

MORTALITY FROM SMOKING IN DEVELOPED COUNTRIES 1950–2020

(see also www.deathsfromsmoking.net)

**Richard Peto, Alan D Lopez, Hongchao Pan
Jillian Boreham and Michael Thun**

EU15

(European Union – 15 countries*)

Raw data (pages 12–13)

Analyses (pages 14–15, 16–17, 18–19)

Appendix (pages 20–21)

*Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK

EU15 (European Union - 15 countries*): 2010

	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 1820189	43318	514734	650.1	51.9	640.0	92.3	9.6	11.4	38.4	61.4	68.0	82.1
	F 1875808	22278	279540	419.0	28.4	332.9	79.4	7.9	8.6	17.9	22.5	26.4	36.0
Tuberculosis	M 1561	39	474	0.6	0.0	0.6	0.0	-	-	0.0	0.0	0.1	0.2
	F 1087	26	132	0.2	0.0	0.2	0.0	0.0	-	0.0	0.0	0.1	0.1
Other infective and parasitic	M 28065	753	9049	10.2	0.9	10.7	2.1	0.3	0.2	0.5	0.4	0.9	1.9
	F 30318	511	4400	6.9	0.7	5.2	1.9	0.2	0.1	0.4	0.3	0.6	1.0
ALL CANCER	M 560494	4054	204116	206.1	4.8	260.2	2.2	2.7	2.6	4.1	5.1	6.7	10.1
	F 440567	3655	144313	125.1	4.4	171.8	2.5	2.3	2.1	3.1	3.5	6.2	11.2
Mouth and pharynx cancer	M 14929	64	9561	6.2	0.1	11.7	-	0.0	0.0	0.0	0.1	0.1	0.2
	F 5078	45	2252	1.6	0.1	2.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Oesophagus cancer	M 18672	39	9358	7.3	0.0	11.8	-	-	-	-	0.0	0.1	0.2
	F 6424	13	2013	1.8	0.0	2.4	-	-	-	0.0	-	0.0	0.1
Stomach cancer	M 26392	99	9233	9.6	0.1	11.7	0.0	-	-	0.0	0.0	0.2	0.4
	F 17870	116	4543	4.7	0.1	5.4	-	-	-	0.0	0.1	0.3	0.5
Colorectal cancer	M 62870	185	20172	22.6	0.2	26.0	-	-	0.0	0.0	0.2	0.4	0.9
	F 53206	148	12707	13.5	0.2	15.3	0.0	0.0	0.0	0.0	0.1	0.3	0.6
Liver cancer	M 20642	89	8485	7.8	0.1	10.9	0.1	0.0	0.0	0.1	0.1	0.2	0.3
	F 8230	42	1742	2.1	0.1	2.1	0.1	-	-	0.1	0.0	0.1	0.1
Pancreas cancer	M 30363	42	12793	11.4	0.1	16.3	-	-	0.0	0.0	0.0	0.1	0.2
	F 30900	37	8641	8.3	0.0	10.6	-	-	-	0.0	0.0	0.1	0.2
Larynx cancer	M 7245	3	3608	2.8	-	4.5	-	-	-	-	-	0.0	0.0
	F 906	3	386	0.3	-	0.5	-	-	-	-	-	0.0	0.0
Lung cancer	M 142672	133	61024	53.9	0.1	78.4	0.1	0.0	0.0	0.0	0.1	0.3	0.6
	F 61808	103	26753	19.4	0.1	32.0	0.0	-	0.0	0.1	0.1	0.1	0.5
Malignant melanoma	M 7073	158	3433	2.8	0.2	4.1	0.0	-	0.0	0.1	0.1	0.4	0.6
	F 5397	140	2303	1.7	0.2	2.6	0.0	-	0.0	0.1	0.1	0.4	0.6
Female breast cancer	F 74385	453	31562	23.0	0.5	36.6	0.0	-	-	0.0	0.1	0.6	2.9
Cervix cancer	F 5620	182	3179	2.0	0.2	3.5	-	-	-	-	0.1	0.5	0.9
Other uterine cancer	F 13281	28	4333	3.8	0.0	5.3	-	0.0	-	-	0.0	0.1	0.1
Ovarian cancer	F 23536	163	9623	7.3	0.2	11.5	0.0	-	0.0	0.1	0.2	0.4	0.6
Prostate cancer	M 59511	9	8394	19.4	0.0	11.5	0.0	-	-	0.0	0.0	0.0	0.0
Bladder cancer	M 23898	12	5402	8.1	0.0	7.1	-	-	-	-	0.0	0.0	0.1
	F 8482	12	1379	1.9	0.0	1.7	-	-	-	-	-	0.1	0.0
Other and ill-defined cancer sites	M 102960	2135	39408	38.6	2.5	49.5	1.5	1.9	1.7	2.2	2.7	3.2	4.7
	F 88236	1374	24520	24.0	1.7	29.4	1.4	1.6	1.4	1.6	1.6	2.0	2.5
Hodgkin's disease	M 1173	126	487	0.5	0.1	0.6	-	0.0	0.0	0.1	0.2	0.3	0.3
	F 983	116	281	0.3	0.1	0.3	-	-	0.0	0.2	0.2	0.3	0.3
Myeloma and non- Hodgkin lymphomas	M 23923	278	7685	8.7	0.3	9.8	0.1	0.1	0.2	0.3	0.4	0.5	0.7
	F 21372	138	4804	5.5	0.2	5.9	0.1	0.0	0.2	0.3	0.3	0.3	0.3
Leukaemia	M 18171	682	5073	6.6	0.8	6.5	0.5	0.6	0.7	1.1	1.1	0.9	0.9
	F 14853	542	3292	4.0	0.7	4.0	0.9	0.6	0.6	0.7	0.6	0.7	0.8
Diabetes	M 38781	177	9030	13.3	0.2	11.6	-	0.0	0.1	0.1	0.3	0.3	0.6
	F 49505	114	4381	10.0	0.1	5.4	-	-	0.1	0.1	0.1	0.3	0.3
ALL VASCULAR DISEASE	M 579201	2564	122464	195.6	3.0	154.8	1.7	0.4	0.7	1.6	3.0	4.9	8.3
	F 706283	1372	45929	133.8	1.7	56.0	1.8	0.4	0.5	1.1	1.8	2.3	3.6
Rheumatic heart disease and fever	M 3028	12	637	1.0	0.0	0.8	0.0	0.0	0.0	-	0.0	0.0	0.0
	F 6637	23	756	1.4	0.0	0.9	-	0.0	0.0	0.0	0.0	0.0	0.1
Hypertensive disease	M 32443	43	5016	10.5	0.1	6.4	-	-	0.0	0.0	0.1	0.1	0.2
	F 65487	16	2409	11.5	0.0	3.0	0.0	-	-	-	-	0.0	0.1
Ischaemic heart disease	M 241753	553	62531	83.7	0.6	78.8	0.1	-	0.0	0.1	0.5	1.1	2.5
	F 206412	150	16043	40.2	0.2	19.8	0.0	0.0	0.0	0.0	0.1	0.3	0.7
Pulmonary embolism and other venous	M 12381	140	4134	4.5	0.2	5.1	0.0	-	0.0	0.1	0.2	0.3	0.5
	F 18836	178	2982	4.3	0.2	3.5	0.0	0.0	0.1	0.1	0.4	0.4	0.5
Cerebrovascular disease	M 121121	463	19032	39.7	0.5	24.4	0.3	0.1	0.2	0.3	0.6	0.7	1.6
	F 181572	319	11633	34.5	0.4	14.0	0.3	0.1	0.2	0.2	0.4	0.6	0.9
Other vascular disease	M 168475	1353	31114	56.1	1.6	39.3	1.4	0.3	0.4	1.2	1.7	2.6	3.5
	F 227339	686	12106	41.9	0.9	14.8	1.5	0.3	0.3	0.7	0.9	0.9	1.4
Chronic obstructive pulmonary disease	M 76938	130	12291	25.3	0.1	16.4	0.1	0.1	0.1	0.2	0.3	0.3	0.3
	F 55600	105	7991	12.3	0.1	10.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2
Other respiratory disease	M 87657	787	12504	28.6	0.9	16.0	1.7	0.2	0.2	0.6	0.9	1.2	1.8
	F 94659	524	6195	18.0	0.7	7.5	1.5	0.3	0.3	0.5	0.4	0.7	0.9
Peptic ulcer	M 4718	18	1323	1.6	0.0	1.6	0.0	-	-	0.0	0.0	0.0	0.1
	F 5239	14	651	1.1	0.0	0.8	0.0	0.0	-	-	0.0	0.0	0.1
Liver cirrhosis	M 33738	333	23395	14.3	0.4	27.6	0.0	0.0	0.0	0.0	0.1	0.6	1.8
	F 16312	156	8942	5.7	0.2	10.2	0.0	0.0	0.0	0.0	0.1	0.3	0.9
Renal disease	M 24364	78	2958	7.8	0.1	3.9	0.2	0.0	0.0	0.0	0.0	0.1	0.2
	F 28312	61	1758	5.4	0.1	2.2	0.1	0.0	0.0	0.0	0.1	0.1	0.2
Pregnancy, birth Congenital and perinatal causes	F 218	151	66	0.1	0.2	0.1	-	-	-	0.1	0.2	0.5	0.5
	M 9266	7277	1534	6.2	9.6	1.7	61.4	0.9	0.8	1.0	1.1	0.9	0.8
Ill-defined causes	M 7927	6008	1338	5.3	8.3	1.5	53.6	0.9	0.8	0.7	0.8	0.7	0.7
	F 64493	3441	23552	24.5	4.1	27.8	9.5	0.5	0.5	2.4	4.0	5.6	6.5
	M 76689	1527	9143	16.2	2.0	10.6	6.8	0.3	0.3	0.9	1.4	1.8	2.1
Other medical causes	M 208065	4789	46082	71.8	5.7	56.2	8.3	2.1	2.2	4.0	5.8	7.4	10.3
	F 298680	2936	28652	60.7	3.7	34.2	7.2	1.8	2.3	2.9	3.4	3.8	4.7
ALL NON-MEDICAL CAUSES	M 102848	18878	45962	44.1	22.0	51.0	5.1	2.3	3.8	23.9	40.5	39.0	39.3
	F 64412	5118	15649	18.0	6.3	17.3	3.8	1.5	2.0	8.0	10.2	8.9	9.6
Road traffic accidents	M 16188	6447	6924	7.9	7.6	7.5	1.1	0.8	1.4	11.8	16.1	12.2	9.7
	F 5136	1649	1880	2.2	2.0	2.1	0.8	0.6	0.9	3.8	4.0	2.4	1.9
Fire	M 1231	173	675	0.5	0.2	0.8	0.2	0.1	0.1	0.1	0.3	0.3	0.3
	F 910	93	316	0.3	0.1	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1
Suicide	M 31082	5646	18655	14.1	6.5	20.4	-	0.0	0.7	5.7	11.7	12.6	14.6
	F 10267	1503	6295	4.3	1.8	6.8	-	0.0	0.3	2.0	3.1	3.2	3.8
POPULATION: (1000s; UN, 2015 revision)	M=male	194112	81210	91402	10805	10547	10704	11315	12067	12683	13088		
	F=female	202125	78205	92945	10259	10027	101						

2010: EU15 (European Union - 15 countries)

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			
112.2	169.2	276.8	463.1	736.1	1078.9	1643.7	2597.5	4426.4	11095.6	M	ALL CAUSES	001-999/A00-Y89
57.3	94.0	154.6	251.8	375.5	550.8	846.5	1387.2	2606.4	9379.2	F	Tuberculosis	010-018, 137/ A15-A19, B90
0.2	0.3	0.4	0.5	0.6	0.7	1.1	1.9	3.6	9.5	M	Other infective and parasitic	Rest of 001-139, 279, 58, 6/ rest of A00-B99 excl A33, A34
0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.8	2.2	5.1	F		
3.4	6.1	8.8	9.6	11.0	14.4	21.3	35.1	64.6	162.9	M		
1.6	2.1	3.1	3.6	4.9	7.6	13.2	23.3	47.9	147.1	F		
17.6	34.0	77.1	168.3	307.2	483.9	733.7	1056.2	1527.7	2437.4	M	ALL CANCER	140-208/C00-C97
22.6	43.3	77.0	135.3	207.0	296.8	420.6	570.4	799.2	1314.0	F		
0.5	1.6	5.5	12.3	17.6	21.4	22.5	22.0	24.7	27.9	M	Mouth and pharynx cancer	140-149/C00-C14
0.2	0.6	1.3	2.6	3.9	4.5	5.5	5.3	7.3	12.8	F	Oesophagus cancer	150/C15
0.4	1.2	3.9	9.3	16.2	22.9	28.4	35.5	42.1	53.3	M		
0.1	0.2	0.7	1.8	3.0	4.9	6.4	8.4	11.5	20.2	F		
1.1	2.0	4.1	8.1	13.5	21.0	31.6	50.2	74.3	118.8	M	Stomach cancer	151/C16
0.9	1.8	2.6	4.0	6.1	8.7	13.6	21.1	33.2	64.6	F		
1.6	2.8	6.9	14.7	29.1	48.3	78.7	120.1	181.3	305.6	M	Colorectal cancer	153, 154/C18-C21
1.3	3.0	6.1	10.9	18.1	26.8	41.0	63.5	97.2	200.7	F		
0.4	1.0	3.3	7.1	12.6	20.2	31.3	44.7	59.7	66.6	M	Liver cancer	155.0/C22 excl C221
0.1	0.4	0.5	1.3	2.4	4.0	6.1	12.1	19.7	28.0	F		
0.8	2.0	4.9	10.4	19.6	30.0	46.6	63.1	82.0	103.2	M	Pancreas cancer	157/C25
0.5	1.2	3.0	6.3	12.1	19.4	31.7	46.6	64.6	94.9	F		
0.1	0.4	1.5	3.7	6.5	8.7	10.8	12.6	16.0	22.9	M	Larynx cancer	161/C32
0.0	0.1	0.1	0.6	0.7	0.8	1.0	1.3	1.4	2.1	F		
2.2	6.5	18.7	50.2	96.1	150.6	224.5	296.1	394.5	464.9	M	Lung cancer	162/C33, C34
1.7	4.9	12.2	27.4	42.4	58.3	77.5	91.7	113.2	128.3	F		
1.2	1.7	2.4	3.3	4.7	6.7	9.0	11.9	15.6	21.9	M	Malignant melanoma	172/C43
1.1	1.5	2.0	2.4	2.9	3.9	4.8	5.7	8.0	13.3	F		
7.5	13.9	22.0	34.3	46.1	59.5	73.1	87.9	111.9	188.7	F	Female breast cancer	174/C50
1.6	2.6	3.2	4.0	4.2	4.3	4.8	5.8	6.6	8.8	F	Cervix cancer	180/C53
0.4	0.9	1.9	3.1	6.2	9.6	14.6	20.2	25.1	37.5	F	Other uterine cancer	179, 182/C54, C55
1.1	2.1	4.8	9.0	13.8	20.7	29.1	34.5	43.4	52.4	F	Ovarian cancer	183/C56, C570-C574
0.0	0.1	0.7	2.5	8.6	21.3	47.3	92.2	176.2	467.6	M	Prostate cancer	185/C61
0.2	0.4	1.2	3.2	7.0	13.7	24.0	39.3	70.4	156.0	M	Bladder cancer	188/C67
0.1	0.3	0.6	1.1	1.7	2.8	5.2	8.6	15.1	38.4	F		
6.5	10.5	18.0	33.6	59.1	89.4	129.0	186.1	263.7	424.9	M	Other and ill-defined cancer sites	Rest of 140-199/ rest of C00-C80, C97
4.4	7.5	12.2	20.7	33.5	51.0	76.3	108.8	162.2	294.5	F	Hodgkin's disease	201/C81
0.3	0.3	0.4	0.5	0.6	0.8	1.2	1.7	2.8	3.4	M		
0.2	0.2	0.3	0.3	0.5	0.7	1.1	1.1	1.7	2.6	F		
1.1	1.8	3.4	5.5	10.1	18.1	28.6	46.2	70.3	111.4	M	Myeloma and non- Hodgkin lymphomas	200, 202-203/ C82-C90, C96
0.5	1.0	1.9	3.2	5.9	10.8	17.9	29.6	47.7	73.8	F		
1.2	1.5	2.3	3.7	5.8	10.8	20.1	34.5	54.1	89.0	M	Leukaemia	204-208/C91-C95
0.9	1.1	1.7	2.4	3.9	6.5	11.2	18.2	29.5	52.3	F		
1.0	1.9	3.6	6.7	12.5	21.0	34.2	62.4	111.8	250.8	M	Diabetes	250/E10-E14
0.5	0.7	1.4	2.8	5.3	9.5	17.7	38.6	83.2	263.6	F		
16.1	31.2	58.2	104.3	171.8	264.6	437.5	762.0	1445.5	4332.3	M	ALL VASCULAR DISEASE	390-459/I00-I99
6.5	11.8	21.0	34.3	54.3	90.9	173.4	374.4	875.7	4215.3	F		
0.1	0.2	0.2	0.6	0.9	1.4	2.3	4.9	8.8	20.5	M	Rheumatic heart disease and fever	390-398/I00-I09
0.1	0.1	0.2	0.4	0.7	1.8	3.3	6.4	12.8	32.1	F		
0.4	1.0	2.0	3.8	7.2	11.2	19.6	34.2	71.4	289.4	M	Hypertensive disease	401-405/I10-I15
0.1	0.3	0.8	1.5	2.9	5.0	10.3	24.1	63.9	424.5	F		
6.3	14.4	30.1	56.2	91.1	138.6	215.1	356.4	618.8	1591.3	M	Ischaemic heart disease	410-414/I20-I25
1.4	3.2	6.4	11.5	18.7	33.1	64.1	130.0	280.9	1182.9	F		
0.9	1.6	2.6	3.8	5.8	8.6	12.3	17.5	30.3	68.5	M	Pulmonary embolism and other venous	415.1, 451-453/ I26, I80-I82
0.9	1.3	2.1	2.4	3.4	5.2	9.3	15.7	29.7	89.7	F		
2.6	4.8	8.5	14.5	24.3	39.2	76.7	149.7	323.0	994.8	M	Cerebrovascular disease	430-438/I60-I69
1.9	3.4	6.4	9.8	14.2	21.4	41.2	96.6	240.2	1075.5	F		
5.8	9.2	14.8	25.3	42.4	65.7	111.5	199.3	393.3	1367.7	M	Other vascular disease	Rest of 390-459/ rest of I00-I99
2.1	3.4	5.1	8.7	14.4	24.4	45.2	101.6	248.4	1410.5	F		
0.5	1.1	2.6	6.3	14.4	29.7	60.0	113.4	224.2	592.4	M	Chronic obstructive pulmonary disease	490-496/ J40-J47, J67
0.4	0.9	1.9	4.5	9.6	18.8	33.8	54.4	100.7	260.0	F		
2.5	3.2	5.5	9.3	15.9	26.1	49.4	98.1	208.0	767.2	M	Other respiratory disease	Rest of 460-519/ rest of J00-J98
1.3	1.9	2.8	4.9	7.6	12.1	22.0	46.8	109.1	569.7	F		
0.2	0.4	0.7	1.3	1.9	2.9	4.2	6.7	11.5	30.3	M	Peptic ulcer	531-533/K25-K27
0.1	0.1	0.3	0.5	0.8	1.5	2.4	3.9	7.6	27.4	F		
4.6	10.9	19.4	29.7	39.8	43.5	44.9	47.6	48.9	43.2	M	Liver cirrhosis	571/K70, K74
1.9	4.2	7.4	11.0	14.0	16.1	17.0	20.3	24.0	25.1	F		
0.4	0.5	0.8	2.1	3.9	6.6	12.6	28.1	58.5	221.2	M	Renal disease	580-590/N00-N19
0.3	0.3	0.6	1.1	2.0	3.6	7.3	16.8	38.9	165.9	F		
0.3	0.1	-	-	-	-	-	-	0.0	-	F	Pregnancy, birth Congenital and perinatal causes	630-676/A34,000-O99 740-779/A33, P00-P96, Q00-Q99
1.0	1.0	1.3	1.9	2.6	2.7	1.8	1.7	1.8	2.9	M	III-defined causes	780-799/R00-R99
0.8	0.8	1.2	1.5	2.2	2.3	1.5	1.4	1.7	2.4	F		
9.5	13.4	18.4	26.5	35.0	42.0	49.7	67.5	106.1	364.1	M		
3.4	4.7	6.4	9.1	12.1	16.1	22.4	34.2	67.5	437.5	F		
13.6	20.2	30.9	44.1	64.3	87.7	132.7	237.2	488.1	1542.2	M	Other medical causes	Rest of 001-799/ rest of A00-R99
6.8	10.3	15.9	24.4	36.4	54.9	90.5	166.4	382.1	1680.5	F		
41.6	45.1	49.0	52.6	55.2	53.2	60.6	79.6	126.0	339.1	M	ALL NON- MEDICAL CAUSES	E800-E999/V01-Y89
10.7	12.5	15.5	18.6	19.2	20.3	24.4	35.7	66.5	265.8	F		
8.8	7.8	7.8	7.8	6.9	6.1	7.5	9.1	12.8	18.3	M	Road traffic accidents	E810-E819, E826-E829/ part of V01-V99, Y850
1.6	1.7	2.0	2.2	2.0	2.4	2.5	4.0	5.5	5.8	F		
0.4	0.5	0.6	0.8	1.0	0.9	1.2	1.1	1.5	2.9	M	Fire	E890-E899/X00-X09
0.1	0.3	0.4	0.3	0.5	0.6	0.6	0.9	1.3	2.4	F		
16.6	20.0	22.1	23.1	22.4	19.6	18.8	22.5	28.5	45.2	M	Suicide	E950-E959/X60-X84
4.7	5.9	7.0	8.3	7.7	6.9	7.2	7.4	7.4	8.8	F		
14061	15429	15298	13611	12102	11533	9366	8323	6239	6938	M	POPULATION	
13933	15331	15288	13761	12445	12061	10126	9717	8188	13069	F	(1000s; UN, 2015 revision)	

EU15 (European Union - 15 countries): 2010**Relative importance of deaths in MIDDLE age (35–69) in the year 2010**

Age range (years)	Deaths attributed to SMOKING /total deaths (thousands)		Mean years lost PER DEATH FROM SMOKING
	Male	Female	
0–34	– / 43	– / 22	–
35–69	153 / 515	51 / 280	24 years
70+	256 / 1262	143 / 1574	7 years
All ages	409 / 1820	194 / 1876	13 years

Deaths, by cause, attributed to SMOKING / total deaths (thousands) in the year 2010

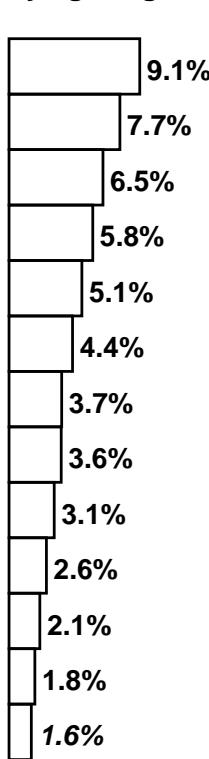
Cause	Male (by age)				Female (by age)			
	0–34	35–69	70+	All	0–34	35–69	70+	All
Lung Cancer	–/0.1	54/61	71/82	126/143	–/0.1	19/27	24/35	43/62
All Cancer	–/4.1	80/204 (39%)	106/352 (30%)	185/560	–/3.7	24/144 (17%)	32/293 (11%)	56/441
Vascular	–/2.6	40/122	72/454	112/579	–/1.4	12/46	55/659	67/706
Respiratory	–/0.9	13/25	56/139	69/165	–/0.6	6.7/14	36/135	43/150
All Other	–/36	20/163	23/317	43/516	–/17	7.7/75	20/487	28/579
All Causes	–/43	153/515 (30%)	256/1262 (20%)	409/1820	–/22	51/280 (18%)	143/1574 (9%)	194/1876

**Cancer deaths, and all deaths,
attributed to SMOKING / total deaths (thousands) in the year 2010**

Cause	Male	Female	Male + Female
All Cancer	185 / 560 (33%)	56 / 441 (13%)	241 / 1001 (24%)
All Causes	409 / 1820 (22%)	194 / 1876 (10%)	602 / 3696 (16%)

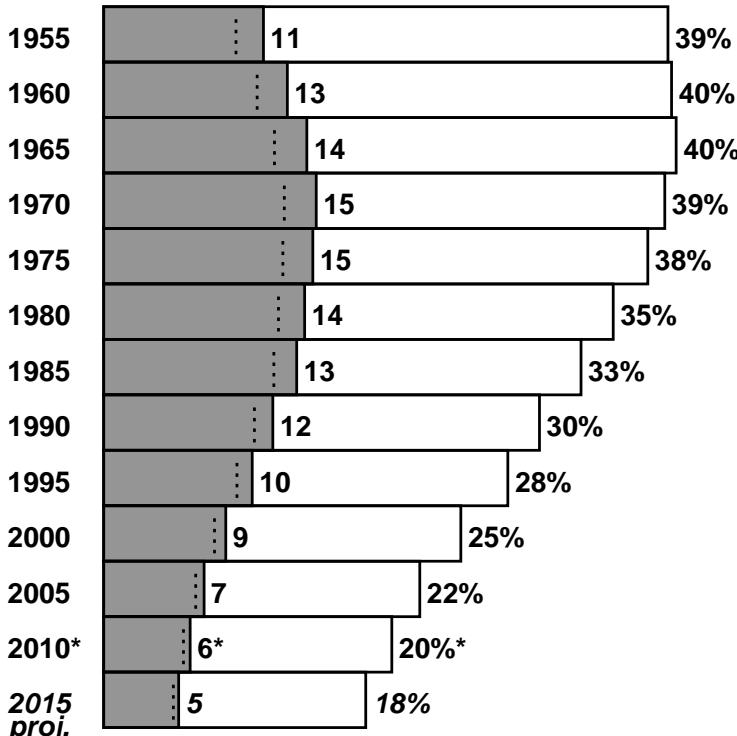
1955-2015: EU15 (European Union - 15 countries)

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)

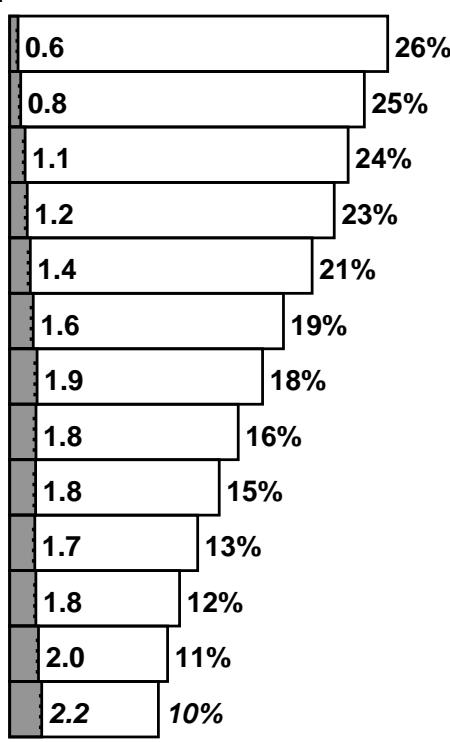
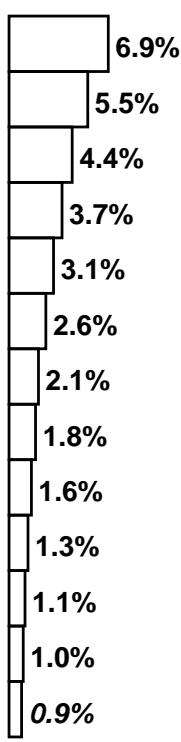
MALE



*eg, at year 2010 male death rates, out of 100 men aged 35, 20 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



EU15 (European Union - 15 countries): 1950-2015***Relative importance of deaths in MIDDLE age (35–69), 2015 projections***

Age range (years)	Deaths attributed to SMOKING		Mean years lost PER DEATH FROM SMOKING
	/total deaths (thousands)	Male	
0–34	– / 36	– / 19	–
35–69	141 / 496	60 / 282	24 years
70+	245 / 1305	152 / 1578	7 years
All ages	385 / 1837	212 / 1878	13 years

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
1955	–/236	195/666 (29%)	60/763 (8%)	255/1665	–/174	11/502 (2%)	5.0/903 (0.6%)	16/1579
1965	–/183	278/780 (36%)	133/872 (15%)	411/1836	–/120	23/499 (5%)	17/1092 (2%)	39/1710
1975	–/136	294/773 (38%)	249/1039 (24%)	543/1947	–/78	31/462 (7%)	36/1313 (3%)	68/1853
1985	–/97	264/658 (40%)	288/1143 (25%)	553/1898	–/49	38/364 (11%)	69/1461 (5%)	108/1874
1995	–/85	233/641 (36%)	283/1133 (25%)	517/1859	–/38	40/332 (12%)	114/1511 (8%)	154/1881
2005	–/52	171/543 (32%)	264/1200 (22%)	435/1795	–/25	44/289 (15%)	134/1545 (9%)	178/1859
2015 proj.	–/36	141/496 (28%)	245/1305 (19%)	385/1837	–/19	60/282 (21%)	152/1578 (10%)	212/1878

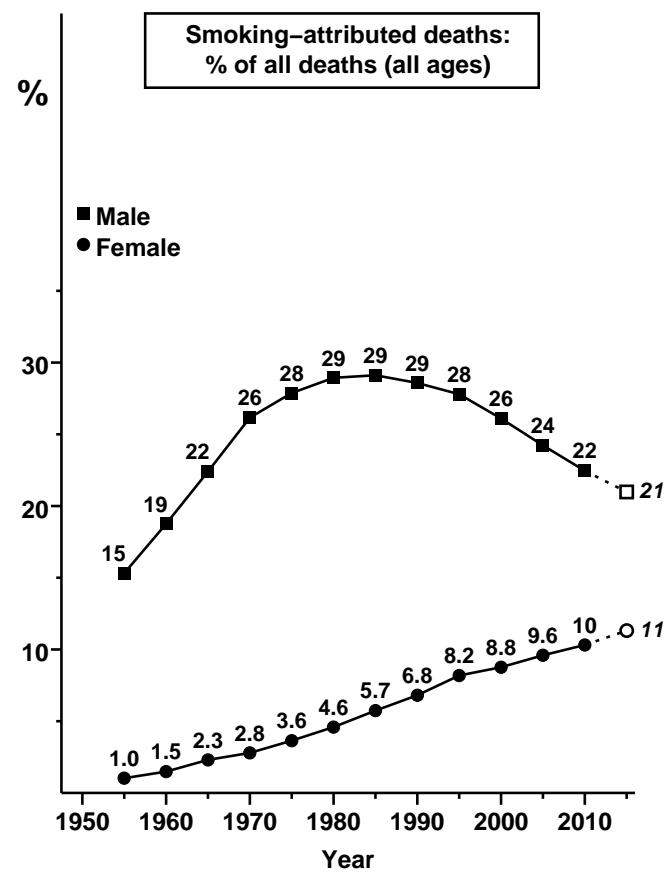
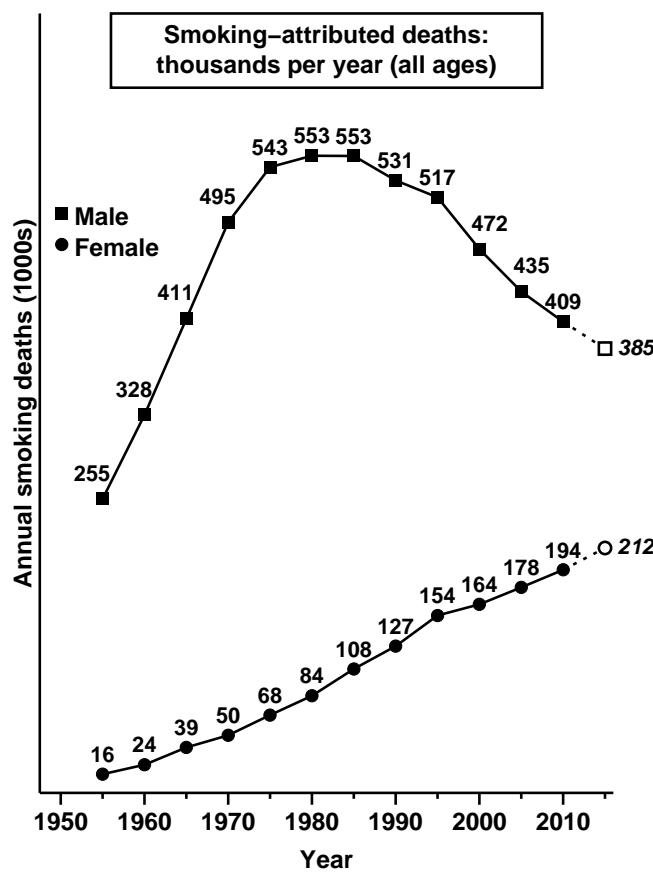
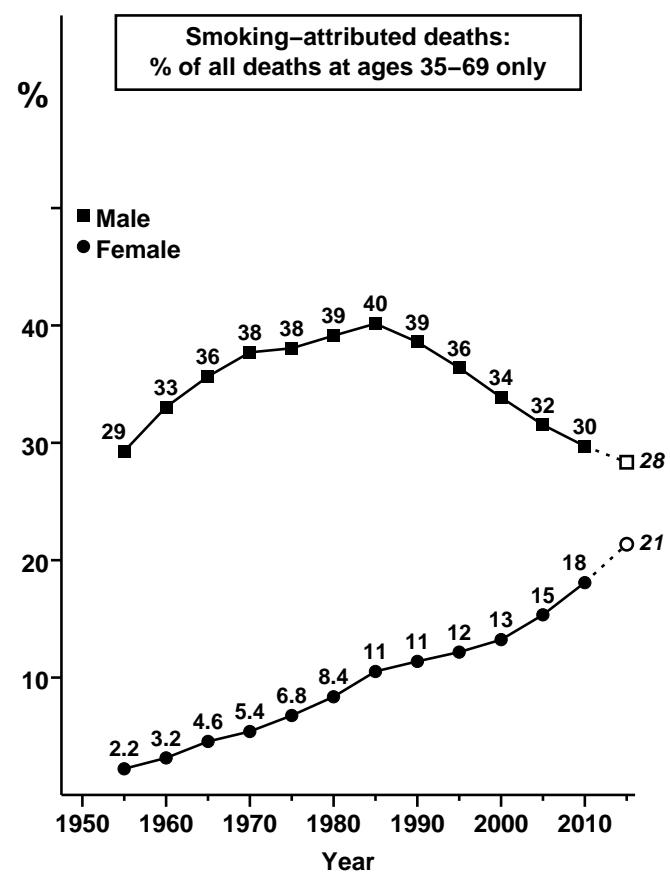
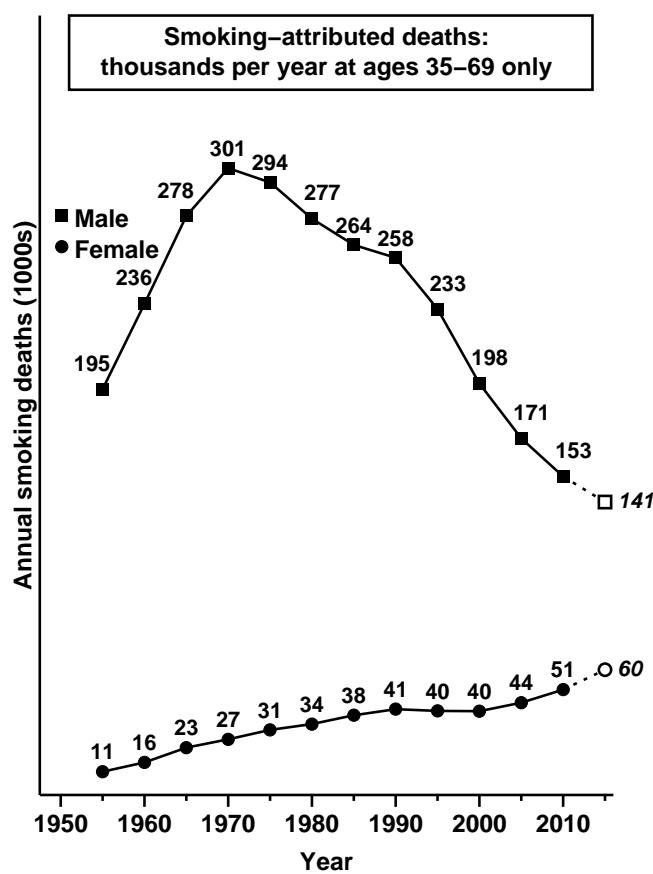
60-year total (M=millions), decade of 1960s to decade of 2010s (1960–2020*): 36 / 222M

*Estimated as 10 times the sum of the annual numbers for 1965, 1975, 1985, 1995, 2005 and 2015

1960–2020, by age & sex:

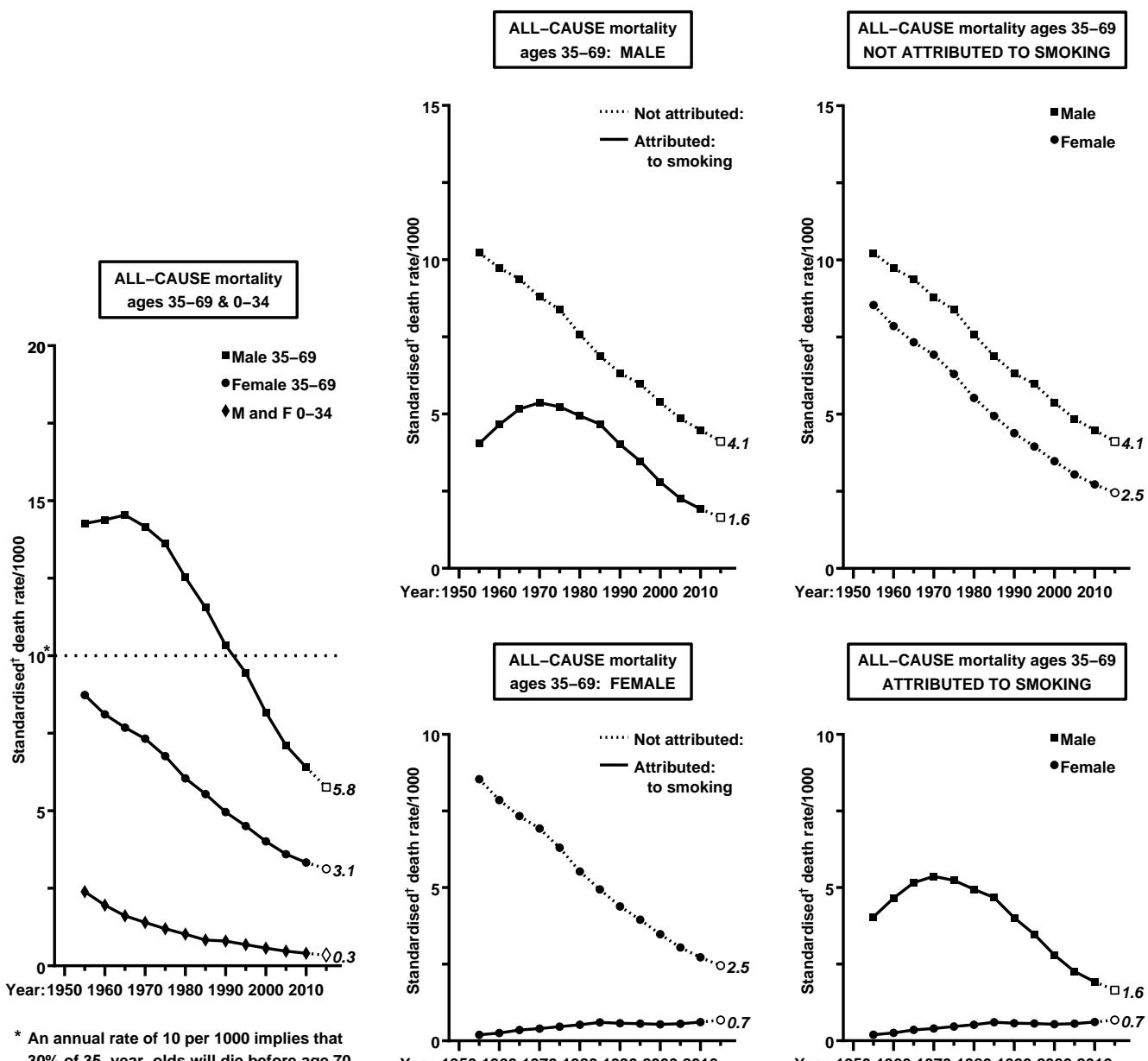
–/5.9M (36%)	14/39M (22%)	15/67M (22%)	28/112M	–/3.3M	2.4/22M (11%)	5.2/85M (6%)	7.6/111M
------------------------	------------------------	------------------------	---------	--------	-------------------------	------------------------	----------

1955-2015: EU15 (European Union - 15 countries)



EU15 (European Union - 15 countries): 1955-2015

ALL-CAUSE mortality rates attributed and not attributed to smoking

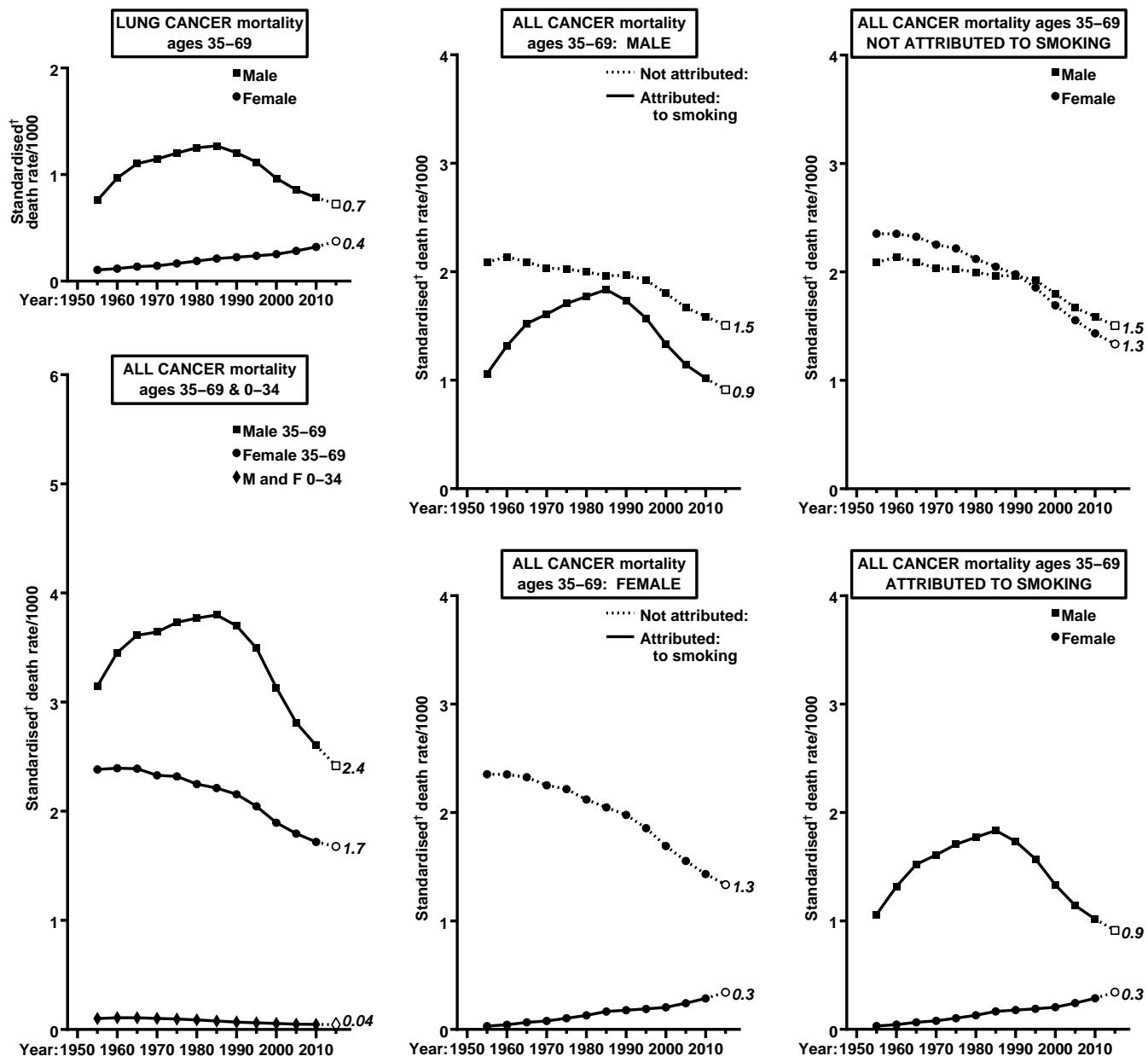


Year	Attributed to smoking?	MALE all-cause mortality (annual rate/1000, by age)						FEMALE all-cause mortality (annual rate/1000, by age)					
		0–34		35–69		70–79		0–34		35–69		70–79	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1950
1955	-	2.73		4.04	10.2		6.98	71.1		-	2.05	0.19	8.54
1960	-	2.30		4.65	9.73		9.84	67.6		-	1.61	0.25	7.85
1965	-	1.93		5.16	9.38		13.4	63.3		-	1.29	0.35	7.33
1970	-	1.72		5.36	8.80		18.0	59.4		-	1.07	0.40	6.93
1975	-	1.49		5.23	8.38		19.9	56.8		-	0.90	0.46	6.30
1980	-	1.29		4.94	7.58		19.5	51.3		-	0.74	0.52	5.52
1985	-	1.07		4.67	6.88		18.2	47.6		-	0.59	0.60	4.94
1990	-	1.06		4.01	6.32		16.9	41.8		-	0.53	0.57	4.38
1995	-	0.91		3.47	5.97		15.5	38.5		-	0.45	0.56	3.95
2000	-	0.75		2.79	5.38		12.5	34.4		-	0.38	0.54	3.47
2005	-	0.62		2.26	4.85		10.3	30.8		-	0.32	0.55	3.04
2010	-	0.52		1.92	4.48		8.27	26.9		-	0.28	0.61	2.72
2015	-	0.45		1.65	4.11		6.77	24.0		-	0.25	0.67	2.45

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

1955-2015: EU15 (European Union - 15 countries)

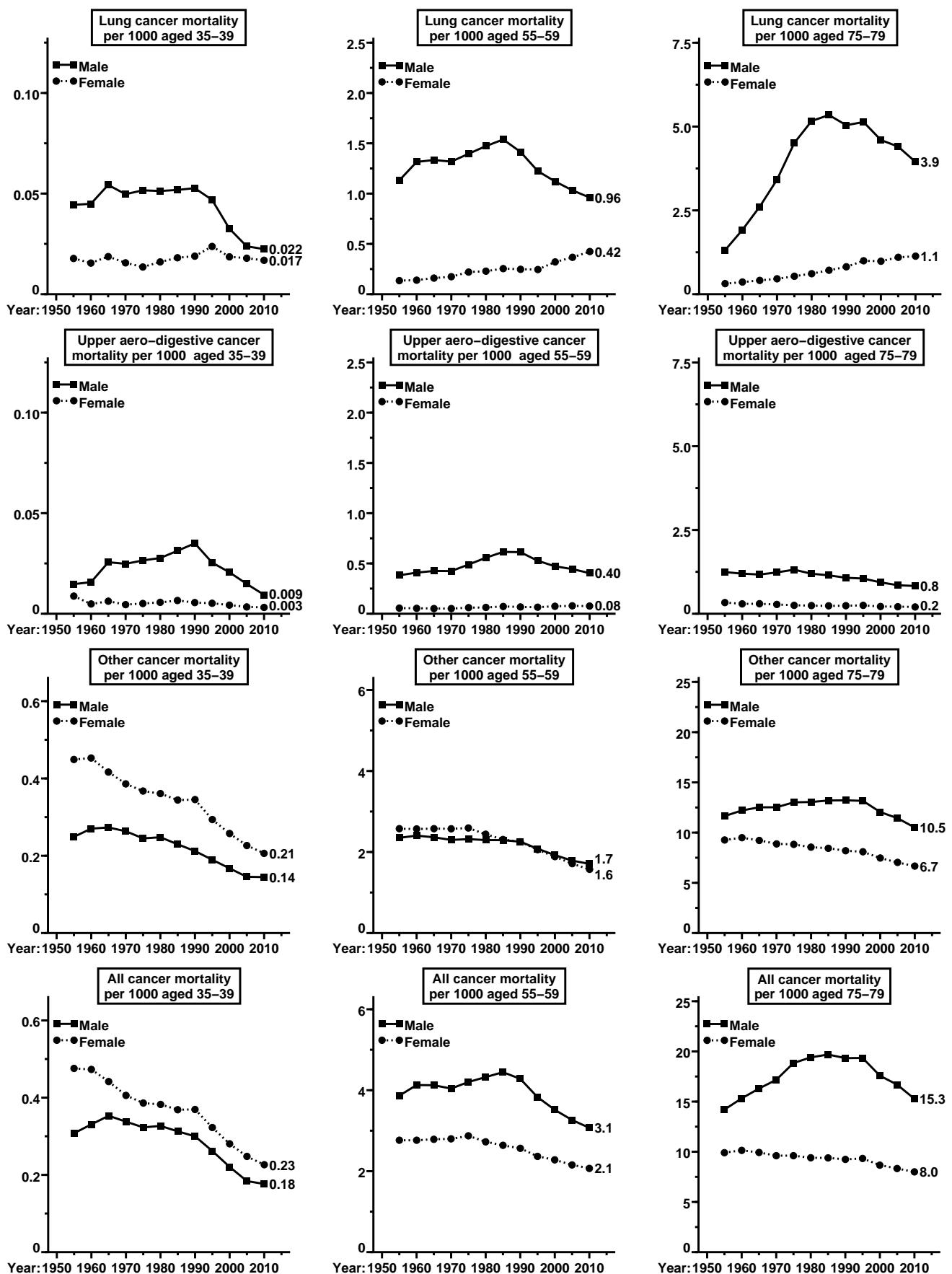
ALL CANCER mortality rates attributed and not attributed to smoking



[†] 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	0–34		35–69		70–79	
		Yes	No	Yes	No	Yes	No		Yes	No	Yes	No	Yes	No
1950
1955	-	0.10	1.06	2.09	1.73	10.9	...	-	0.10	0.03	2.35	0.05	8.63	...
1960	-	0.11	1.32	2.14	2.58	11.0	...	-	0.10	0.04	2.35	0.08	8.67	...
1965	-	0.12	1.52	2.09	3.69	11.0	...	-	0.10	0.06	2.32	0.14	8.58	...
1970	-	0.11	1.61	2.03	4.95	10.5	...	-	0.09	0.08	2.25	0.17	8.20	...
1975	-	0.10	1.71	2.02	5.97	10.7	...	-	0.09	0.10	2.22	0.26	8.05	...
1980	-	0.09	1.77	2.00	6.41	10.6	...	-	0.08	0.13	2.12	0.35	7.81	...
1985	-	0.08	1.83	1.96	6.46	10.6	...	-	0.07	0.16	2.05	0.49	7.69	...
1990	-	0.07	1.73	1.97	6.54	10.5	...	-	0.06	0.18	1.98	0.67	7.47	...
1995	-	0.06	1.57	1.92	6.31	10.3	...	-	0.06	0.19	1.86	0.80	7.21	...
2000	-	0.06	1.33	1.80	5.50	9.72	...	-	0.05	0.20	1.69	0.80	6.71	...
2005	-	0.05	1.14	1.67	4.93	9.29	...	-	0.05	0.24	1.55	0.85	6.29	...
2010	-	0.05	1.02	1.59	4.28	8.63	...	-	0.04	0.29	1.43	0.90	5.95	...
2015	-	0.05	0.91	1.50	3.76	8.17	...	-	0.04	0.34	1.33	1.00	5.67	...

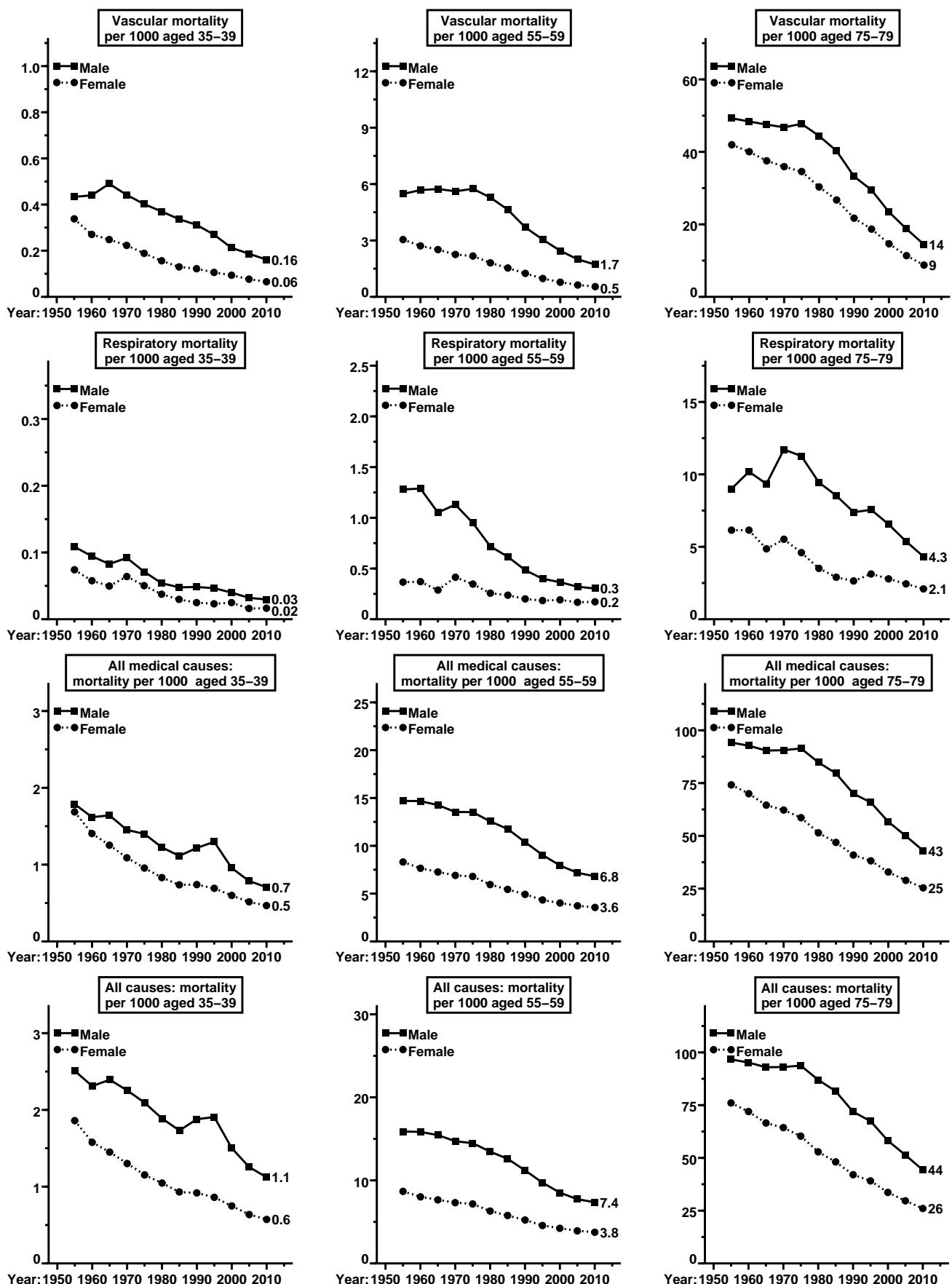
0–34 and 35–69 = means of 7 age-specific rates; 70–79 = mean of 2 rates (70–74 & 75–79)

EU15 (European Union - 15 countries): 1955-2010**Mortality* trends at selected ages: 35-39, 55-59 & 75-79**

* Annual mortality per 1000: 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005 and 2010

1955-2010: EU15 (European Union - 15 countries)

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



* Annual mortality per 1000: 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005 and 2010