

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

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

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FINLAND

Raw data (pages 176–77, 178–79)

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FINLAND: 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.	—	—	—	—	—	—	—	—	—	—	—
0–34 Total	1064	65	0	2	63	2	10	56	4	253	674
35–69 Sm.	2140	889	654	74	161	142	53	854	—	202	—
35–69 Total	9887	2260	730	133	1397	197	248	3962	335	912	1973
(22%)	(39%)	(90%)	(56%)	(12%)	(72%)	(21%)	(22%)			(22%)	
70+ Sm.	2646	1046	713	69	264	407	117	887	—	189	—
70+ Total	13332	2848	780	113	1955	546	978	6897	56	1531	476
(20%)	(37%)	(91%)	(61%)	(14%)	(75%)	(12%)	(13%)			(12%)	
Any age Sm.	4786	1935	1367	143	425	549	170	1741	—	391	—
Any age Total	24283	5173	1510	248	3415	745	1236	10915	395	2696	3123
(20%)	(37%)	(91%)	(58%)	(12%)	(74%)	(14%)	(16%)			(15%)	
2000											
0–34 Sm.	—	—	—	—	—	—	—	—	—	—	—
0–34 Total	946	54	1	0	53	2	14	63	8	253	552
35–69 Sm.	1571	687	507	59	121	118	44	546	—	176	—
35–69 Total	9122	2130	588	130	1412	183	262	3345	390	1066	1746
(17%)	(32%)	(86%)	(45%)	(9%)	(64%)	(17%)	(16%)			(17%)	
70+ Sm.	2561	1025	724	47	254	471	121	728	—	216	—
70+ Total	13974	3020	803	83	2134	658	1177	6517	56	1991	555
(18%)	(34%)	(90%)	(57%)	(12%)	(72%)	(10%)	(11%)			(11%)	
Any age Sm.	4132	1712	1231	106	375	589	165	1274	—	392	—
Any age Total	24042	5204	1392	213	3599	843	1453	9925	454	3310	2853
(17%)	(33%)	(88%)	(50%)	(10%)	(70%)	(11%)	(13%)			(12%)	

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	2486.5	1193.7	1128.8	197.2	206.9	221.1	153.5	131.7	114.7	103.7	74.8	44.5	44.7	
2000	2526.0	1152.2	1181.7	193.8	195.1	203.2	214.9	147.4	123.7	103.6	87.8	57.1	47.2	
NUMBER OF DEATHS (Source: WHO)														
<i>All causes</i>														
1995	24283	1064	9887	456	719	1147	1114	1446	2004	3001	3459	3263	6610	
2000	24042	946	9122	379	614	933	1533	1414	1808	2441	3390	3653	6931	
<i>Lung cancer</i>														
1995	1510	—	730	7	12	38	57	134	168	314	332	240	208	
2000	1392	1	588	3	2	22	83	96	158	224	327	273	203	
<i>ANNUAL DEATH RATE / 100,000</i>														
(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	1021.4*	87.0*	1080.3*	231.2	347.5	518.8	725.7	1097.9	1747.2	2893.9	4624.3	7332.6	14787.5	
2000	921.1*	81.6*	922.8*	195.6	314.7	459.2	713.4	959.3	1461.6	2356.2	3861.0	6397.5	14684.3	
<i>All cancer</i>														
1995	218.2*	5.3*	264.0*	16.7	31.4	79.1	142.0	286.3	468.2	824.5	1279.4	1793.3	2445.2	
2000	196.8*	4.6*	231.1*	18.1	25.6	60.5	146.6	251.7	401.0	714.3	1124.1	1574.4	2402.5	
<i>Lung cancer</i>														
1995	63.4*	—	87.8*	3.5	5.8	17.2	37.1	101.7	146.5	302.8	443.9	539.3	465.3	
2000	52.0*	0.1*	65.9*	1.5	1.0	10.8	38.6	65.1	127.7	216.2	372.4	478.1	430.1	
<i>Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)</i>														
1995	10.5*	0.2*	14.8*	—	2.9	6.8	13.0	15.2	34.0	31.8	48.1	67.4	105.1	
2000	8.0*	—	13.5*	—	3.1	4.9	11.2	19.0	19.4	36.7	26.2	54.3	61.4	
<i>Other cancer</i>														
1995	144.3*	5.1*	161.4*	13.2	22.7	55.2	91.9	169.3	287.7	489.9	787.4	1186.5	1874.7	
2000	136.9*	4.5*	151.8*	16.5	21.5	44.8	96.8	167.6	253.8	461.4	725.5	1042.0	1911.0	
<i>Chronic obstructive pulmonary disease (COPD)</i>														
1995	31.8*	0.2*	24.6*	1.0	1.0	3.2	8.5	15.2	41.0	102.2	201.9	319.1	566.0	
2000	32.1*	0.2*	21.6*	0.5	1.0	1.0	5.1	24.4	36.4	83.0	198.2	369.5	578.4	
<i>Other respiratory disease</i>														
1995	53.5*	0.8*	27.5*	4.6	10.6	10.0	20.2	23.5	41.8	82.0	187.2	384.3	1492.2	
2000	57.4*	1.2*	27.2*	3.1	6.2	13.8	21.4	23.1	44.5	78.2	139.0	471.1	1665.3	
<i>Vascular disease</i>														
1995	464.4*	4.4*	460.7*	29.4	64.8	153.3	251.5	448.7	839.6	1437.8	2324.9	3829.2	7727.1	
2000	380.6*	5.4*	356.6*	32.5	55.4	124.0	241.5	378.6	601.5	1062.7	1752.8	2996.5	6921.6	
<i>Liver cirrhosis</i>														
1995	15.8*	0.3*	31.8*	7.1	20.3	33.9	43.0	35.7	48.8	33.8	36.1	42.7	22.4	
2000	16.7*	0.6*	34.5*	6.2	23.1	37.9	40.9	44.1	51.7	37.6	35.3	19.3	29.7	
<i>Other medical causes</i>														
1995	114.4*	21.3*	93.8*	38.0	49.8	59.7	73.0	85.0	129.9	220.8	382.4	703.4	2085.0	
2000	129.8*	22.7*	102.6*	36.1	48.2	73.8	87.0	101.1	152.0	220.1	419.1	749.6	2531.8	
<i>All non-medical causes</i>														
1995	123.3*	54.8*	177.9*	134.4	169.6	179.6	187.6	203.5	177.9	192.9	212.6	260.7	449.7	
2000	107.7*	46.9*	149.2*	99.1	155.3	148.1	170.8	136.4	174.6	160.2	192.5	217.2	555.1	

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

1995, 2000: FINLAND

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	429	62	1	0	61	1	5	23	6	173	159
35-69 Sm.	209	86	69	7	10	22	3	69	—	29	—
Total	4381	1762	161	38	1563	75	87	1290	87	565	515
(%)	(5%)	(5%)	(43%)	(18%)	(1%)	(29%)	(3%)	(5%)		(5%)	
70+ Sm.	602	152	107	21	24	84	30	254	—	82	—
Total	20232	3045	208	103	2734	222	1391	11254	53	3686	581
(%)	(3%)	(5%)	(51%)	(20%)	(1%)	(38%)	(2%)	(2%)		(2%)	
Any age Sm.	811	238	176	28	34	106	33	323	—	111	—
Total	25042	4869	370	141	4358	298	1483	12567	146	4424	1255
(%)	(3%)	(5%)	(48%)	(20%)	(1%)	(36%)	(2%)	(3%)		(3%)	
2000											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
Total	418	57	2	1	54	1	7	29	1	159	164
35-69 Sm.	206	90	74	7	9	22	5	59	—	30	—
Total	4167	1724	169	32	1523	71	97	1074	129	563	509
(%)	(5%)	(5%)	(44%)	(22%)	(1%)	(31%)	(5%)	(5%)		(5%)	
70+ Sm.	766	219	159	28	32	121	38	270	—	118	—
Total	20689	3249	283	113	2853	291	1530	10371	78	4568	602
(%)	(4%)	(7%)	(56%)	(25%)	(1%)	(42%)	(2%)	(3%)		(3%)	
Any age Sm.	972	309	233	35	41	143	43	329	—	148	—
Total	25274	5030	454	146	4430	363	1634	11474	208	5290	1275
(%)	(4%)	(6%)	(51%)	(24%)	(1%)	(39%)	(3%)	(3%)		(3%)	

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	2621.0	1143.3	1150.6	189.5	199.8	213.0	152.3	137.5	127.4	131.1	120.3	88.5	118.3	
2000	2650.5	1104.3	1192.1	186.1	189.2	198.8	210.9	150.1	134.4	122.6	122.0	104.7	127.4	
NUMBER OF DEATHS (Source: WHO)														
All causes														
1995	25042	429	4381	173	268	440	486	610	857	1547	2577	3763	13892	
2000	25274	418	4167	153	255	417	622	614	867	1239	2259	3763	14667	
Lung cancer														
1995	370	1	161	6	5	17	19	18	40	56	69	63	76	
2000	454	2	169	1	6	5	33	28	37	59	86	80	117	
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	563.3*	37.0*	435.3*	91.3	134.1	206.6	319.1	443.6	672.7	1180.0	2142.1	4252.0	11743.0	
2000	524.8*	38.1*	398.1*	82.2	134.8	209.8	294.9	409.1	645.1	1010.6	1851.6	3594.1	11512.6	
All cancer														
1995	129.5*	5.2*	174.5*	22.2	44.0	99.1	158.2	200.0	270.8	427.2	599.3	866.7	1316.1	
2000	124.5*	5.1*	164.8*	25.3	46.5	81.0	129.9	191.2	287.2	392.3	618.9	841.5	1266.1	
Lung cancer														
1995	10.4*	0.1*	16.2*	3.2	2.5	8.0	12.5	13.1	31.4	42.7	57.4	71.2	64.2	
2000	11.5*	0.2*	16.6*	0.5	3.2	2.5	15.6	18.7	27.5	48.1	70.5	76.4	91.8	
Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)														
1995	3.4*	—	3.8*	—	—	3.3	3.3	5.8	5.5	8.4	16.6	23.7	52.4	
2000	3.2*	0.1*	3.1*	—	—	2.0	2.8	3.3	2.2	11.4	13.9	29.6	51.0	
Other cancer														
1995	115.7*	5.1*	154.6*	19.0	41.5	87.8	142.5	181.1	233.9	376.0	525.4	771.8	1199.5	
2000	109.8*	4.8*	145.1*	24.7	43.3	76.5	111.4	169.2	257.4	332.8	534.4	735.4	1123.2	
Chronic obstructive pulmonary disease (COPD)														
1995	7.3*	0.1*	7.9*	0.5	0.5	0.9	4.6	10.2	14.9	23.6	43.2	63.3	96.4	
2000	7.9*	0.1*	7.2*	0.5	1.1	1.0	3.8	7.3	16.4	20.4	38.5	85.0	121.7	
Other respiratory disease														
1995	28.6*	0.4*	8.7*	2.6	1.0	4.7	7.2	5.1	11.8	28.2	64.8	229.4	938.3	
2000	29.2*	0.6*	9.5*	2.7	1.6	3.0	6.6	9.3	14.1	29.4	72.1	186.2	978.8	
Vascular disease														
1995	258.4*	1.9*	135.1*	11.6	12.5	30.0	56.5	108.4	222.9	503.4	1044.9	2290.4	6737.1	
2000	215.7*	2.6*	108.1*	14.5	19.6	34.7	60.7	81.3	182.3	363.8	740.2	1673.4	6056.5	
Liver cirrhosis														
1995	4.7*	0.5*	8.2*	2.1	3.5	6.6	10.5	10.9	16.5	7.6	15.8	14.7	17.8	
2000	6.2*	0.1*	11.2*	2.1	7.4	11.6	13.8	13.3	19.3	10.6	22.1	24.8	19.6	
Other medical causes														
1995	97.6*	15.3*	55.9*	19.0	22.0	21.1	38.1	54.5	92.6	144.2	304.2	672.3	2303.5	
2000	105.3*	15.1*	54.0*	9.1	22.7	27.7	37.0	58.0	78.9	144.4	290.2	690.5	2740.2	
All non-medical causes														
1995	37.1*	13.7*	45.1*	33.2	50.6	44.1	44.0	54.5	43.2	45.8	69.8	115.3	333.9	
2000	36.0*	14.6*	43.3*	27.9	35.9	50.8	43.1	48.6	46.9	49.8	69.7	92.6	329.7	

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

FINLAND: 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	– / 0.9	– / 0.4	–
35–69	1.6 / 9.1	0.2 / 4.2	21 years
70+	2.6 / 14	0.8 / 21	8 years
All ages	4.1 / 24	1.0 / 25	13 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	0.5/0.6	0.7/0.8	1.2/1.4	–/0.0	0.1/0.2	0.2/0.3	0.2/0.5
All Cancer	–/0.1	0.7/2.1 (32%)	1.0/3.0 (34%)	1.7/5.2	–/0.1	0.1/1.7 (5%)	0.2/3.2 (7%)	0.3/5.0
Vascular	–/0.1	0.5/3.3	0.7/6.5	1.3/9.9	–/0.0	0.1/1.1	0.3/10	0.3/11
Respiratory	–/0.0	0.2/0.4	0.6/1.8	0.8/2.3	–/0.0	0.0/0.2	0.2/1.8	0.2/2.0
All Other	–/0.8	0.2/3.2	0.2/2.6	0.4/6.6	–/0.3	0.0/1.2	0.1/5.2	0.1/6.8
All Causes	–/0.9	1.6/9.1 (17%)	2.6/14 (18%)	4.1/24	–/0.4	0.2/4.2 (5%)	0.8/21 (4%)	1.0/25

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

Cause	Male	Female	Male + Female
All Cancer	1.7 / 5.2 (33%)	0.3 / 5.0 (6%)	2.0 / 10 (20%)
All Causes	4.1 / 24 (17%)	1.0 / 25 (4%)	5.1 / 49 (10%)

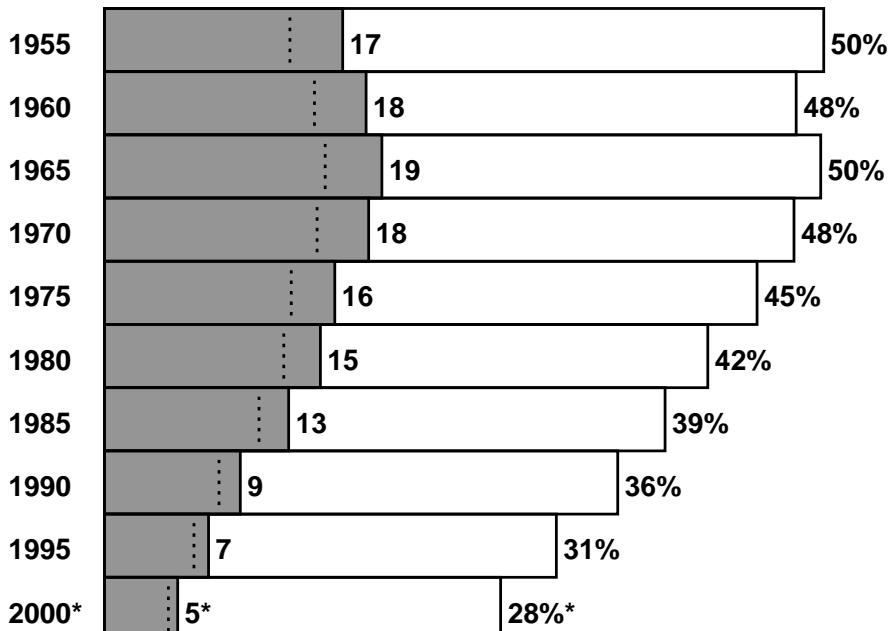
1955-2000: FINLAND

Population risk of dying at ages 0–34

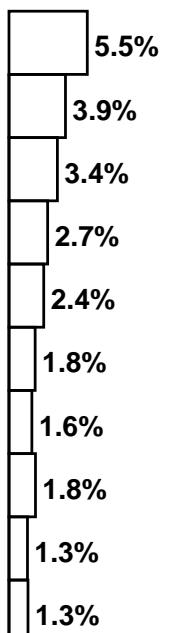


Population risk of a 35-year-old dying at ages 35–69 from smoking (shaded) or from any cause (shaded and white)

*eg, at year 2000 male death rates, out of 100 men aged 35, 28 would die before age 70 (with 5 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

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

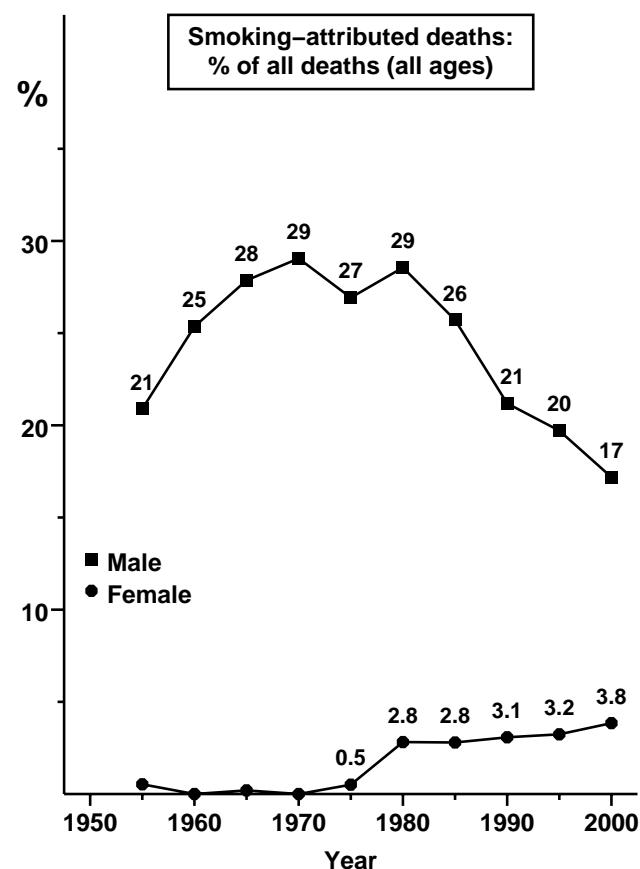
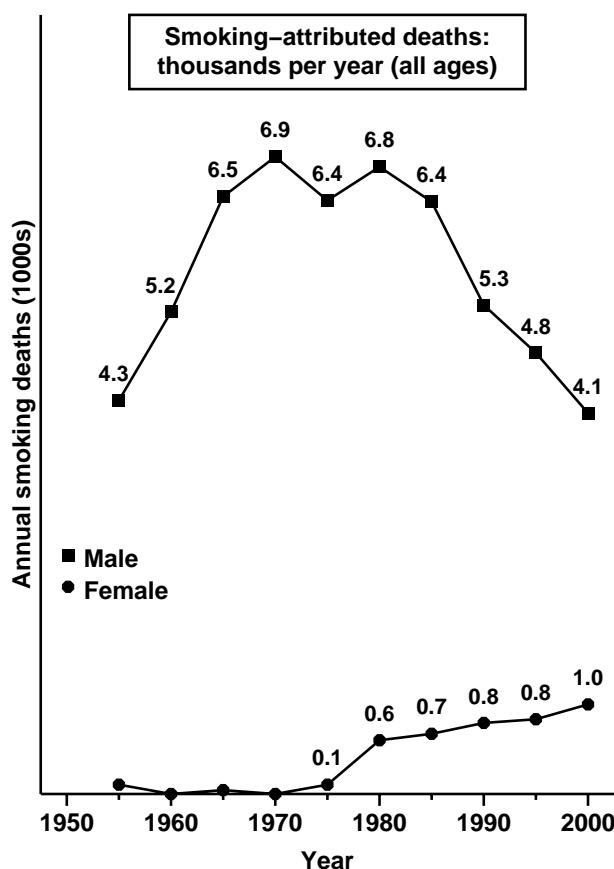
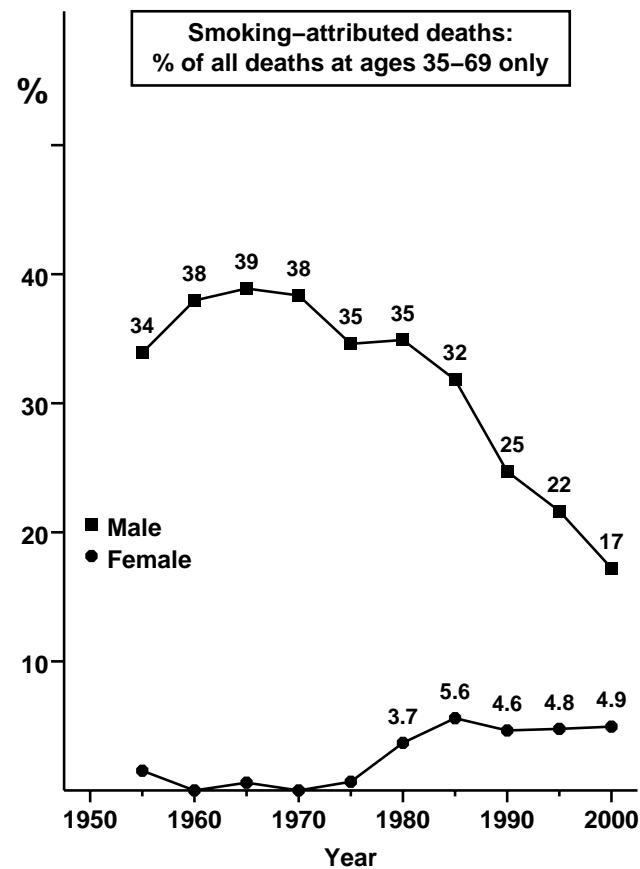
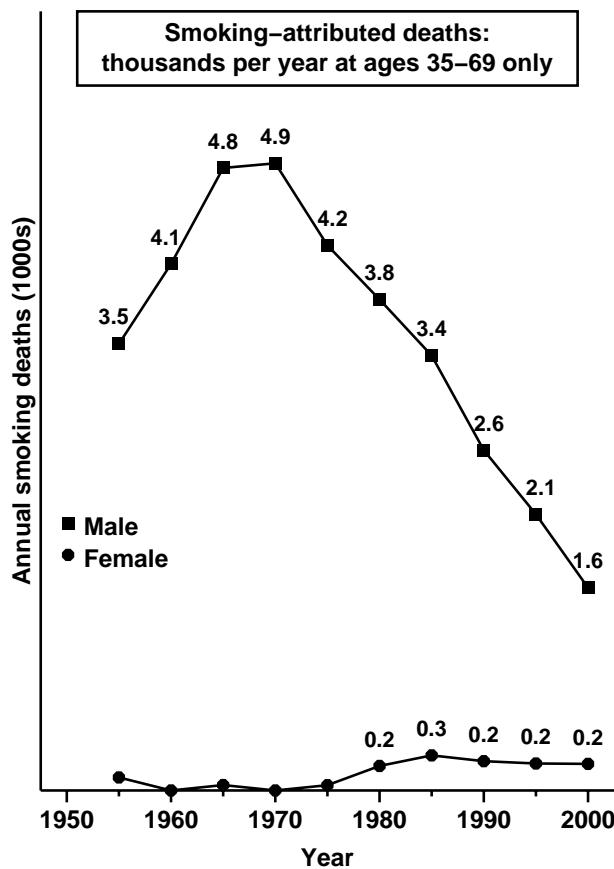
Year	Male (by age)				Female (by age)			
	0-34	35-69	70+	All	0-34	35-69	70+	All
1950
1955	-/3.5	3.5/10 (34%)	0.8/6.7 (12%)	4.3/20	-/2.2	0.1/6.6	0.0/10	0.1/19
1960	-/2.7	4.1/11 (38%)	1.1/7.2 (16%)	5.2/21	-/1.5	0.0/6.5	0.0/11	0.0/19
1965	-/2.4	4.8/12 (39%)	1.7/8.5 (20%)	6.5/23	-/1.3	0.0/7.0	0.0/13	0.0/21
1970	-/2.1	4.9/13 (38%)	2.1/9.0 (23%)	6.9/24	-/1.0	0.0/6.7	0.0/13	0.0/20
1975	-/2.0	4.2/12 (35%)	2.2/9.7 (23%)	6.4/24	-/0.8	0.0/6.1	0.1/13 (0.5%)	0.1/20
1980	-/1.7	3.8/11 (35%)	3.0/11 (27%)	6.8/24	-/0.7	0.2/5.2 (4%)	0.4/15 (3%)	0.6/21
1985	-/1.4	3.4/11 (32%)	3.1/13 (23%)	6.4/25	-/0.6	0.3/4.9 (6%)	0.4/18 (2%)	0.7/23
1990	-/1.4	2.6/11 (25%)	2.7/13 (21%)	5.3/25	-/0.6	0.2/4.9 (5%)	0.5/20 (3%)	0.8/25
1995	-/1.1	2.1/9.9 (22%)	2.6/13 (20%)	4.8/24	-/0.4	0.2/4.4 (5%)	0.6/20 (3%)	0.8/25
2000	-/0.9	1.6/9.1 (17%)	2.6/14 (18%)	4.1/24	-/0.4	0.2/4.2 (5%)	0.8/21 (4%)	1.0/25

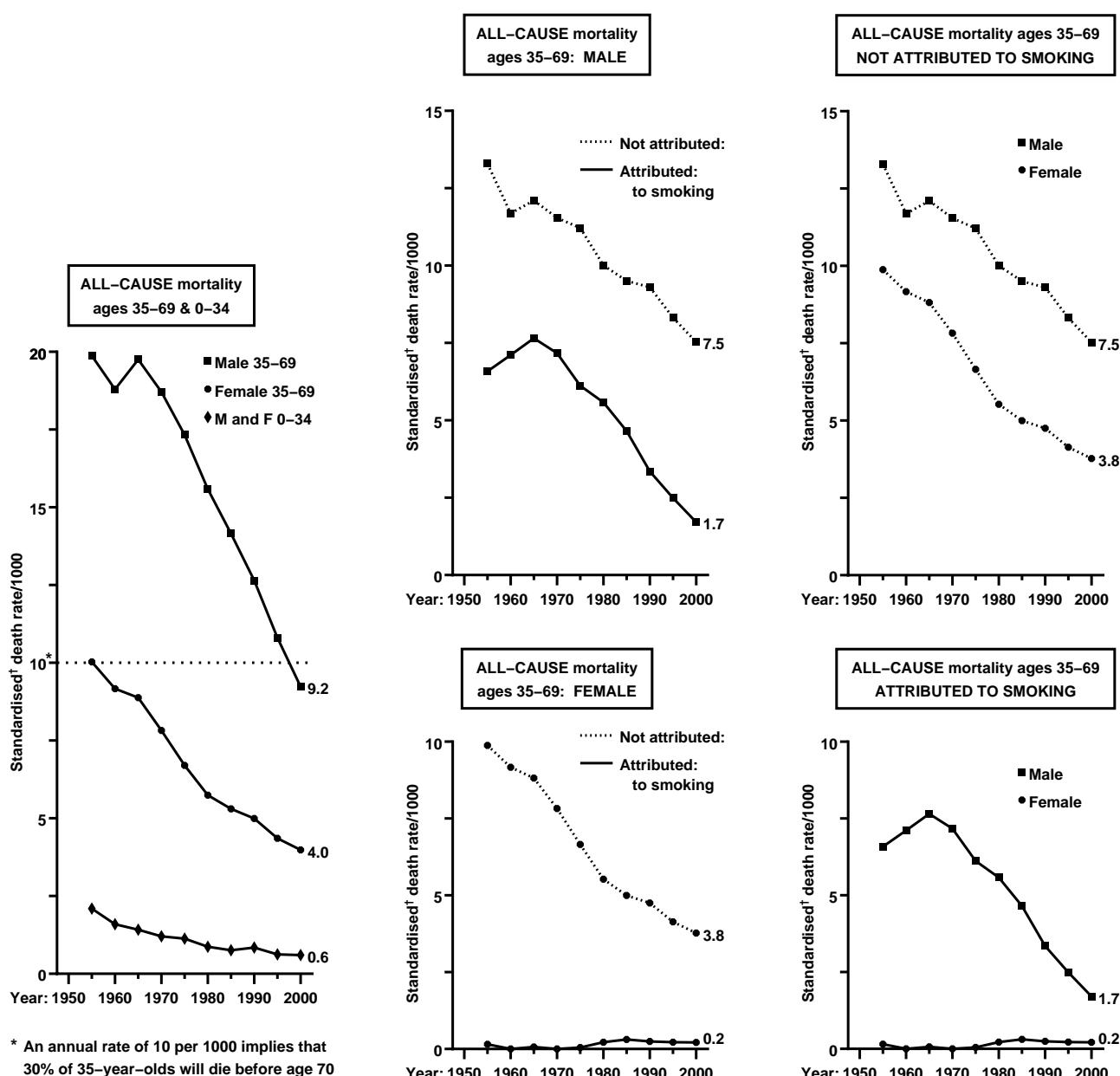
50-year total* (thousands), mid-1950 to mid-2000: 301 / 2256**1950-2000 by age & sex:**

-/104	180/553 (33%)	104/512 (20%)	284/1169	-/53	6.7/289 (2%)	10/745 (1%)	17/1087
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*Estimated as 10 times the sum of the annual numbers for 1955, 1965, 1975, 1985 & 1995

1955-2000: FINLAND



FINLAND: 1955-2000**ALL-CAUSE mortality rates attributed and not attributed to smoking**

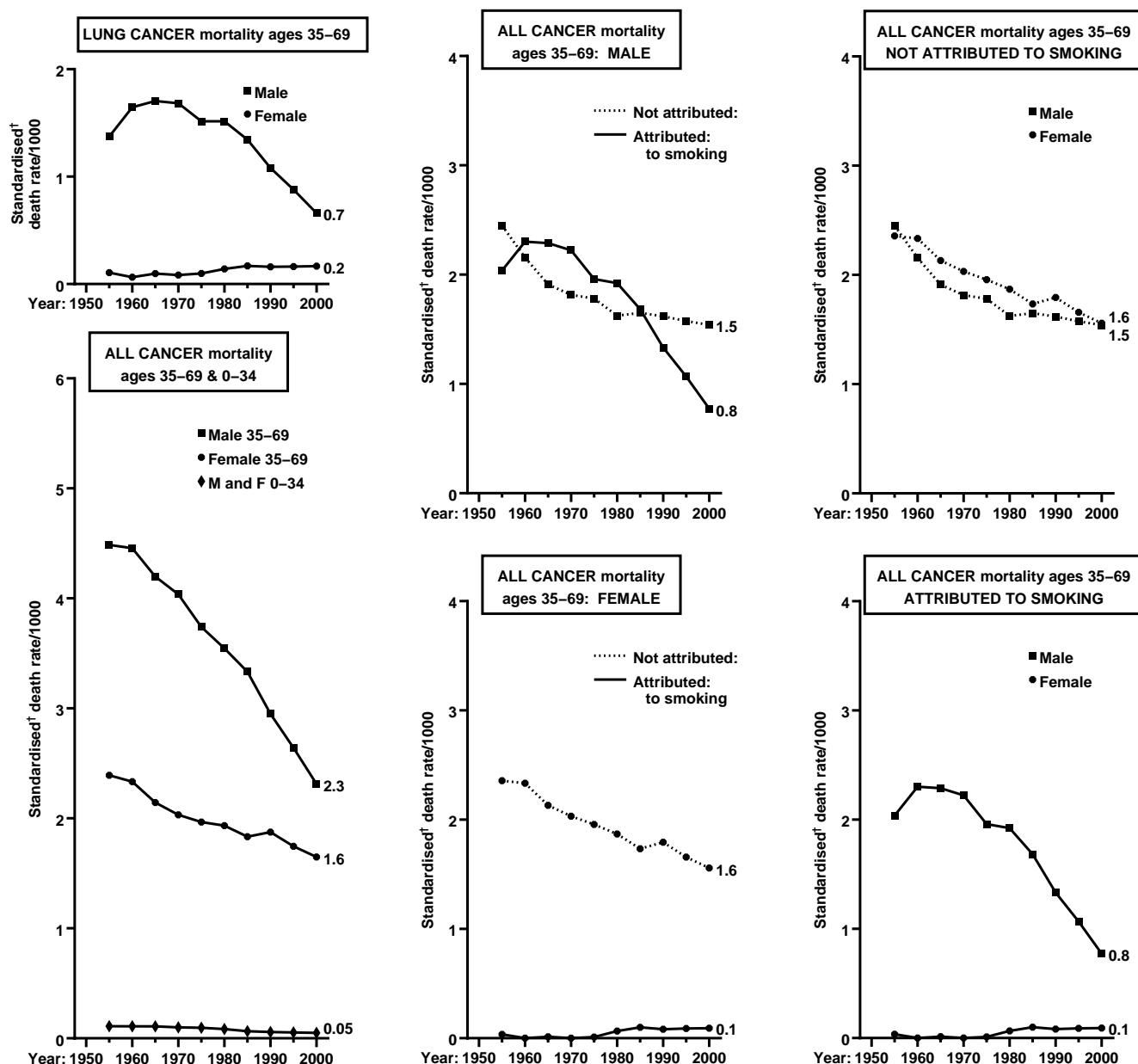
[†] Mean of 7 age-specific rates, ages 35-69 (or ages 0-34)

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	-	2.58		6.58	13.3		12.0	80.3	-	1.60	0.15	9.88	0.00	71.5
1960	-	2.03		7.11	11.7		16.0	75.5	-	1.15	0.00	9.16	0.00	70.4
1965	-	1.85		7.65	12.1		20.2	75.5	-	0.98	0.06	8.81	0.00	71.2
1970	-	1.62		7.17	11.5		21.6	67.8	-	0.78	0.00	7.82	0.00	59.1
1975	-	1.55		6.11	11.2		20.0	61.7	-	0.70	0.05	6.65	0.23	48.6
1980	-	1.21		5.58	10.0		21.5	54.1	-	0.53	0.22	5.52	1.27	39.9
1985	-	1.05		4.65	9.50		19.2	55.5	-	0.46	0.31	4.99	1.15	38.7
1990	-	1.15		3.35	9.30		15.5	50.8	-	0.53	0.24	4.75	1.29	35.3
1995	-	0.87		2.49	8.32		13.5	46.2	-	0.37	0.22	4.14	1.27	30.7
2000	-	0.82		1.71	7.52		11.1	40.2	-	0.38	0.21	3.77	1.46	25.8

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

1955-2000: FINLAND

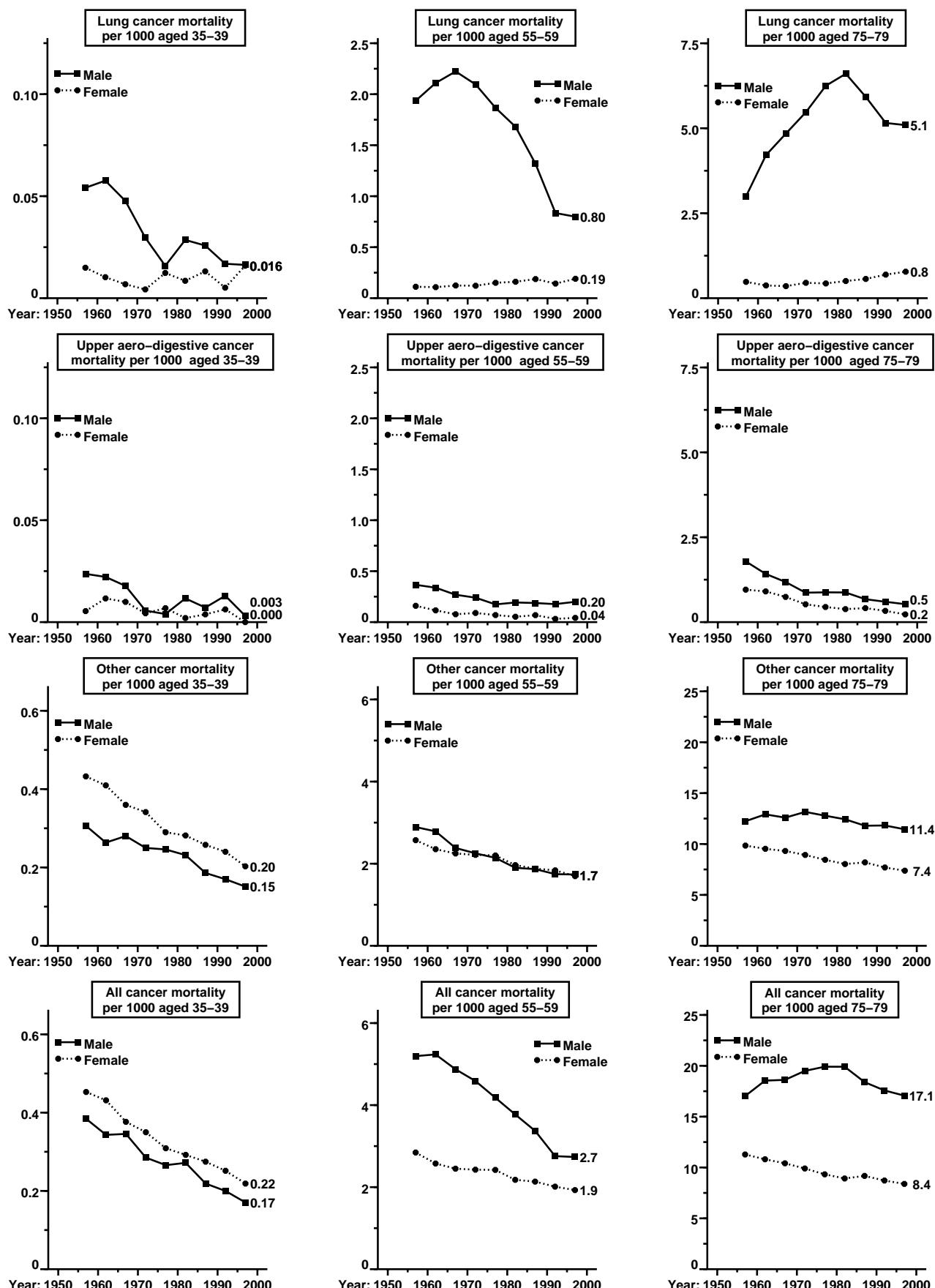
ALL CANCER mortality rates attributed and not attributed to smoking



[†] 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	-	0.13		2.04	2.45			4.33	11.7		0.09	0.03	2.36	0.00	9.68
1960	-	0.11		2.30	2.15			5.65	11.6		0.10	0.00	2.33	0.00	10.2
1965	-	0.12		2.29	1.91			6.74	10.1		0.10	0.01	2.13	0.00	9.14
1970	-	0.11		2.22	1.81			7.63	10.4		0.09	0.00	2.03	0.00	8.47
1975	-	0.11		1.96	1.78			7.37	9.62		0.08	0.01	1.96	0.07	7.88
1980	-	0.10		1.92	1.62			8.76	9.16		0.06	0.06	1.87	0.36	7.16
1985	-	0.08		1.68	1.65			7.43	8.86		0.05	0.10	1.73	0.34	7.76
1990	-	0.05		1.33	1.62			6.68	9.12		0.06	0.08	1.79	0.43	7.22
1995	-	0.05		1.07	1.57			6.18	9.18		0.05	0.09	1.66	0.43	6.90
2000	-	0.05		0.77	1.54			5.12	8.37		0.05	0.09	1.56	0.55	6.75

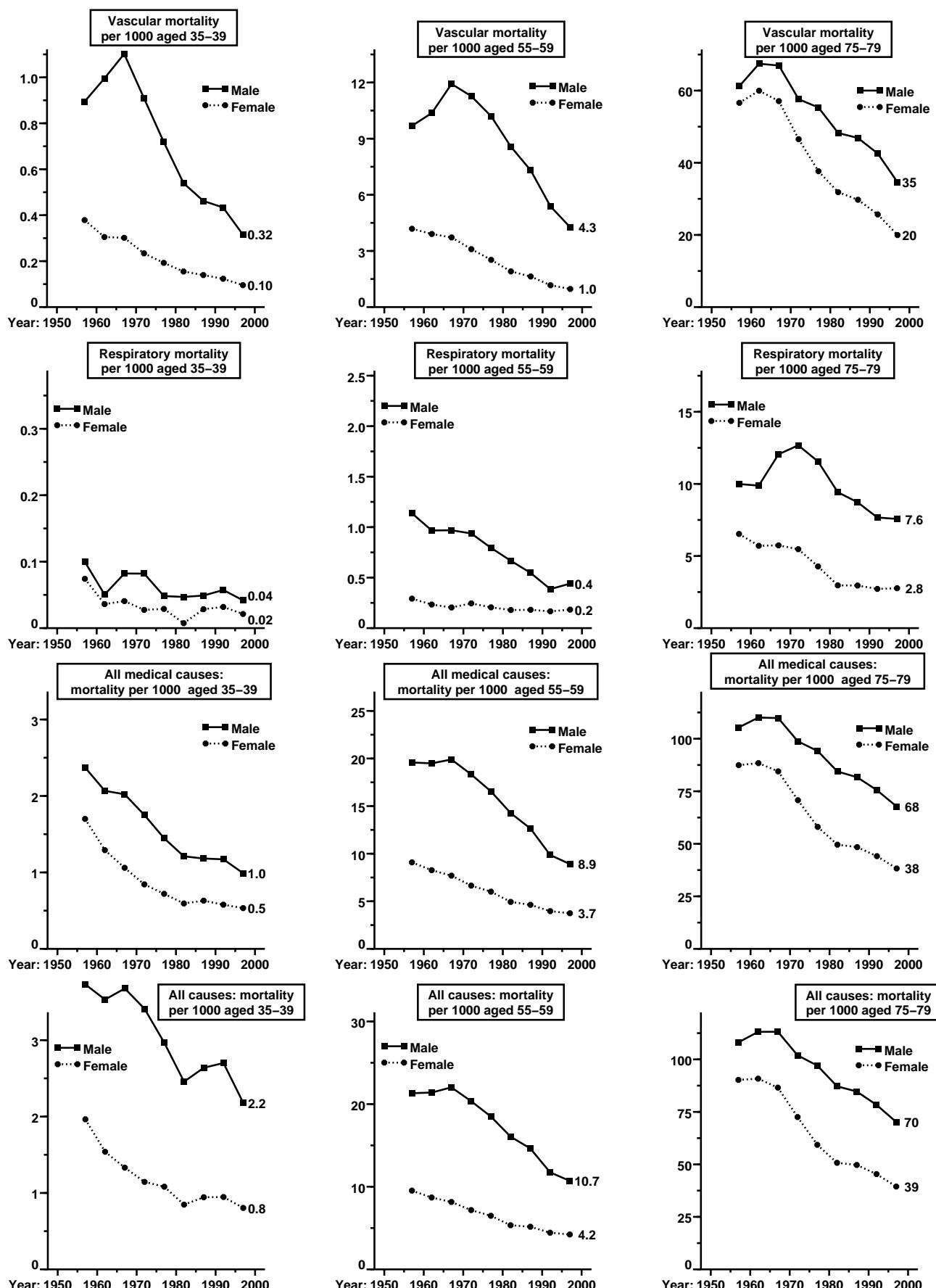
0-34 and 35-69 = means of 7 age-specific rates; 70-79 = mean of 2 rates (70-74 & 75-79)

FINLAND: 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 176-177

1955-2000: FINLAND

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 176-177