
Ovarian cancer	1615	21	787		5.9	0.2	10.0		-	-	-	-	0.2	0.4	0.7
Prostate cancer	5456	1	794		22.2	0.0	11.7		-	-	-	0.1	-	-	-
Bladder cancer	3193	3	939		13.3	0.0	13.5		-	-	-	-	0.1	0.1	0.1
	721	1	101		1.9	0.0	1.3		-	-	-	-	-	-	0.1
Other and ill-defined cancer sites	9244	255	3943		40.7	2.5	54.4		1.9	1.6	1.0	3.1	2.7	2.9	4.0
	7740	171	2289		24.0	1.8	29.1		1.1	1.9	1.5	1.5	1.6	2.2	2.7
Hodgkin's disease	155	28	68		0.7	0.3	0.9		-	0.1	0.1	0.4	0.4	0.4	0.4
	125	23	40		0.4	0.2	0.5		-	0.1	0.5	0.2	0.4	0.3	-
Myeloma and non-Hodgkin lymphomas	2045	56	800		8.7	0.5	11.0		0.1	0.2	0.3	0.4	0.6	0.9	1.1
	1921	29	599		6.0	0.3	7.7		-	0.4	0.3	0.6	0.6	0.2	0.4
Leukaemia	1618	136	572		7.1	1.5	7.8		1.5	1.7	1.7	1.7	1.2	1.1	1.2
	1263	103	362		4.1	1.1	4.6		0.5	1.1	1.2	1.3	0.5	1.2	1.9
Diabetes	3558	16	814		14.8	0.1	11.6		0.1	-	-	0.1	-	0.2	0.6
	5695	13	551		14.1	0.1	7.2		-	-	-	-	0.1	0.2	0.5
<b>ALL VASCULAR DISEASE</b>	57056	416	14508		240.4	3.6	202.7		1.2	0.5	0.9	2.0	4.1	5.5	11.2
	68667	186	5378		166.2	1.8	69.2		1.4	0.3	1.1	1.0	1.8	2.6	4.3
Rheumatic heart disease and fever	523	6	222		2.2	0.1	3.1		-	-	-	-	0.1	0.2	
Hypertensive disease	1277	2	351		3.8	0.0	4.6		-	-	0.1	-	-	0.1	-
	1583	4	335		6.6	0.0	4.8		-	-	0.1	0.1	0.1	0.1	0.1
Ischaemic heart disease	22541	110	7585		96.2	0.9	105.6		-	-	0.1	0.3	0.5	1.7	3.9
	16774	24	1774		42.0	0.2	22.9		0.2	-	-	0.1	0.2	0.4	0.6
Pulmonary embolism and other venous disease	1170	27	374		5.0	0.2	5.0		-	-	-	-	0.4	0.3	0.9
	1645	17	210		4.3	0.2	2.7		-	-	0.1	-	0.3	0.2	0.4
Cerebrovascular disease	15019	86	2696		62.3	0.8	38.0		0.2	0.1	0.3	0.3	1.2	1.0	2.2
	21577	66	1545		52.0	0.6	19.8		-	0.1	0.2	0.4	0.5	0.9	2.1
Other vascular disease	16220	183	3296		68.0	1.7	46.0		0.9	0.4	0.6	1.3	2.0	2.4	4.0
	23922	75	1291		56.0	0.8	16.6		1.2	0.2	0.8	0.5	0.7	1.0	1.2
Chronic obstructive pulmonary disease	12222	19	1854		49.7	0.2	27.0		-	-	-	0.2	0.3	0.3	0.4
Other respiratory disease	11909	228	2007		49.5	2.1	27.7		2.8	0.7	0.4	1.0	2.5	2.8	4.8
	12447	80	831		29.8	0.8	10.5		1.9	0.1	0.3	0.5	0.6	1.0	1.6
Peptic ulcer	416	1	104		1.8	0.0	1.4		-	-	-	-	-	-	0.1
	337	4	31		0.8	0.0	0.4		-	0.1	-	-	0.2	-	-
Liver cirrhosis	3539	60	2280		16.5	0.5	30.5		-	-	-	-	0.5	2.9	
	1605	23	694		5.6	0.2	8.8		-	-	-	0.1	0.1	0.3	1.0
Renal disease	2876	15	470		11.9	0.1	6.6		-	0.1	-	0.3	0.1	0.2	0.4
	3010	19	310		7.5	0.2	4.0		0.1	-	-	0.2	0.5	0.2	0.3
Pregnancy, birth and congenital and perinatal causes	14	12	2		0.1	0.1	0.0		-	-	-	0.1	0.2	0.2	0.3
	1055	911	103		7.8	12.8	1.2		82.2	2.1	0.6	0.9	1.2	1.2	1.2
Ill-defined causes	916	752	103		6.8	11.2	1.2		71.2	1.5	1.5	1.8	1.0	0.3	0.9
	4288	334	1231		18.9	3.4	16.0		8.3	0.7	0.4	1.6	3.2	3.5	6.0
Other medical causes	5355	118	395		13.2	1.4	4.9		6.0	0.1	0.5	0.4	0.6	1.0	1.5
<b>ALL NON-MEDICAL CAUSES</b>	19207	536	4083		81.3	5.6	55.5		9.5	3.7	3.5	5.1	4.3	5.0	7.9
	27149	335	2492		67.8	3.8	31.6		8.2	3.1	2.4	3.4	2.9	2.8	4.0
Road traffic accidents	12107	4305	5254		55.2	38.2	62.8		8.3	5.9	11.1	46.1	66.3	66.3	63.1
	4434	1028	1439		16.6	10.1	17.0		6.3	3.3	4.9	13.7	15.8	12.6	14.1
Fire	4682	2199	1916		21.5	19.7	22.8		2.6	3.3	6.8	30.1	38.8	31.0	25.2
	1451	573	534		6.3	5.7	6.3		2.4	1.9	3.6	9.8	10.2	6.5	5.6
Suicide	127	27	54		0.6	0.3	0.7		0.7	0.5	-	0.1	0.1	0.3	0.4
	79	16	19		0.3	0.2	0.2		0.4	0.1	0.1	0.2	0.3	-	0.2
Homicide	2574	635	1247		11.6	5.4	15.1		-	0.6	5.3	9.2	12.2	10.3	
	819	153	414		3.3	1.4	5.0		-	0.3	1.4	1.5	2.7	3.6	
<b>POPULATION:</b> (1000s; UN, 2004 revision)	<b>M=male</b>		19970	9639	8450	984	980	1081	1343	1713	1843	1696			
	<b>F=female</b>		20747												

2000: SPAIN

**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
181.0	246.7	368.2	568.5	814.7	1401.7	2026.5	3112.8	5576.5	13785.7	M	ALL CAUSES	001-999/A00-Y89
69.7	106.0	152.4	219.4	307.0	528.4	832.0	1426.9	2959.6	11021.4	F	Tuberculosis	010-018, 137/ A15-A19, B90
0.7	0.3	0.8	1.2	1.1	2.2	4.0	5.9	12.4	20.4	M	HIV	279.5, 279.6/B20-B24
0.1	-	0.2	0.2	0.4	0.6	0.9	2.8	4.6	9.0	F	Other infective and parasitic	Rest of 001-139/rest of A00-B99 excl A33,A34
26.9	18.4	8.6	5.7	4.6	3.2	2.1	1.4	1.4	1.5	M		
6.0	3.8	1.7	0.6	0.1	0.3	0.5	0.3	-	-	F		
3.5	3.5	4.9	6.5	6.8	13.6	22.1	33.7	55.8	129.7	M		
1.0	0.7	1.7	2.8	3.4	8.1	17.1	21.7	42.0	108.6	F		
27.3	66.6	141.8	248.4	380.0	630.3	871.1	1175.3	1736.3	2746.4	M	ALL CANCER	140-208/C00-C97
27.1	53.9	81.9	125.8	165.3	252.4	342.6	446.8	687.9	1241.5	F		
1.9	6.2	11.8	19.7	22.3	30.2	28.1	25.0	31.5	33.3	M	Mouth and pharynx cancer	140-149/C00-C14
0.2	0.7	1.1	2.1	2.2	2.5	3.4	4.0	4.9	12.9	F	Oesophagus cancer	150/C15
0.4	2.3	5.8	12.1	18.8	25.4	26.9	29.6	33.1	36.0	M		
0.1	0.2	0.6	0.7	1.4	1.8	1.6	2.8	4.2	10.5	F		
1.9	4.6	8.9	15.3	23.0	39.2	58.6	79.1	118.4	178.3	M	Stomach cancer	151/C16
1.2	3.5	3.7	6.3	7.4	12.0	22.3	29.6	48.3	105.4	F	Colorectal cancer	153, 154/C18-C21
2.2	4.3	10.8	19.3	30.2	60.9	101.5	134.2	208.0	386.1	M	Liver cancer	155.0/C22 excl C221
2.2	5.2	8.1	12.0	19.7	30.4	47.9	63.1	111.7	232.9	F		
0.5	1.7	3.7	8.8	16.5	26.8	44.8	63.1	78.4	99.0	M	Pancreas cancer	157/C25
0.3	0.5	1.2	1.2	3.1	7.1	12.7	19.7	31.1	45.0	F	Larynx cancer	161/C32
5.2	19.3	50.1	82.8	128.0	203.9	266.7	346.8	453.3	473.4	M	Ovarian cancer	162/C33, C34
2.5	5.9	9.1	10.9	11.4	16.5	19.0	24.1	34.9	50.1	F	Prostate cancer	185/C61
1.2	0.9	1.9	2.1	3.7	4.3	5.1	7.1	7.8	12.5	M	Malignant melanoma	172/C43
0.9	0.8	1.0	1.5	1.3	2.7	3.1	3.9	4.7	8.9	F	Female breast cancer	174/C50
8.3	16.6	24.3	35.7	41.3	55.3	58.2	66.9	87.3	153.5	M	Cervix cancer	180/C53
1.8	3.7	4.4	5.2	4.4	4.8	6.1	5.6	8.3	9.2	F	Other uterine cancer	179, 182/C54, C55
0.2	0.6	1.9	4.9	6.5	9.3	14.6	18.5	23.9	42.1	M	Ovarian cancer	183/C56, C570-C574
1.4	2.7	4.7	11.0	13.2	18.0	19.2	23.1	31.1	33.4	F	Hodgkin's disease	185/C61
0.1	0.1	0.9	2.9	6.2	24.0	47.8	91.5	209.7	573.0	M	Bladder cancer	188/C67
0.2	0.7	3.2	7.1	13.4	26.6	43.5	66.2	122.3	212.2	F	Other and ill-defined cancer sites	Rest of 140-199/ rest of C00-C80, C97
6.9	14.8	24.1	41.2	66.0	98.4	129.1	182.2	261.2	430.6	M		201/C81
4.8	8.7	13.0	20.2	30.9	51.6	74.6	102.2	158.5	311.5	F		
0.3	0.8	0.7	1.3	0.5	1.2	1.2	1.9	3.7	4.7	M	Myeloma and non- Hodgkin lymphomas	200, 202-203/ C82-C90, C96
0.6	0.2	0.3	0.3	0.4	0.6	0.9	1.9	1.4	3.3	F	Leukaemia	204-208/C91-C95
2.7	3.2	4.2	5.9	10.6	21.2	29.6	45.1	68.8	88.8	M	Diabetes	250/E10-E14
1.2	1.7	2.8	4.6	7.2	14.2	22.1	29.5	49.7	61.9	F		
2.0	2.5	3.5	5.9	6.1	13.8	20.7	27.9	44.2	89.9	M		
0.7	1.8	2.6	3.2	4.5	8.5	10.9	15.4	24.5	46.6	F		
0.9	1.7	1.6	6.4	11.5	23.7	35.8	67.6	125.8	306.6	M		
0.5	0.7	1.0	1.6	6.0	12.5	27.9	55.9	127.7	373.7	F		
22.0	44.5	76.9	133.6	196.4	373.4	571.8	959.0	1811.0	5044.9	M	ALL VASCULAR DISEASE	390-459/I00-I99
7.9	13.3	22.0	32.5	56.0	123.0	229.9	493.8	1169.4	5154.7	F	Rheumatic heart disease and fever	390-398/I00-I09
0.3	0.4	1.0	2.0	3.1	5.7	9.5	13.0	15.8	20.4	M	Hypertensive disease	401-405/I10-I15
0.4	0.3	0.6	2.2	3.9	10.0	14.9	21.8	33.6	45.0	F		
0.3	0.7	0.9	3.1	4.2	9.8	14.5	26.0	48.8	158.6	M	Ischaemic heart disease	410-414/I20-I25
0.1	0.3	1.0	1.3	2.1	3.3	10.4	23.9	59.1	269.5	F	Pulmonary embolism and other venous disease	415.1, 451-453/ I26, I80-I82
10.5	24.5	41.4	77.1	105.0	191.8	289.3	431.5	723.0	1508.4	M	Cerebrovascular disease	430-438/I60-I69
3.6	6.7	9.6	16.9	38.0	84.0	162.1	347.2	1113.7		F		
1.2	2.1	3.8	3.4	4.4	10.2	10.2	18.7	35.9	86.5	M		
0.4	0.9	1.3	1.8	2.8	4.9	6.5	15.0	32.6	106.0	F		
3.7	5.7	13.5	21.8	35.2	71.4	114.9	238.4	513.1	1552.7	M		
3.2	4.1	8.2	10.6	16.2	35.8	60.3	147.8	382.0	1630.3	F		
6.0	11.1	16.4	26.3	44.4	84.5	133.4	231.4	474.3	1718.5	M	Other vascular disease	Rest of 390-459/ rest of I00-I99
2.4	4.0	4.2	6.9	14.1	31.0	53.7	123.2	314.9	1990.1	F	Chronic obstructive pulmonary disease	490-496/ J40-J47, J67
0.5	1.9	3.8	6.9	18.1	51.3	106.7	215.4	471.2	1243.8	M	Other respiratory disease	Rest of 460-519/ rest of J00-J98
0.4	1.0	1.1	1.9	3.2	8.5	16.6	34.8	80.2	320.9	F		
6.4	8.3	9.6	14.4	23.3	48.2	83.8	153.9	383.5	1315.9	M		
2.7	3.1	4.5	5.3	9.3	15.4	32.8	71.6	186.4	986.6	F		
0.2	0.3	0.9	1.4	1.4	2.9	2.9	6.4	13.6	38.2	M	Pregnancy, birth and perinatal causes	531-533/K25-K27
0.2	0.1	0.1	0.2	0.2	0.7	1.1	2.7	6.4	23.7	F	Ill-defined causes	571/K70, K74
5.7	13.1	19.8	30.5	35.2	52.4	56.7	59.1	69.7	64.9	M		
1.8	2.1	5.6	7.6	10.2	14.9	19.3	25.9	39.5	31.7	F		
0.7	1.4	2.2	2.7	6.1	12.3	21.0	44.0	89.2	321.2	M	Renal disease	580-590/N00-N19
0.4	0.6	1.3	1.5	2.8	7.4	14.1	23.9	57.4	209.1	F		
0.1	0.1	-	-	-	-	-	-	-	-	M	Peptic ulcer	630-676/A34,000-O99
1.4	1.1	0.8	1.7	1.0	1.2	1.3	0.6	4.4	2.3	F	Congenital and perinatal causes	740-779/A33, P00-P96, Q00-Q99
0.7	1.3	1.0	0.7	1.1	1.9	1.8	1.4	1.9	3.3	M		780-799/R00-R99
7.8	9.2	10.4	12.1	16.6	24.5	31.1	43.6	82.5	400.5	F		
1.9	2.3	2.9	3.9	3.4	7.4	12.2	19.2	53.6	447.3	M		
13.6	17.7	27.0	39.5	52.9	91.3	146.5	259.3	592.2	1918.8	M	Other medical causes	Rest of 001-799/ rest of A00-R99
6.7	10.1	13.0	18.9	29.2	54.4	88.7	187.9	449.9	1990.2	F		
63.5	58.6	59.1	57.5	59.4	71.2	69.9	87.6	127.4	230.7	M	ALL NON- MEDICAL CAUSES	E800-E999/V01-Y89
12.2	12.9	14.2	16.0	16.4	20.9	26.4	38.3	52.8	121.1	F		
23.1	22.3	21.7	21.1	23.3	24.9	23.1	27.0	31.7	33.9	M	Road traffic accidents	E810-E819, E826-E829/ part of V01-V99, Y850
4.6	5.5	5.5	6.3	6.0	6.9	9.0	10.3	13.5	13.6	F		
0.5	0.4	0.9	0.5	0.7	1.0	0.7	0.9	3.4	4.0	M	Fire	E890-E899/X00-X09
0.2	0.2	0.4	-	0.2	-	0.4	0.4	1.4	3.1	F		
13.6	12.9	13.8	13.2	14.1	17.9	20.4	24.3	34.7	61.7	M	Suicide	E950-E959/X60-X84
2.9	3.5	4.1	5.3	4.8	7.1	6.9	8.3	8.7	10.1	F		
2.1	2.5	2.2	1.5	1.6	1.8	0.9	0.2	0.7	1.3	M	Homicide	E960-E969/ X85-X99, Y00-Y09
0.7	0.8	0.5	0.7	0.5	0.2	0.4	0.5	1.0	0.4	F		
1621	1491	1250	1177	1058	865	987	845	565	472	M	POPULATION	(1000s; UN, 2004 revision)
1603	1499	1260	1203	1108	947	1131	1053	803	941	F		

**SPAIN: 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
<b>1995</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
0-34 Total	11399	771	47	26	698	44	306	748	135	4717	4678
35-69 Sm.	21167	11666	7338	2292	2036	1718	493	4593	—	2697	—
35-69 Total	62229	24769	7943	3532	13294	2253	1777	16472	3105	8944	4909
(34%)	(47%)	(92%)	(65%)	(15%)	(76%)	(28%)	(28%)	(28%)		(30%)	
70+ Sm.	23607	9553	6245	976	2332	6728	698	4563	—	2065	—
70+ Total	110860	28607	6941	1710	19956	9492	6742	42606	1558	19559	2296
(21%)	(33%)	(90%)	(57%)	(12%)	(71%)	(10%)	(11%)	(11%)		(11%)	
Any age Sm.	44774	21219	13583	3268	4368	8446	1191	9156	—	4762	—
Any age Total	184488	54147	14931	5268	33948	11789	8825	59826	4798	33220	11883
(24%)	(39%)	(91%)	(62%)	(13%)	(72%)	(13%)	(13%)	(15%)		(14%)	
<b>2000</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
0-34 Total	7972	623	29	25	569	19	228	416	60	2321	4305
35-69 Sm.	19524	11148	7112	2090	1946	1391	541	3949	—	2495	—
35-69 Total	58662	24207	7724	3271	13212	1854	2007	14508	2280	8552	5254
(33%)	(46%)	(92%)	(64%)	(15%)	(75%)	(27%)	(27%)	(27%)		(29%)	
70+ Sm.	25531	10548	6911	1040	2597	7260	958	4325	—	2440	—
70+ Total	122834	32695	7724	1867	23104	10349	9674	42132	1199	24237	2548
(21%)	(32%)	(89%)	(56%)	(11%)	(70%)	(10%)	(10%)	(10%)		(10%)	
Any age Sm.	45055	21696	14023	3130	4543	8651	1499	8274	—	4935	—
Any age Total	189468	57525	15477	5163	36885	12222	11909	57056	3539	35110	12107
(24%)	(38%)	(91%)	(61%)	(12%)	(71%)	(13%)	(13%)	(15%)		(14%)	

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	
<b>POPULATION (1000s; UN, 2004 revision)</b>														
1995	19568	10028	7933	1467	1270	1201	1083	937	1041	934	736	440	431	
2000	19970	9639	8450	1621	1491	1250	1177	1058	865	987	845	565	472	
<b>NUMBER OF DEATHS (Source: WHO)</b>														
<b>All causes</b>														
1995	184488	11399	62229	3447	3400	4875	6192	8955	14998	20362	25820	25279	59761	
2000	189468	7972	58662	2935	3678	4603	6691	8622	12125	20008	26300	31507	65027	
<b>Lung cancer</b>														
1995	14931	47	7943	117	284	608	821	1257	2173	2683	2830	2020	2091	
2000	15477	29	7724	85	287	626	974	1355	1764	2633	2930	2561	2233	
<b>ANNUAL DEATH RATE / 100,000</b>														
(*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	872.0*	107.8*	865.1*	235.0	267.7	405.8	571.9	955.9	1440.6	2179.2	3508.2	5746.5	13868.9	
2000	815.1*	77.1*	801.1*	181.0	246.7	368.2	568.5	814.7	1401.7	2026.5	3112.8	5576.5	13785.7	
<b>All cancer</b>														
1995	258.3*	7.3*	349.8*	32.7	72.8	154.6	247.4	417.7	638.9	884.4	1269.4	1753.1	2680.9	
2000	250.9*	5.9*	337.9*	27.3	66.6	141.8	248.4	380.0	630.3	871.1	1175.3	1736.3	2746.4	
<b>Lung cancer</b>														
1995	71.6*	0.4*	112.4*	8.0	22.4	50.6	75.8	134.2	208.7	287.1	384.5	459.2	485.3	
2000	68.6*	0.2*	108.0*	5.2	19.3	50.1	82.8	128.0	203.9	266.7	346.8	453.3	473.4	
<b>Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)</b>														
1995	26.7*	0.2*	49.2*	3.1	13.1	32.3	50.0	75.9	85.0	85.2	97.4	101.8	126.5	
2000	24.3*	0.2*	44.8*	3.2	11.6	25.8	45.8	59.2	82.7	85.3	86.3	102.7	118.3	
<b>Other cancer</b>														
1995	160.0*	6.7*	188.2*	21.6	37.4	71.7	121.6	207.6	345.2	512.1	787.5	1192.1	2069.2	
2000	158.0*	5.5*	185.1*	18.9	35.8	65.9	119.9	192.8	343.7	519.1	742.2	1180.4	2154.8	
<b>Chronic obstructive pulmonary disease (COPD)</b>														
1995	53.8*	0.4*	32.9*	0.8	2.0	4.8	10.3	28.4	57.9	126.0	273.9	514.4	1209.8	
2000	49.7*	0.2*	27.0*	0.5	1.9	3.8	6.9	18.1	51.3	106.7	215.4	471.2	1243.8	
<b>Other respiratory disease</b>														
1995	40.9*	2.8*	25.0*	6.1	7.0	8.5	12.8	24.0	41.7	74.7	140.6	300.8	1017.4	
2000	49.5*	2.1*	27.7*	6.4	8.3	9.6	14.4	23.3	48.2	83.8	153.9	383.5	1315.9	
<b>Vascular disease</b>														
1995	279.2*	6.8*	233.0*	31.2	52.7	92.4	139.7	250.9	399.5	664.9	1153.4	2052.3	5822.5	
2000	240.4*	3.6*	202.7*	22.0	44.5	76.9	133.6	196.4	373.4	571.8	959.0	1811.0	5044.9	
<b>Liver cirrhosis</b>														
1995	23.9*	1.2*	42.7*	10.4	18.1	26.2	34.5	57.3	69.3	83.0	92.1	97.5	104.7	
2000	16.5*	0.5*	30.5*	5.7	13.1	19.8	30.5	35.2	52.4	56.7	59.1	69.7	64.9	
<b>Other medical causes</b>														
1995	159.0*	48.1*	119.1*	92.7	61.9	63.8	70.7	108.5	164.0	272.2	477.7	909.5	2794.6	
2000	152.8*	26.5*	112.5*	55.6	53.7	57.2	77.1	102.2	174.9	266.7	462.5	977.3	3139.1	
<b>All non-medical causes</b>														
1995	56.9*	41.2*	62.6*	61.2	53.1	55.4	56.2	69.2	69.3	74.0	101.0	118.9	239.0	
2000	55.2*	38.2*	62.8*	63.5	58.6	59.1	57.5	59.4	71.2	69.9	87.6	127.4	230.7	

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

1995, 2000: SPAIN

## 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
<b>1995</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
Total	4402	585	16	11	558	24	112	293	29	2240	1119
35-69 Sm.	0	0	0	0	0	0	0	0	—	0	—
Total	27044 (%)	12435 (%)	659 (%)	199 (%)	11577 (%)	438 (%)	659 (%)	6437 (%)	990	4647 (%)	1438
70+ Sm.	0	0	0	0	0	0	0	0	—	0	—
Total	130293 (%)	19737 (%)	904 (%)	387 (%)	18446 (%)	3953 (%)	7524 (%)	65154 (%)	1080	30960 (%)	1885
Any age Sm.	0	0	0	0	0	0	0	0	—	0	—
Total	161739 (%)	32757 (%)	1579 (%)	597 (%)	30581 (%)	4415 (%)	8295 (%)	71884 (%)	2099	37847 (%)	4442
<b>2000</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
Total	3324	526	10	8	508	12	80	186	23	1469	1028
35-69 Sm.	417	232	191	16	25	27	13	71	—	74	—
Total	25082 (%)	11883 (%)	870 (22%)	233 (7%)	10780 (%)	363 (7%)	831 (2%)	5378 (1%)	694	4494 (2%)	1439
70+ Sm.	0	0	0	0	0	0	0	0	—	0	—
Total	142517 (%)	21912 (%)	1006 (0%)	388 (0%)	20518 (0%)	4030 (0%)	11536 (0%)	63103 (0%)	888	39081 (0%)	1967
Any age Sm.	417	232	191	16	25	27	13	71	—	74	—
Total	170923 (%)	34321 (1%)	1886 (10%)	629 (3%)	31806 (0%)	4405 (1%)	12447 (0%)	68667 (0%)	1605	45044 (0%)	4434

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	
<b>POPULATION (1000s; UN, 2004 revision)</b>														
1995	20353	9608	8293	1464	1274	1217	1111	999	1142	1087	933	682	837	
2000	20747	9200	8750	1603	1499	1260	1203	1108	947	1131	1053	803	941	
<b>NUMBER OF DEATHS (Source: WHO)</b>														
<b>All causes</b>														
1995	161739	4402	27044	1291	1448	1940	2566	3614	6324	9861	15264	22021	93008	
2000	170923	3324	25082	1117	1589	1920	2640	3402	5002	9412	15027	23757	103733	
<b>Lung cancer</b>														
1995	1579	16	659	39	53	55	74	84	152	202	247	242	415	
2000	1886	10	870	40	88	114	131	126	156	215	254	280	472	
<b>ANNUAL DEATH RATE / 100,000</b>														
(*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	487.8*	47.8*	345.0*	88.2	113.7	159.4	231.0	361.7	553.6	907.5	1635.8	3229.4	11118.7	
2000	458.2*	37.3*	316.4*	69.7	106.0	152.4	219.4	307.0	528.4	832.0	1426.9	2959.6	11021.4	
<b>All cancer</b>														
1995	116.5*	5.7*	158.8*	34.8	56.4	88.0	125.5	195.7	256.1	355.3	493.9	711.0	1228.9	
2000	111.0*	5.1*	149.8*	27.1	53.9	81.9	125.8	165.3	252.4	342.6	446.8	687.9	1241.5	
<b>Lung cancer</b>														
1995	5.7*	0.1*	8.3*	2.7	4.2	4.5	6.7	8.4	13.3	18.6	26.5	35.5	49.6	
2000	6.7*	0.1*	10.7*	2.5	5.9	9.1	10.9	11.4	16.5	19.0	24.1	34.9	50.1	
<b>Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)</b>														
1995	2.1*	0.1*	2.5*	0.5	0.9	1.8	2.5	2.7	3.8	5.4	8.1	13.5	26.2	
2000	2.1*	0.1*	2.9*	0.3	1.1	2.1	3.0	3.8	4.6	5.6	7.3	9.8	24.6	
<b>Other cancer</b>														
1995	108.7*	5.5*	148.0*	31.6	51.3	81.7	116.3	184.5	239.1	331.3	459.3	662.0	1153.1	
2000	102.2*	5.0*	136.2*	24.3	46.9	70.7	111.9	150.1	231.2	318.1	415.3	643.2	1166.7	
<b>Chronic obstructive pulmonary disease (COPD)</b>														
1995	12.3*	0.2*	5.7*	0.5	0.4	1.6	2.1	6.1	10.4	18.6	46.0	100.9	339.0	
2000	10.7*	0.1*	4.7*	0.4	1.0	1.1	1.9	3.2	8.5	16.6	34.8	80.2	320.9	
<b>Other respiratory disease</b>														
1995	22.6*	1.2*	8.4*	2.1	2.6	3.2	4.5	6.2	15.0	25.1	56.5	147.8	716.0	
2000	29.8*	0.8*	10.5*	2.7	3.1	4.5	5.3	9.3	15.4	32.8	71.6	186.4	986.6	
<b>Vascular disease</b>														
1995	196.1*	2.9*	83.0*	9.4	15.6	26.0	42.3	69.2	137.2	281.2	623.8	1422.6	5933.3	
2000	166.2*	1.8*	69.2*	7.9	13.3	22.0	32.5	56.0	123.0	229.9	493.8	1169.4	5154.7	
<b>Liver cirrhosis</b>														
1995	7.9*	0.3*	12.7*	2.2	4.9	5.6	8.6	14.1	21.9	31.4	38.8	46.2	48.2	
2000	5.6*	0.2*	8.8*	1.8	2.1	5.6	7.6	10.2	14.9	19.3	25.9	39.5	31.7	
<b>Other medical causes</b>														
1995	114.9*	26.8*	58.7*	26.4	20.0	21.4	32.7	50.5	92.1	168.0	337.0	743.7	2718.9	
2000	118.3*	19.1*	56.5*	17.5	19.8	23.1	30.3	46.7	93.4	164.3	315.8	743.4	3164.9	
<b>All non-medical causes</b>														
1995	17.6*	10.8*	17.7*	12.8	13.7	13.6	15.4	19.9	20.9	27.8	39.8	57.2	134.4	
2000	16.6*	10.1*	17.0*	12.2	12.9	14.2	16.0	16.4	20.9	26.4	38.3	52.8	121.1	

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

**SPAIN: 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	– / 8.0	– / 3.3	–
35–69	20 / 59	0.4 / 25	23 years
70+	26 / 123	0.0 / 143	8 years
All ages	45 / 189	0.4 / 171	15 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	7.1/7.7	6.9/7.7	14/15	–/0.0	0.2/0.9	0.0/1.0	0.2/1.9
All Cancer	–/0.6	11/24 (46%)	11/33 (32%)	22/58	–/0.5	0.2/12 ( 2%)	0.0/22 ( 0%)	0.2/34
Vascular	–/0.4	3.9/15	4.3/42	8.3/57	–/0.2	0.1/5.4	0.0/63	0.1/69
Respiratory	–/0.2	1.9/3.9	8.2/20	10/24	–/0.1	0.0/1.2	0.0/16	0.0/17
All Other	–/6.7	2.5/16	2.4/28	4.9/51	–/2.5	0.1/6.6	0.0/42	0.1/51
All Causes	–/8.0	20/59 (33%)	26/123 (21%)	45/189	–/3.3	0.4/25 ( 2%)	0.0/143 ( 0%)	0.4/171

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

Cause	Male	Female	Male + Female
All Cancer	22 / 58 (38%)	0.2 / 34 (0.7%)	22 / 92 (24%)
All Causes	45 / 189 (24%)	0.4 / 171 (0.2%)	45 / 360 (13%)

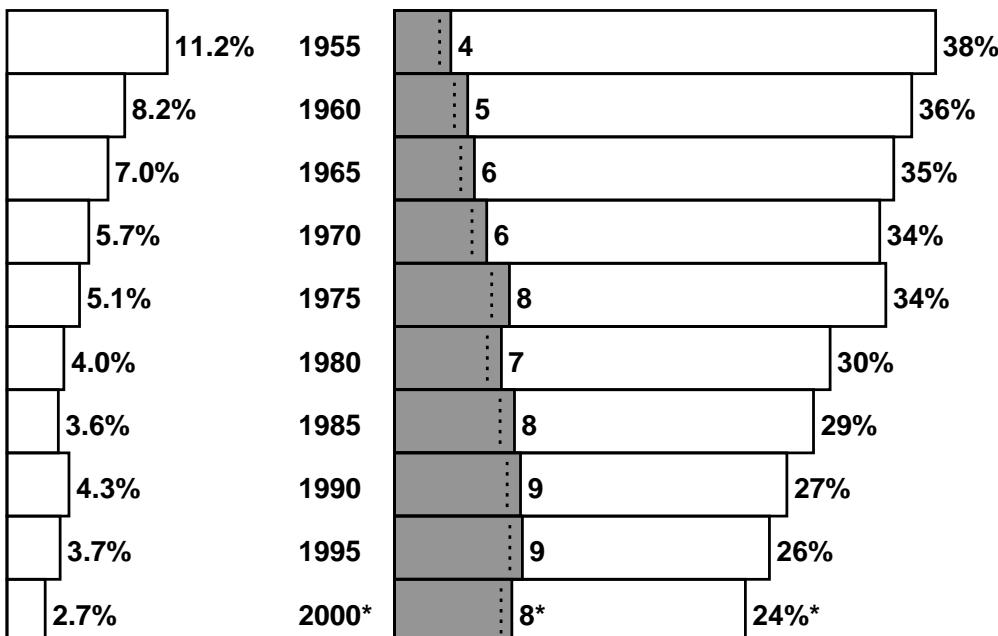
1955-2000: SPAIN

**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)**

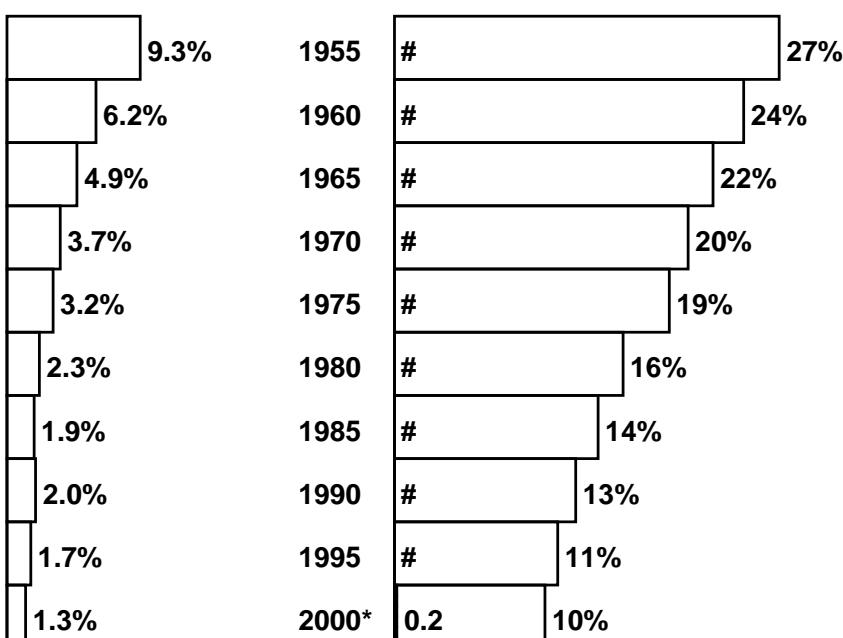
\*eg, at year 2000 male death rates, out of 100 men aged 35, 24 would die before age 70 (with 8 of these deaths attributed to smoking)

**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

**SPAIN: 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
<b>1950</b>	...	...	...	...	...	...	...	...
<b>1955</b>	-/32	5.6/52 <b>(11%)</b>	1.5/52 <b>( 3%)</b>	7.1/135	-/25	0.0/40	0.0/68	0.0/134
<b>1960</b>	-/24	7.6/52 <b>(15%)</b>	3.3/57 <b>( 6%)</b>	11/133	-/18	0.3/39	0.0/73	0.3/129
<b>1965</b>	-/21	8.9/55 <b>(16%)</b>	4.9/62 <b>( 8%)</b>	14/138	-/14	0.0/38	0.0/78	0.0/130
<b>1970</b>	-/17	11/59 <b>(19%)</b>	6.3/68 <b>( 9%)</b>	17/144	-/11	0.4/38	0.0/87	0.4/136
<b>1975</b>	-/16	14/62 <b>(23%)</b>	10/78 <b>(13%)</b>	25/155	-/9.8	0.0/37	0.0/96	0.0/143
<b>1980</b>	-/12	14/58 <b>(25%)</b>	12/82 <b>(14%)</b>	26/152	-/6.9	0.0/32	0.0/98	0.0/137
<b>1985</b>	-/10	17/60 <b>(29%)</b>	16/94 <b>(17%)</b>	33/165	-/5.1	0.0/30	0.0/113	0.0/148
<b>1990</b>	-/13	20/63 <b>(32%)</b>	19/101 <b>(19%)</b>	39/177	-/5.2	0.0/29	0.0/122	0.0/156
<b>1995</b>	-/11	21/62 <b>(34%)</b>	24/111 <b>(21%)</b>	45/184	-/4.4	0.0/27	0.0/130	0.0/162
<b>2000</b>	-/8.0	20/59 <b>(33%)</b>	26/123 <b>(21%)</b>	45/189	-/3.3	0.4/25 <b>( 2%)</b>	0.0/143	0.4/171

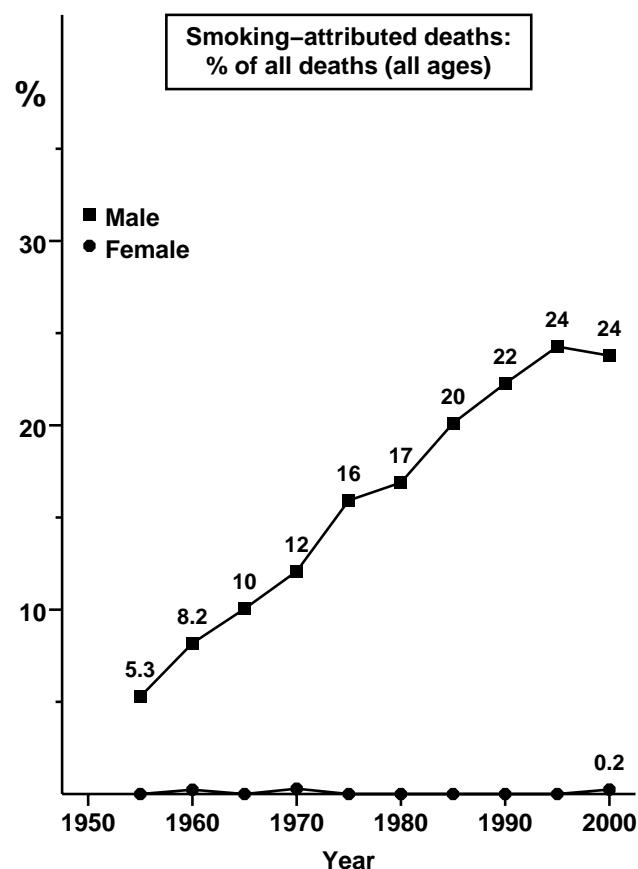
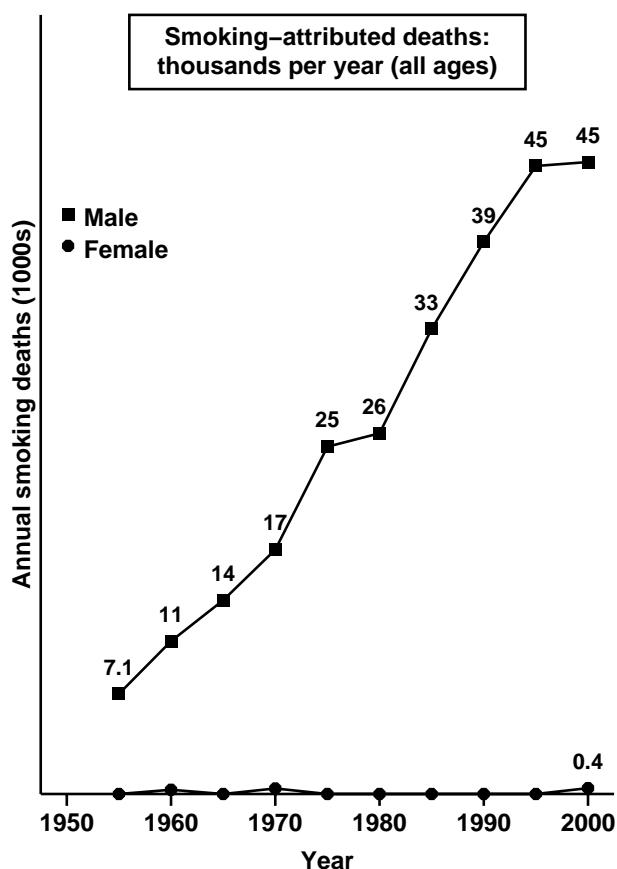
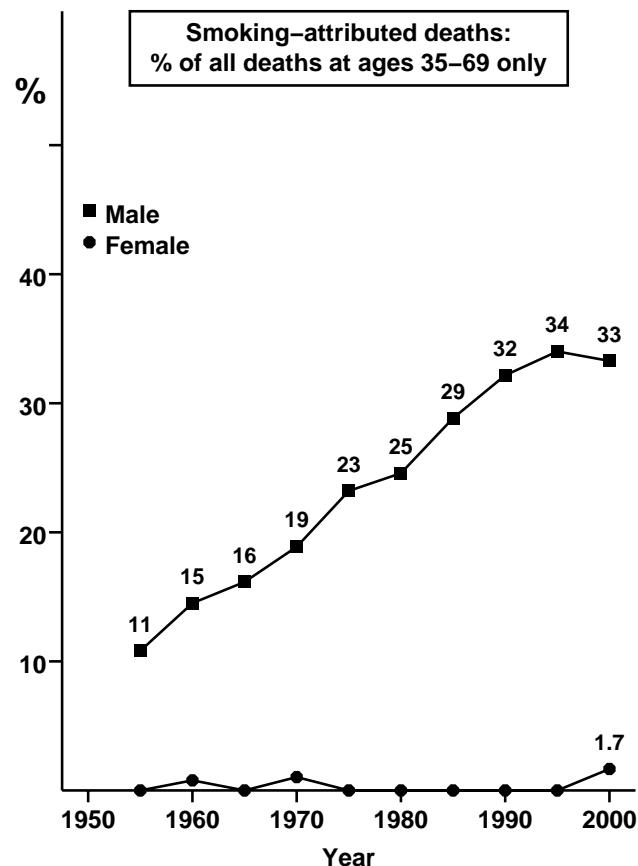
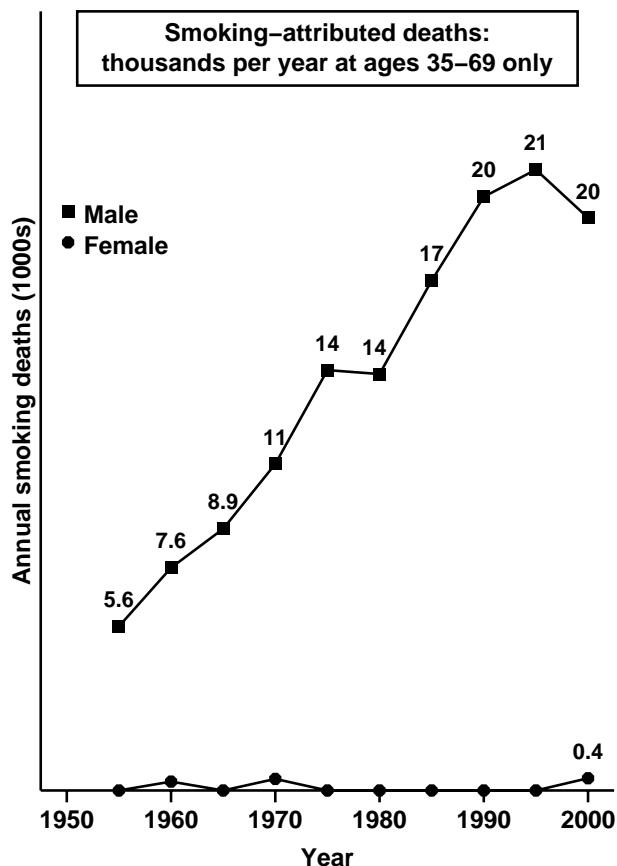
**50-year total\* (thousands), mid-1950 to mid-2000: 1236 / 14937**

**1950-2000 by age & sex:**

-/901	674/2912 <b>(23%)</b>	562/3963 <b>(14%)</b>	1236/7775	-/588	0.0/1723 <b>( 0%)</b>	0.0/4851 <b>( 0%)</b>	0.0/7161
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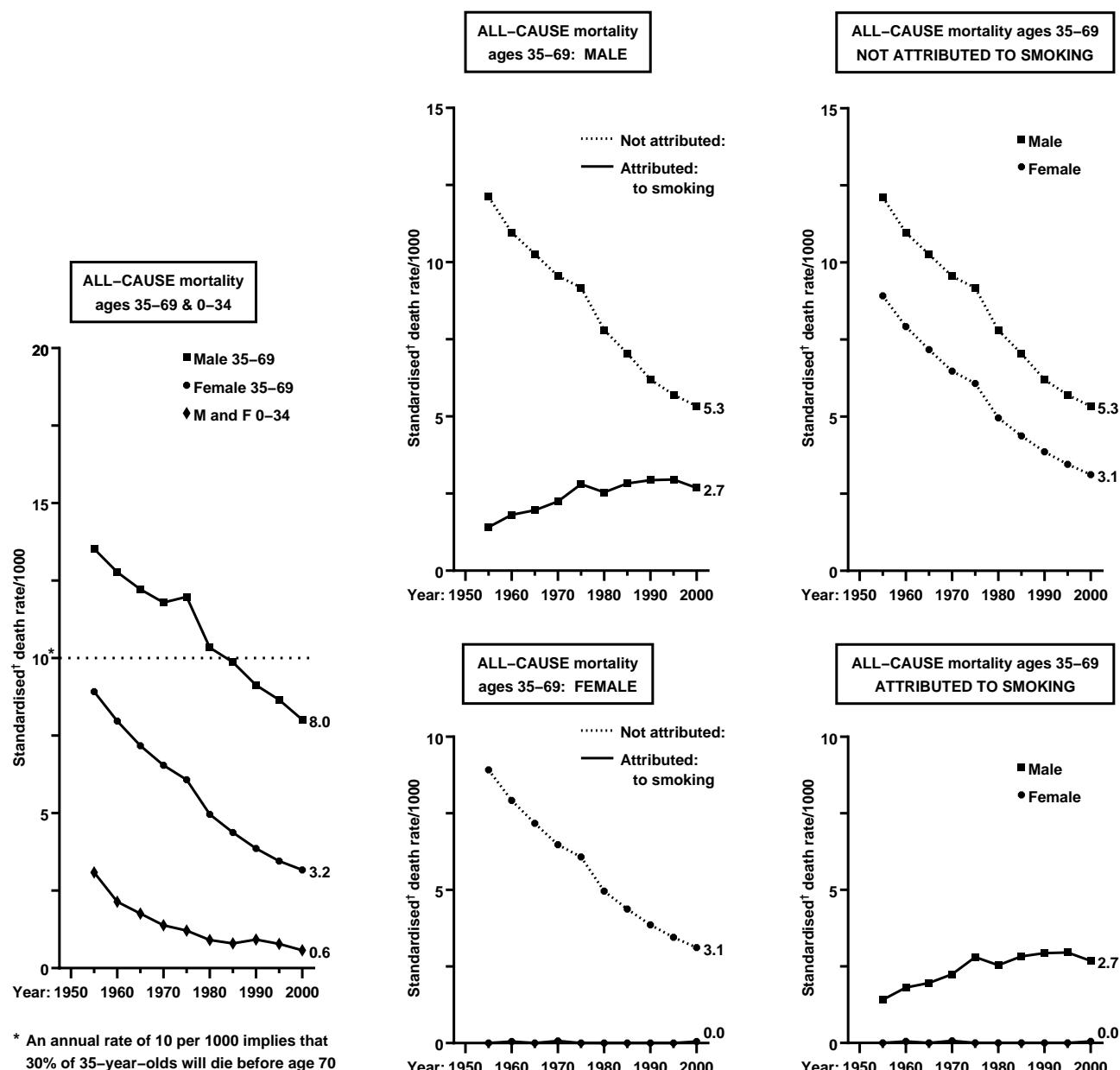
\*Estimated as 10 times the sum of the annual numbers for 1955, 1965, 1975, 1985 & 1995

## 1955-2000: SPAIN



## SPAIN: 1955-2000

## ALL-CAUSE mortality rates attributed and not attributed to smoking



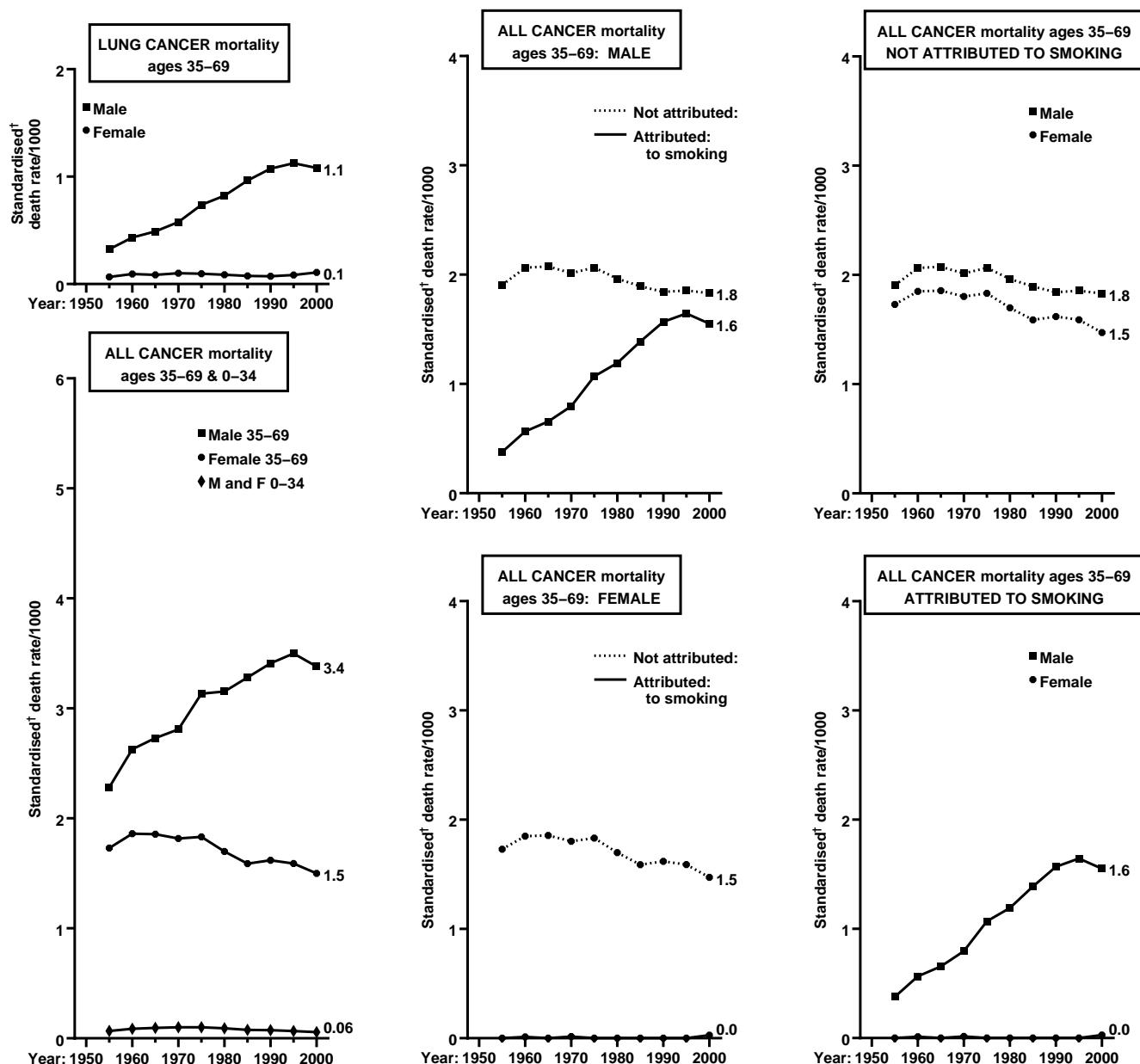
† Mean of 7 age-specific rates, ages 35-69 (or ages 0-34)

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	0-34		35-69		70-79		
		Yes	No	Yes	No	Yes	No		Yes	No	Yes	No	Yes	No	
1950		...	...	...	...	...	...	...	...	...	...	...	...	...	
1955	-	3.38		1.41	12.1		2.59	75.1	-	2.78		0.00	8.92	0.00	57.4
1960	-	2.45		1.81	11.0		4.68	67.6	-	1.83		0.05	7.92	0.00	53.5
1965	-	2.09		1.96	10.3		6.55	68.5	-	1.43		0.00	7.17	0.00	54.3
1970	-	1.68		2.24	9.55		7.00	61.3	-	1.08		0.07	6.47	0.00	47.7
1975	-	1.48		2.80	9.17		10.6	61.1	-	0.93		0.00	6.07	0.00	47.9
1980	-	1.16		2.54	7.80		9.83	52.8	-	0.65		0.00	4.96	0.00	38.0
1985	-	1.04		2.83	7.04		10.8	45.9	-	0.55		0.00	4.37	0.00	32.7
1990	-	1.26		2.93	6.19		11.2	39.5	-	0.57		0.00	3.86	0.00	28.1
1995	-	1.08		2.95	5.70		11.3	34.9	-	0.48		0.00	3.45	0.00	24.3
2000	-	0.77		2.68	5.33		10.2	33.2	-	0.37		0.05	3.12	0.00	21.9

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

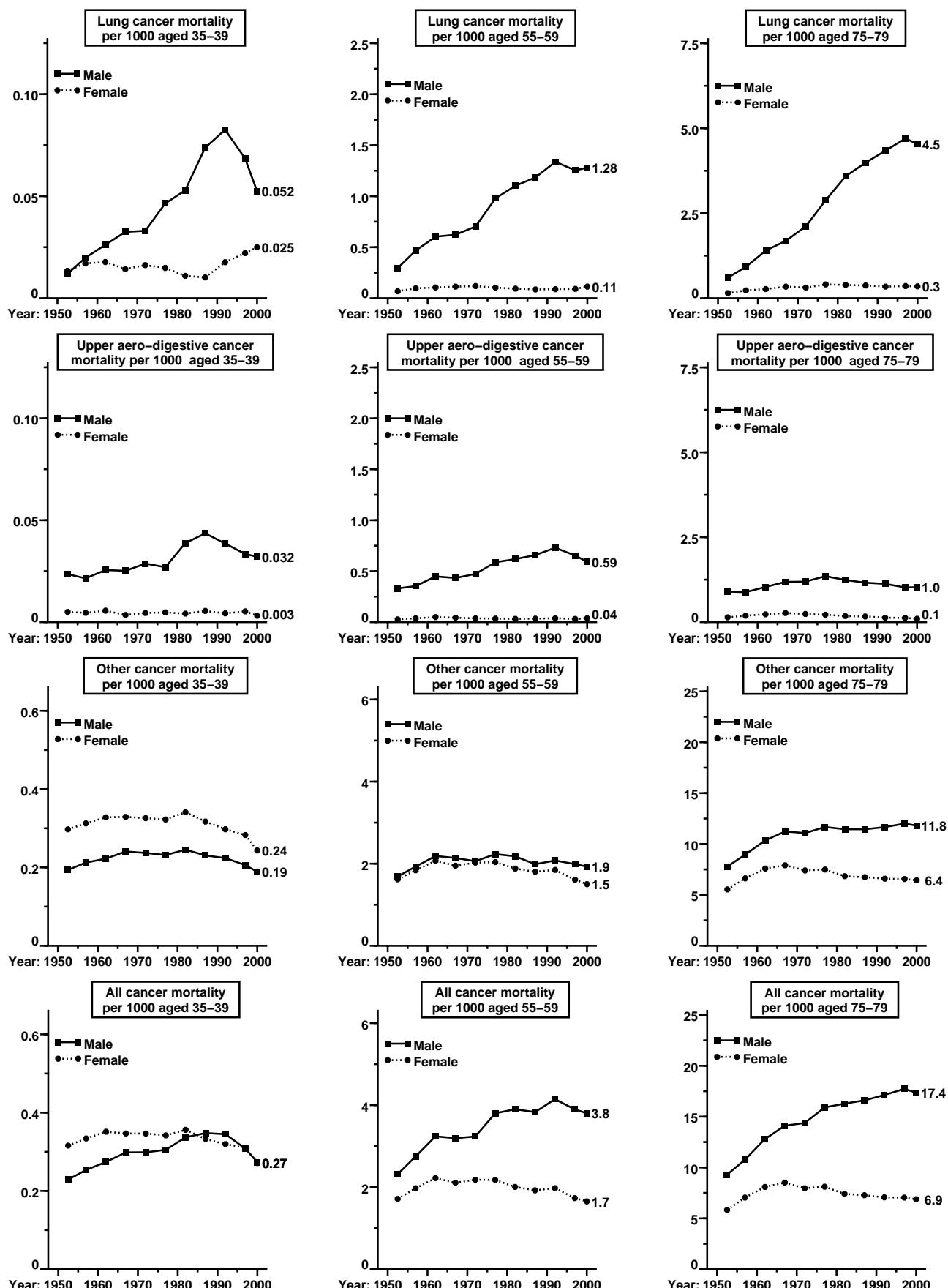
1955-2000: SPAIN

## ALL CANCER mortality rates attributed and not attributed to smoking

<sup>†</sup> 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		...	...	...	...	...	...	...	...	0.07	0.00	1.73	0.00	6.00	
1955		–	0.07	0.38	1.90	0.64	8.63	–	0.07	0.00	1.73	0.00	6.00		
1960		–	0.09	0.56	2.06	1.36	9.06	–	0.08	0.01	1.85	0.00	6.51		
1965		–	0.11	0.66	2.07	2.03	10.9	–	0.08	0.00	1.85	0.00	7.10		
1970		–	0.11	0.80	2.01	2.18	9.77	–	0.09	0.01	1.80	0.00	6.74		
1975		–	0.11	1.07	2.06	3.47	10.2	–	0.09	0.00	1.83	0.00	7.11		
1980		–	0.10	1.19	1.96	4.18	10.1	–	0.08	0.00	1.70	0.00	6.67		
1985		–	0.08	1.39	1.89	4.70	9.71	–	0.07	0.00	1.59	0.00	6.29		
1990		–	0.08	1.57	1.84	5.13	9.75	–	0.06	0.00	1.62	0.00	6.03		
1995		–	0.07	1.64	1.85	5.53	9.58	–	0.06	0.00	1.59	0.00	6.02		
2000		–	0.06	1.55	1.83	5.19	9.37	–	0.05	0.03	1.47	0.00	5.67		

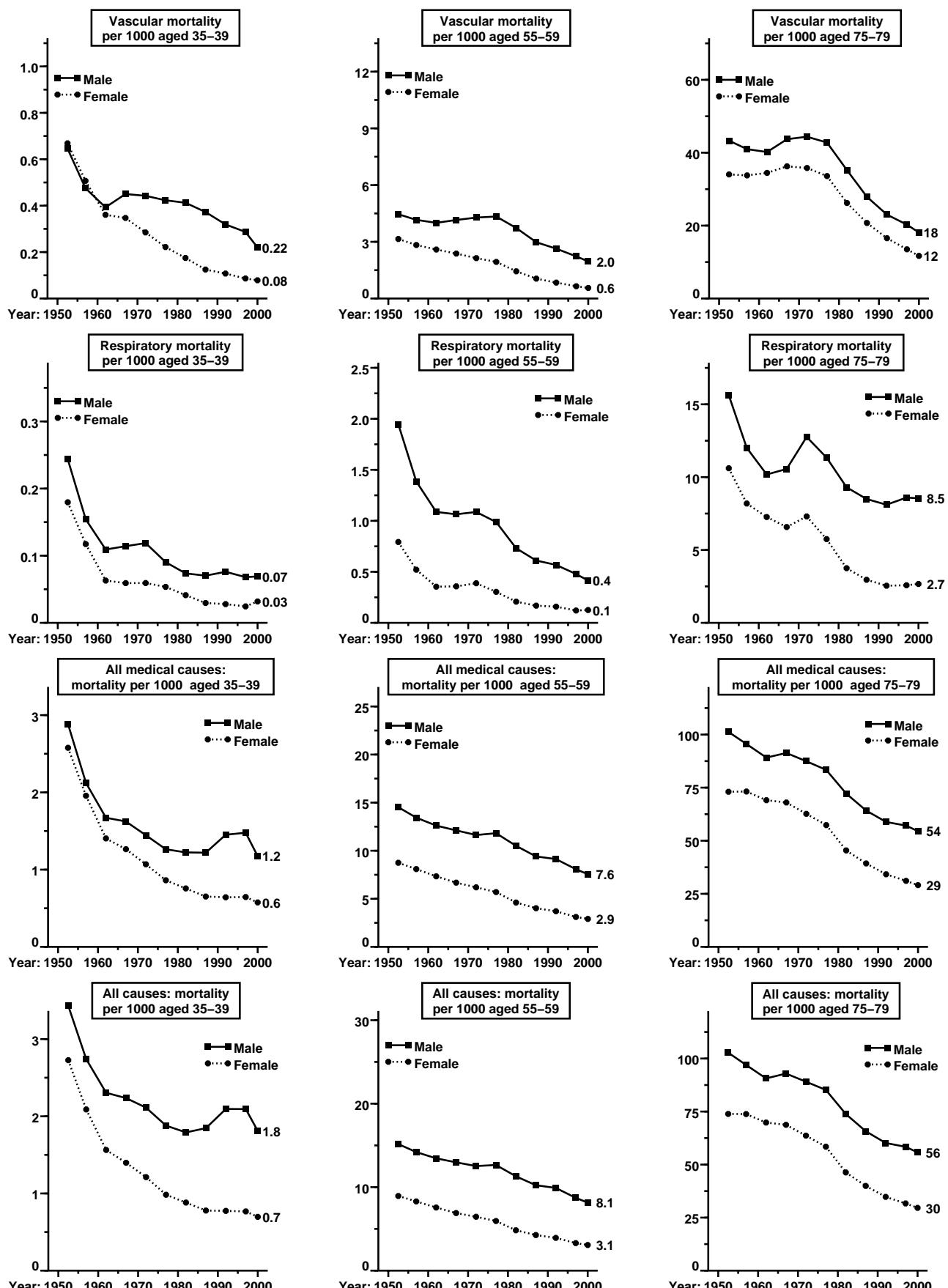
0–34 and 35–69 = means of 7 age-specific rates; 70–79 = mean of 2 rates (70–74 &amp; 75–79)

**SPAIN: 1951-2000****Mortality\* trends at selected ages: 35-39, 55-59 & 75-79**

\* Annual mortality per 1000: averages of years available in 1950-54,...,1995-99; then year 2000 separately

1951-2000: SPAIN

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



\* Annual mortality per 1000: averages of years available in 1950-54,...,1995-99; then year 2000 separately