

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

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**CANADA**

**Raw data** (pages 110–11, 112–13)

**Analyses** (pages 114–15, 116–17, 118–19)

**Appendix** (pages 120–21)

**CANADA: 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	111741	5145	36314	739.3	71.0	718.7	127.9	14.3	18.0	67.1	90.8	81.0	98.0	
ALL CAUSES	F	106320	2706	22367	480.5	39.7	423.9	102.7	10.4	13.9	33.5	35.8	34.8	46.7	
Tuberculosis	M	82	2	27	0.5	0.0	0.6	-	-	-	-	-	0.1	0.1	
	F	56	3	14	0.3	0.0	0.2	-	-	-	-	-	0.2	0.1	
HIV	M	429	61	359	2.6	0.8	4.7	-	0.1	-	0.1	0.1	1.0	4.1	
	F	82	23	56	0.5	0.3	0.7	-	0.1	-	0.2	0.9	1.0	-	
Other infective and parasitic	M	1218	43	433	8.0	0.6	8.0	2.0	0.3	0.1	0.5	0.3	0.6	0.6	
	F	1245	51	283	5.8	0.8	5.4	1.9	0.7	0.5	0.7	0.5	0.3	0.7	
ALL CANCER	M	33360	385	13411	224.4	5.1	278.9	2.3	3.1	2.5	4.1	7.2	6.8	10.0	
	F	29312	354	11645	154.0	4.8	219.6	2.4	2.0	1.5	3.9	3.7	6.8	13.5	
Mouth and pharynx cancer	M	594	6	335	4.1	0.1	6.5	-	-	-	0.1	0.1	0.2	0.2	
	F	307	7	108	1.6	0.1	2.0	-	-	-	-	-	0.1	0.5	
Oesophagus cancer	M	1052	-	541	7.2	-	11.0	-	-	-	-	-	-	-	
	F	340	2	108	1.7	0.0	2.2	-	-	-	-	-	0.1	0.1	
Stomach cancer	M	1195	10	472	8.0	0.1	9.8	-	-	-	-	0.1	0.2	0.6	
	F	793	6	254	3.9	0.1	4.8	-	-	-	0.1	-	0.3	0.2	
Colorectal cancer	M	3549	15	1455	24.0	0.2	30.5	-	-	-	0.1	0.2	0.4	0.7	
	F	3094	11	954	15.1	0.1	18.5	-	-	-	0.1	-	0.2	0.7	
Liver cancer	M	651	8	304	4.4	0.1	6.0	0.1	0.2	-	-	0.1	0.1	0.3	
	F	311	6	104	1.6	0.1	2.0	0.1	-	-	0.2	0.1	0.2	-	
Pancreas cancer	M	1510	6	676	10.2	0.1	14.0	-	-	-	0.1	0.1	0.2	0.2	
	F	1582	2	487	7.9	0.0	9.6	-	-	-	-	-	-	0.2	
Larynx cancer	M	416	-	189	2.8	-	4.0	-	-	-	-	-	-	-	
	F	90	-	40	0.5	-	0.9	-	-	-	-	-	-	-	
Lung cancer	M	9650	7	4300	65.7	0.1	92.1	-	-	-	0.1	-	0.3	0.3	
	F	6484	10	3055	36.4	0.1	59.7	-	-	-	0.2	0.3	0.3	0.4	
Malignant melanoma	M	432	15	239	2.9	0.2	4.4	-	-	-	-	0.3	0.5	0.6	
	F	277	11	140	1.5	0.1	2.3	-	-	-	-	0.1	0.3	0.6	
Female breast cancer	M	4857	40	2399	26.5	0.5	42.4	-	-	-	-	-	0.2	3.4	
Cervix cancer	M	398	24	237	2.3	0.3	3.8	-	-	-	-	0.3	0.5	1.4	
Other uterine cancer	M	640	2	225	3.3	0.0	4.3	-	-	-	-	-	0.1	0.1	
Ovarian cancer	M	1402	18	644	7.7	0.2	12.1	-	-	-	0.3	0.1	0.5	0.8	
Prostate cancer	M	3718	-	615	24.2	-	14.5	-	-	-	-	-	-	-	
Bladder cancer	M	1082	2	298	7.2	0.0	6.5	-	-	-	-	-	-	0.2	
	F	437	-	84	1.9	-	1.7	-	-	-	-	-	-	-	
Other and ill-defined cancer sites	M	6313	173	2672	42.3	2.3	53.0	1.3	2.0	1.3	1.8	3.0	2.3	4.5	
Hodgkin's disease	M	5675	126	1984	28.9	1.8	37.6	1.7	1.7	1.0	1.3	1.3	2.5	2.8	
	F	78	14	43	0.5	0.2	0.7	-	-	0.1	0.1	0.5	0.6	0.1	
Myeloma and non-Hodgkin lymphomas	M	1930	38	839	13.0	0.5	17.1	-	0.1	0.1	0.5	0.9	0.8	1.1	
	F	1717	24	582	8.8	0.3	11.3	-	0.1	0.1	0.6	-	0.5	1.0	
Leukaemia	M	1190	91	433	7.9	1.2	8.7	0.9	0.9	0.9	1.3	2.0	1.3	1.3	
	F	858	54	225	4.2	0.8	4.1	0.6	0.2	0.4	1.1	1.2	0.8	1.1	
Diabetes	M	3322	33	1085	22.0	0.4	22.4	-	-	0.2	0.2	0.2	0.8	1.7	
	F	3392	17	620	15.0	0.2	12.6	-	-	0.1	0.1	0.3	0.5	0.6	
ALL VASCULAR DISEASE	M	38080	206	10448	250.6	2.8	216.5	2.2	0.5	0.5	1.7	3.2	4.6	6.6	
	F	38346	143	4193	154.8	2.0	85.1	2.3	0.3	0.9	1.4	2.5	2.4	4.2	
Rheumatic heart disease and fever	M	122	1	34	0.8	0.0	0.6	-	-	0.1	-	-	-	-	
Hypertensive disease	M	304	-	77	1.4	-	1.6	-	-	-	-	-	-	-	
	F	592	4	142	3.9	0.1	3.0	-	-	-	-	0.1	-	0.3	
Ischaemic heart disease	M	23354	44	7286	154.6	0.6	150.9	-	-	-	-	0.3	1.1	2.5	
	F	19063	22	2234	77.9	0.3	46.5	0.1	-	0.2	0.1	0.7	1.0	-	
Pulmonary embolism and other venous disease	M	416	9	171	2.8	0.1	3.2	-	-	-	-	-	0.5	0.4	
Cerebrovascular disease	M	557	14	165	2.7	0.2	3.0	-	-	0.1	0.1	0.7	0.2	0.4	
	F	6421	29	1204	41.7	0.4	25.3	0.1	0.1	0.1	0.3	0.5	0.7	1.0	
Other vascular disease	M	9155	32	862	36.2	0.5	16.8	0.5	0.2	0.3	0.2	0.5	0.9	0.6	
Peptic ulcer	M	7175	119	1611	46.9	1.6	33.3	2.1	0.4	0.3	1.4	2.4	2.4	2.5	
	F	8167	74	784	32.4	1.0	15.7	1.7	0.1	0.6	1.1	0.7	2.2	-	
Chronic obstructive pulmonary disease	M	5518	14	850	35.8	0.2	19.7	0.2	-	-	0.3	0.7	0.1	0.1	
Other respiratory disease	M	4301	21	640	18.8	0.3	13.6	0.1	0.1	0.2	0.6	0.5	0.4	-	
	F	3820	62	659	24.8	0.9	13.2	2.8	0.4	0.2	0.5	0.4	0.8	1.2	
4105	43	419	16.3	0.6	8.2	1.6	0.2	0.3	0.2	0.7	0.6	0.7	0.8	-	
Peptic ulcer	M	234	2	65	1.5	0.0	1.2	-	-	-	-	-	0.1	0.1	
	F	190	1	26	0.8	0.0	0.5	-	-	-	-	0.1	-	-	
Liver cirrhosis	M	1468	9	1011	10.1	0.1	19.5	-	-	-	-	-	0.1	0.7	
	F	699	3	382	4.0	0.0	7.0	-	-	-	-	0.1	-	0.2	
Renal disease	M	1642	6	307	10.7	0.1	6.6	0.1	-	-	-	0.2	0.1	0.2	
	F	1650	13	200	6.8	0.2	4.0	0.3	-	-	0.1	0.1	0.1	0.6	
Pregnancy, birth and congenital and perinatal causes	M	11	10	1	0.1	0.1	0.0	-	-	-	0.1	0.2	0.2	0.4	
	F	1001	858	105	8.3	13.4	1.6	86.2	1.4	1.2	1.4	1.2	0.8	1.3	
Ill-defined causes	M	817	655	108	6.9	10.7	1.7	69.1	1.1	0.7	0.7	1.8	1.0	0.8	
	F	1392	272	615	9.3	3.9	10.2	11.6	0.3	0.5	1.7	4.6	4.2	4.2	
Other medical causes	M	11361	362	2750	74.2	5.0	54.1	10.4	2.3	1.7	3.7	5.1	4.5	7.4	
	F	16334	327	2100	67.3	4.7	39.7	8.7	2.6	2.8	3.1	4.6	5.2	6.0	
ALL NON-MEDICAL CAUSES	M	8814	2830	4189	56.4	37.7	61.5	10.0	5.9	11.2	53.1	67.7	56.5	59.8	
	F	4435	899	1422	23.0	12.6	21.2	7.2	3.0	6.4	21.6	19.2	14.7	16.1	
Road traffic accidents	M	1861	881	759	12.0	11.8	11.4	1.7	3.1	3.4	21.5	24.6	15.3	13.0	
	F	887	360	335	5.5	5.1	4.4	8.9	0.3	1.1	1.1	1.1	0.9	0.9	
Fire	M	150	39	74	1.0	0.5	1.1	0.7	0.6	0.5	0.5	0.4	0.6	0.6	
	F	92	26	26	0.5	0.4	0.4	0.8	0.2	0.2	0.4	0.4	0.3	0.5	
Suicide	M	2798	943	1631	17.7	12.5	23.0	-	-	2.8	16.3	24.4	20.5	23.3	
	F	807	248	506	5.1	3.4	7.1	-	-	1.7	5.2	6.0	5.9	5.2	
Homicide	M	337	168	149	2.1	2.3	2.0	1.7	0.1	0.2	2.8	3.7	4.1	3.3	
	F	126	56	57	0.8	0.8	0.7	1.2	0.2	0.3	1.1	1.1	0.9	0.9	
<b>POPULATION:</b> (1000s; UN, 2004 revision)	<b>M=male</b>	15197	7324	6767	903	1048	1053	1061	1055	1061	1143				
	<b>F=female</b>	15492	7025	6845	858	997	1000	1006	1006	1035	1124				

## 2000: CANADA

**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
128.6	186.6	278.0	439.8	745.3	1235.9	2016.7	3293.4	5347.7	11896.9	M	ALL CAUSES	001-999/A00-Y89
70.6	111.8	172.7	291.3	454.6	717.9	1148.3	1890.3	3161.2	9286.9	F	Tuberculosis	010-018, 137/ A15-A19, B90
0.2	-	-	0.3	0.1	1.0	2.5	2.4	3.6	9.6	F	HIV	279.5, 279.6/B20-B24
-	0.2	0.3	0.2	0.4	0.3	0.3	1.6	1.7	3.7	F	Other infective and parasitic	Rest of 001-139/rest of A00-B99 excl A33,A34
6.2	7.7	6.2	5.2	3.9	1.9	1.5	1.3	0.6	0.3	F		
1.9	1.0	0.4	0.5	0.4	0.3	0.5	-	0.4	0.2	F		
1.6	3.0	5.6	7.1	8.1	10.4	20.0	34.7	54.8	127.4	M		
0.8	1.2	2.3	3.7	6.1	10.6	12.7	26.3	35.1	99.7	F		
16.9	38.9	73.7	163.8	306.4	538.1	814.3	1278.3	1727.9	2526.8	M	ALL CANCER	140-208/C00-C97
28.3	52.8	91.6	169.3	263.2	388.2	543.9	757.2	986.7	1411.7	F	Mouth and pharynx cancer	140-149/C00-C14
0.4	1.7	2.3	5.6	8.7	12.2	14.7	19.9	21.5	28.7	M	Oesophagus cancer	150/C15
0.6	0.8	0.4	1.8	1.8	3.9	4.7	8.0	11.4	15.6	F		
0.9	1.0	3.2	8.5	14.4	18.0	30.9	41.1	45.6	54.3	M		
0.1	0.1	0.7	1.5	1.3	3.6	8.5	9.9	12.7	19.2	F		
0.4	1.8	2.9	5.0	10.2	20.3	28.0	44.8	57.5	100.6	M	Stomach cancer	151/C16
0.6	1.5	2.4	3.8	3.8	8.1	13.2	18.5	26.2	51.1	F		
1.6	3.0	8.2	17.2	34.1	63.2	85.9	132.8	177.3	279.7	M	Colorectal cancer	153, 154/C18-C21
1.7	2.7	6.0	13.6	23.3	32.5	50.0	69.1	114.2	201.0	F		
0.2	1.4	3.1	4.0	7.1	9.9	16.4	27.7	31.3	34.2	M	Liver cancer	155.0/C22 excl C221
0.3	0.2	0.7	0.7	3.7	3.0	5.7	8.8	10.8	16.9	F		
0.5	2.3	3.9	8.4	14.1	30.1	38.9	53.5	83.7	96.4	M	Pancreas cancer	157/C25
0.7	1.3	2.2	7.2	10.4	19.2	26.4	46.6	60.9	91.3	F		
-	0.4	1.0	2.1	4.7	8.8	11.1	18.6	22.9	20.8	M	Larynx cancer	161/C32
-	-	0.4	0.8	0.9	0.9	4.1	3.1	2.5	3.5	F		
1.6	7.9	19.1	47.9	99.0	187.8	281.2	421.2	511.3	542.5	M	Lung cancer	162/C33, C34
2.5	10.7	21.0	37.7	77.5	111.0	157.4	206.3	227.2	202.0	F		
1.0	1.7	2.3	3.5	6.0	6.5	10.0	12.2	18.2	19.5	M	Malignant melanoma	172/C43
0.9	1.4	2.1	1.9	2.5	3.3	4.2	4.9	7.8	10.3	F		
9.0	14.7	24.2	46.0	50.6	72.7	79.3	105.0	128.6	205.1	F	Female breast cancer	174/C50
2.1	2.5	3.3	4.4	3.9	5.5	4.7	5.7	9.1	10.5	F	Cervix cancer	180/C53
0.4	0.7	1.5	3.5	5.3	7.3	11.5	16.1	25.0	34.4	F	Other uterine cancer	179, 182/C54, C55
1.3	2.4	5.7	9.1	16.8	22.5	27.0	37.3	47.0	52.1	F	Ovarian cancer	183/C56, C570-C574
-	0.2	0.5	2.7	10.1	24.9	63.1	128.7	247.0	538.0	M	Prostate cancer	185/C61
0.1	0.7	1.0	3.6	5.2	12.2	22.6	41.1	59.0	126.4	M	Bladder cancer	188/C67
0.3	0.2	0.2	1.2	1.5	3.1	5.2	10.1	14.8	37.8	F		
6.8	11.6	16.6	39.9	62.3	97.2	136.6	223.1	301.3	458.5	M	Other and ill-defined cancer sites	Rest of 140-199/ rest of C00-C80, C97
5.0	10.4	15.4	25.6	43.2	65.4	98.2	134.9	190.1	319.9	F	Hodgkin's disease	201/C81
0.4	0.4	0.3	0.8	1.0	1.1	1.1	2.4	1.5	1.6	M		
0.1	0.2	0.1	0.2	0.5	0.3	0.5	0.5	2.3	1.7	F		
1.9	2.5	5.9	9.3	21.1	31.0	47.8	71.0	94.5	131.2	M	Myeloma and non- Hodgkin lymphomas	200, 202-203/ C82-C90, C96
1.4	2.0	3.7	8.0	12.2	18.1	33.8	49.6	66.2	87.5	F	Leukaemia	204-208/C91-C95
1.0	2.4	3.2	5.1	8.5	14.9	25.8	40.2	55.4	94.5	M		
1.4	1.3	2.0	2.8	4.1	7.8	9.3	22.9	29.8	51.9	F		
2.4	4.4	5.8	11.1	25.1	40.9	67.3	117.8	174.6	344.5	M	Diabetes	250/E10-E14
1.1	2.1	2.8	6.8	10.4	21.2	43.6	74.2	129.4	288.3	F		
16.7	34.3	67.5	120.2	225.5	382.1	668.9	1130.0	2000.0	4962.3	M	ALL VASCULAR DISEASE	390-459/I00-I99
6.6	13.2	21.9	41.5	76.1	147.8	288.4	567.4	1141.9	4233.0	F	Rheumatic heart disease and fever	390-398/I00-I09
0.1	0.1	0.5	0.6	0.6	1.6	0.9	2.8	9.2	13.7	M	Hypertensive disease	401-405/I10-I15
0.1	0.2	0.4	0.6	1.0	3.9	4.9	7.7	10.8	22.2	F		
0.4	0.8	0.8	1.2	2.1	4.7	11.1	17.7	29.2	85.2	M		
0.2	0.5	0.6	1.7	3.1	3.6	3.6	13.2	27.5	137.1	F		
8.9	23.4	45.5	88.1	163.5	269.0	458.2	722.3	1227.4	2745.5	M	Ischaemic heart disease	410-414/I20-I25
2.3	5.0	8.9	19.4	39.8	84.3	166.2	309.7	602.2	2035.5	F	Pulmonary embolism and other venous disease	415.1, 451-453/ I26, I80-I82
0.7	0.8	1.8	2.5	4.1	4.9	7.8	14.6	17.6	35.1	M	Cerebrovascular disease	430-438/I60-I69
0.5	1.3	1.5	2.0	3.6	5.2	7.1	11.7	18.4	37.7	F		
2.3	3.6	8.7	11.0	23.2	44.2	84.2	178.9	365.6	1003.2	M		
1.7	3.6	6.4	10.9	15.0	26.7	53.6	120.9	261.6	1055.9	F		
4.4	5.7	10.2	16.9	31.9	57.7	106.6	193.6	351.0	1079.5	M	Other vascular disease	Rest of 390-459/ rest of I00-I99
1.8	2.8	4.3	8.0	15.1	24.7	53.1	104.2	221.4	944.6	F		
0.7	0.3	2.0	4.7	12.7	32.5	85.1	174.4	357.0	848.7	M	Chronic obstructive pulmonary disease	490-496/ J40-J47, J67
0.4	0.9	1.8	5.3	11.4	24.2	51.2	105.7	176.0	370.1	F		
2.5	3.1	4.8	7.5	12.8	20.3	41.7	87.6	174.3	674.6	M	Other respiratory disease	Rest of 460-519/ rest of J00-J98
1.1	2.1	2.7	4.1	7.8	14.0	25.7	46.4	95.8	487.2	F		
0.1	0.5	0.8	1.1	0.6	2.1	3.5	8.1	10.4	30.3	M	Peptic ulcer	531-533/K25-K27
0.2	0.1	0.3	0.2	0.4	0.6	1.9	3.1	3.8	21.2	F		
2.1	5.5	10.6	13.8	22.8	33.6	48.2	44.1	42.0	33.5	M	Liver cirrhosis	571/K70, K74
1.6	2.1	3.4	5.9	6.5	12.3	17.4	19.6	20.9	17.9	F		
0.5	0.7	2.1	2.2	5.6	11.5	23.8	46.5	93.6	256.1	M	Renal disease	580-590/N00-N19
0.8	0.7	1.1	1.8	2.4	6.4	15.0	28.9	58.8	166.1	F		
0.1	-	-	-	-	-	-	-	-	-	F	Pregnancy, birth Congenital and perinatal causes	630-676/A34,000-099
1.0	1.3	1.8	1.8	1.8	1.1	2.5	2.2	3.9	4.8	M	III-defined causes	740-779/A33, P00-P96, Q00-Q99
1.1	1.2	1.4	2.2	1.9	2.2	1.5	3.5	3.0	3.5	F		
6.1	6.8	8.5	8.4	10.5	13.0	18.0	20.3	29.8	99.6	M		
1.8	2.2	3.7	3.5	3.3	5.9	10.5	12.3	17.6	131.8	F		
10.6	14.2	22.7	34.7	51.4	92.4	152.6	269.4	548.3	1652.6	M	Other medical causes	Rest of 001-799/ rest of A00-R99
7.5	11.3	17.4	24.9	42.4	63.2	110.9	206.3	426.6	1785.9	F		
61.0	65.8	66.0	58.0	58.1	54.8	66.8	76.3	126.9	325.7	M	ALL NON- MEDICAL CAUSES	E800-E999/V01-Y89
17.4	20.5	21.8	21.4	21.9	20.4	24.7	37.8	63.5	266.7	F		
10.7	10.4	12.6	9.7	11.6	10.4	14.7	10.9	22.1	31.0	M	Road traffic accidents	E810-E819, E826-E829/ part of V01-V99, Y850
2.9	5.4	4.7	4.8	5.6	5.8	7.1	9.9	15.2	11.0	F		
0.7	0.8	1.2	1.4	1.6	0.6	1.6	0.7	4.8	5.7	M	Fire	E890-E899/X00-X09
0.3	0.3	0.3	0.2	0.6	0.5	0.7	1.5	1.1	4.5	F		
25.4	29.7	24.8	23.3	21.2	19.7	16.7	17.0	23.2	21.7	M	Suicide	E950-E959/X60-X84
6.5	8.1	9.7	8.6	6.2	4.8	5.6	4.2	3.4	2.3	F		
3.3	3.1	1.7	1.7	0.9	1.6	1.6	1.5	1.8	2.2	M	Homicide	E960-E969/ X85-X99, Y00-Y09
1.3	1.3	0.9	0.4	0.4	0.6	0.2	0.9	0.6	0.8	F		
1353	1303	1153	1019	773	616	550	458	336	313	M	<b>POPULATION</b>	(1000s; UN, 2004 revision)
1333	1303	1163	1028	787	641	592	547	473	603	F		

**CANADA: 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.	—	—	—	—	—	—	—	—	—	—	—
Total	6896	390	17	6	367	24	99	255	14	2533	3581
35-69 Sm.	11826	6098	4265	706	1127	762	204	3116	—	1646	—
Total	38329	13586	4642	1133	7811	995	782	11869	1012	6024	4061
(31%)	(45%)	(92%)	(62%)	(14%)	(77%)	(26%)	(26%)	(26%)	(27%)	(27%)	(27%)
70+ Sm.	15671	6812	4687	515	1610	3379	474	3656	—	1350	—
Total	66171	17356	5110	826	11420	4496	3814	27967	477	10475	1586
(24%)	(39%)	(92%)	(62%)	(14%)	(75%)	(12%)	(13%)	(13%)	(13%)	(13%)	(13%)
Any age Sm.	27497	12910	8952	1221	2737	4141	678	6772	—	2996	—
Total	111396	31332	9769	1965	19598	5515	4695	40091	1503	19032	9228
(25%)	(41%)	(92%)	(62%)	(14%)	(75%)	(14%)	(17%)	(17%)	(16%)	(16%)	(16%)
<b>2000</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
Total	5145	385	7	6	372	14	62	206	9	1639	2830
35-69 Sm.	9954	5466	3882	608	976	621	151	2382	—	1334	—
Total	36314	13411	4300	1065	8046	850	659	10448	1011	5746	4189
(27%)	(41%)	(90%)	(57%)	(12%)	(73%)	(23%)	(23%)	(23%)	(23%)	(23%)	(23%)
70+ Sm.	15655	7148	4856	590	1702	3403	348	3214	—	1542	—
Total	70282	19564	5343	991	13230	4654	3099	27426	448	13296	1795
(22%)	(37%)	(91%)	(60%)	(13%)	(73%)	(11%)	(12%)	(12%)	(12%)	(12%)	(12%)
Any age Sm.	25609	12614	8738	1198	2678	4024	499	5596	—	2876	—
Total	111741	33360	9650	2062	21648	5518	3820	38080	1468	20681	8814
(23%)	(38%)	(91%)	(58%)	(12%)	(73%)	(13%)	(15%)	(15%)	(14%)	(14%)	(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	14503	7531	6015	1288	1149	1029	791	642	594	524	420	270	266	
2000	15197	7324	6767	1353	1303	1153	1019	773	616	550	458	336	313	
<b>NUMBER OF DEATHS (Source: WHO)</b>														
<b>All causes</b>														
1995	111396	6896	38329	2225	2572	3308	4118	5380	8412	12314	15650	16340	34181	
2000	111741	5145	36314	1740	2432	3205	4482	5762	7607	11086	15074	17947	37261	
<b>Lung cancer</b>														
1995	9769	17	4642	43	111	262	445	776	1233	1772	1956	1523	1631	
2000	9650	7	4300	22	103	220	488	765	1156	1546	1928	1716	1699	
<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	836.7*	89.5*	834.7*	172.8	223.8	321.6	520.8	838.7	1417.1	2348.2	3725.3	6045.1	12840.3	
2000	739.3*	71.0*	718.7*	128.6	186.6	278.0	439.8	745.3	1235.9	2016.7	3293.4	5347.7	11896.9	
<b>All cancer</b>														
1995	240.1*	4.9*	311.4*	21.6	39.7	90.0	181.2	339.0	590.1	918.2	1331.6	1797.6	2593.2	
2000	224.4*	5.1*	278.9*	16.9	38.9	73.7	163.8	306.4	538.1	814.3	1278.3	1727.9	2526.8	
<b>Lung cancer</b>														
1995	75.4*	0.2*	108.8*	3.3	9.7	25.5	56.3	121.0	207.7	337.9	465.6	563.4	612.7	
2000	65.7*	0.1*	92.1*	1.6	7.9	19.1	47.9	99.0	187.8	281.2	421.2	511.3	542.5	
<b>Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)</b>														
1995	15.3*	0.1*	25.8*	0.9	3.5	7.0	17.8	31.8	51.5	68.3	83.8	75.8	101.1	
2000	14.1*	0.1*	21.5*	1.3	3.1	6.6	16.2	27.7	39.0	56.8	79.5	90.0	103.8	
<b>Other cancer</b>														
1995	149.3*	4.7*	176.8*	17.3	26.5	57.6	107.1	186.3	330.9	512.0	782.2	1158.3	1879.4	
2000	144.6*	5.0*	165.3*	14.0	27.9	48.0	99.7	179.8	311.3	476.3	777.6	1126.6	1880.6	
<b>Chronic obstructive pulmonary disease (COPD)</b>														
1995	41.4*	0.3*	24.8*	0.8	0.5	2.7	6.8	15.0	37.1	110.8	215.4	402.5	940.3	
2000	35.8*	0.2*	19.7*	0.7	0.3	2.0	4.7	12.7	32.5	85.1	174.4	357.0	848.7	
<b>Other respiratory disease</b>														
1995	35.3*	1.3*	17.8*	1.9	3.6	5.4	10.9	14.2	27.8	60.6	127.8	260.1	966.9	
2000	24.8*	0.9*	13.2*	2.5	3.1	4.8	7.5	12.8	20.3	41.7	87.6	174.3	674.6	
<b>Vascular disease</b>														
1995	304.0*	3.2*	271.8*	21.0	43.7	78.3	152.0	273.6	490.1	844.0	1424.9	2528.3	5690.1	
2000	250.6*	2.8*	216.5*	16.7	34.3	67.5	120.2	225.5	382.1	668.9	1130.0	2000.0	4962.3	
<b>Liver cirrhosis</b>														
1995	11.7*	0.2*	21.8*	1.9	5.7	10.8	17.3	28.1	37.7	51.3	54.3	55.1	37.6	
2000	10.1*	0.1*	19.5*	2.1	5.5	10.6	13.8	22.8	33.6	48.2	44.1	42.0	33.5	
<b>Other medical causes</b>														
1995	140.9*	33.3*	120.1*	52.8	60.4	71.4	85.6	107.4	173.3	290.0	485.4	869.4	2286.3	
2000	137.3*	24.2*	109.4*	28.7	38.6	53.5	71.8	107.1	174.5	291.8	502.7	919.5	2525.2	
<b>All non-medical causes</b>														
1995	63.3*	46.2*	66.9*	72.8	70.2	63.0	66.9	61.4	61.0	73.2	85.9	132.1	326.1	
2000	56.4*	37.7*	61.5*	61.0	65.8	66.0	58.0	58.1	54.8	66.8	76.3	126.9	325.7	

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

1995, 2000: CANADA

## 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	3311	399	22	4	373	17	83	188	9	1579	1036
35-69 Sm.	5578	2704	2199	168	337	529	127	1338	—	880	—
Total	22509	11050	2634	296	8120	708	488	5091	412	3351	1409
(25%)	(24%)	(83%)	(57%)	(4%)	(75%)	(26%)	(26%)	(26%)		(26%)	
70+ Sm.	10124	2927	2209	235	483	2159	399	3193	—	1446	—
Total	73517	15029	2651	422	11956	2945	4437	33746	311	15159	1890
(14%)	(19%)	(83%)	(56%)	(4%)	(73%)	(9%)	(9%)	(9%)		(10%)	
Any age Sm.	15702	5631	4408	403	820	2688	526	4531	—	2326	—
Total	99337	26478	5307	722	20449	3670	5008	39025	732	20089	4335
(16%)	(21%)	(83%)	(56%)	(4%)	(73%)	(11%)	(12%)	(12%)		(12%)	
<b>2000</b>											
0-34 Sm.	—	—	—	—	—	—	—	—	—	—	—
Total	2706	354	10	9	335	21	43	143	3	1243	899
35-69 Sm.	5880	3099	2579	149	371	487	116	1163	—	1015	—
Total	22367	11645	3055	256	8334	640	419	4193	382	3666	1422
(26%)	(27%)	(84%)	(58%)	(4%)	(76%)	(28%)	(28%)	(28%)		(28%)	
70+ Sm.	12951	3849	2923	284	642	2793	387	3706	—	2216	—
Total	81247	17313	3419	472	13422	3640	3643	34010	314	20213	2114
(16%)	(22%)	(85%)	(60%)	(5%)	(77%)	(11%)	(11%)	(11%)		(11%)	
Any age Sm.	18831	6948	5502	433	1013	3280	503	4869	—	3231	—
Total	106320	29312	6484	737	22091	4301	4105	38346	699	25122	4435
(18%)	(24%)	(85%)	(59%)	(5%)	(76%)	(12%)	(13%)	(13%)		(13%)	

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	14799	7241	6117	1283	1157	1030	793	652	614	588	536	391	514	
2000	15492	7025	6845	1333	1303	1163	1028	787	641	592	547	473	603	
<b>NUMBER OF DEATHS (Source: WHO)</b>														
<b>All causes</b>														
1995	99337	3311	22509	984	1366	2038	2501	3333	4784	7503	10895	13302	49320	
2000	106320	2706	22367	941	1456	2009	2993	3577	4599	6792	10338	14946	55963	
<b>Lung cancer</b>														
1995	5307	22	2634	57	113	213	314	430	631	876	994	750	907	
2000	6484	10	3055	33	139	244	387	610	711	931	1128	1074	1217	
<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	514.8*	45.5*	467.8*	76.7	118.1	197.9	315.4	511.1	778.6	1276.7	2031.5	3406.4	9599.1	
2000	480.5*	39.7*	423.9*	70.6	111.8	172.7	291.3	454.6	717.9	1148.3	1890.3	3161.2	9286.9	
<b>All cancer</b>														
1995	157.2*	5.1*	228.8*	28.7	55.8	107.5	177.7	274.7	393.1	563.9	766.7	963.1	1392.8	
2000	154.0*	4.8*	219.6*	28.3	52.8	91.6	169.3	263.2	388.2	543.9	757.2	986.7	1411.7	
<b>Lung cancer</b>														
1995	33.3*	0.2*	56.0*	4.4	9.8	20.7	39.6	65.9	102.7	149.1	185.3	192.1	176.5	
2000	36.4*	0.1*	59.7*	2.5	10.7	21.0	37.7	77.5	111.0	157.4	206.3	227.2	202.0	
<b>Upper aerodigestive cancer (mouth, oesophagus, pharynx and larynx)</b>														
1995	4.2*	0.0*	6.5*	0.4	0.9	1.7	3.7	5.8	12.7	20.2	19.6	26.1	41.8	
2000	3.8*	0.1*	5.1*	0.7	0.8	1.1	3.6	3.8	8.4	17.2	21.0	26.6	38.3	
<b>Other cancer</b>														
1995	119.7*	4.8*	166.3*	23.8	45.2	85.2	134.4	202.9	277.7	394.6	561.8	744.9	1174.4	
2000	113.8*	4.6*	154.8*	25.1	41.3	69.5	128.1	181.9	268.8	369.2	529.9	732.9	1171.4	
<b>Chronic obstructive pulmonary disease (COPD)</b>														
1995	18.8*	0.2*	16.1*	0.4	1.0	2.7	4.7	16.1	28.3	59.2	106.3	186.9	320.2	
2000	18.8*	0.3*	13.6*	0.4	0.9	1.8	5.3	11.4	24.2	51.2	105.7	176.0	370.1	
<b>Other respiratory disease</b>														
1995	22.7*	1.2*	10.3*	1.6	2.2	3.5	6.6	10.6	13.5	34.2	60.6	138.3	695.2	
2000	16.3*	0.6*	8.2*	1.1	2.1	2.7	4.1	7.8	14.0	25.7	46.4	95.8	487.2	
<b>Vascular disease</b>														
1995	184.2*	2.4*	111.8*	8.2	14.1	28.8	52.6	108.3	192.4	377.9	702.4	1405.1	4766.8	
2000	154.8*	2.0*	85.1*	6.6	13.2	21.9	41.5	76.1	147.8	288.4	567.4	1141.9	4233.0	
<b>Liver cirrhosis</b>														
1995	4.7*	0.1*	8.4*	1.0	2.8	3.8	8.2	10.1	12.7	20.2	22.0	24.3	19.1	
2000	4.0*	0.0*	7.0*	1.6	2.1	3.4	5.9	6.5	12.3	17.4	19.6	20.9	17.9	
<b>Other medical causes</b>														
1995	102.1*	22.4*	68.9*	15.3	20.0	30.1	42.9	69.6	112.8	191.6	332.6	614.6	2136.0	
2000	109.7*	19.3*	69.2*	15.2	20.0	29.6	43.8	67.7	110.8	197.0	356.2	676.4	2500.3	
<b>All non-medical causes</b>														
1995	25.0*	14.1*	23.6*	21.4	22.2	21.5	22.8	21.8	25.9	29.6	40.8	74.0	269.0	
2000	23.0*	12.6*	21.2*	17.4	20.5	21.8	21.4	21.9	20.4	24.7	37.8	63.5	266.7	

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

**CANADA: 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	– / 5.1	– / 2.7	–
35–69	10 / 36	5.9 / 22	23 years
70+	16 / 70	13 / 81	8 years
All ages	26 / 112	19 / 106	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	3.9/4.3	4.9/5.3	8.7/9.6	–/0.0	2.6/3.1	2.9/3.4	5.5/6.5
All Cancer	–/0.4	5.5/13 (41%)	7.1/20 (37%)	13/33	–/0.4	3.1/12 (27%)	3.8/17 (22%)	6.9/29
Vascular	–/0.2	2.4/10	3.2/27	5.6/38	–/0.1	1.2/4.2	3.7/34	4.9/38
Respiratory	–/0.1	0.8/1.5	3.8/7.8	4.5/9.3	–/0.1	0.6/1.1	3.2/7.3	3.8/8.4
All Other	–/4.5	1.3/11	1.5/16	2.9/31	–/2.1	1.0/5.5	2.2/23	3.2/30
All Causes	–/5.1	10/36 (27%)	16/70 (22%)	26/112	–/2.7	5.9/22 (26%)	13/81 (16%)	19/106

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

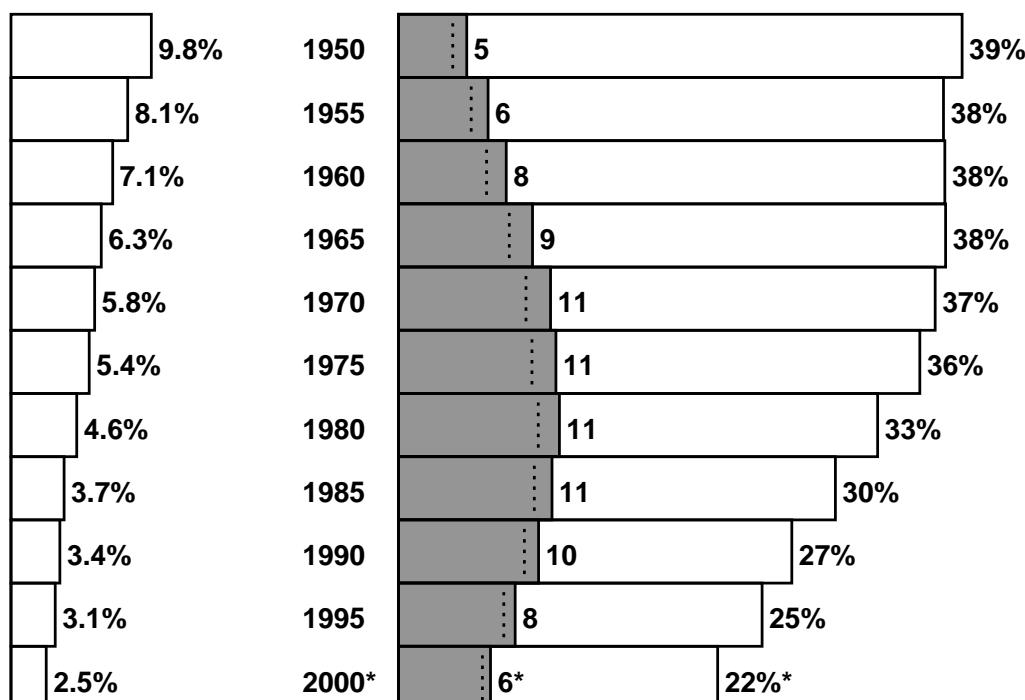
Cause	Male	Female	Male + Female
All Cancer	13 / 33 (38%)	6.9 / 29 (24%)	20 / 63 (31%)
All Causes	26 / 112 (23%)	19 / 106 (18%)	44 / 218 (20%)

**1950-2000: CANADA**

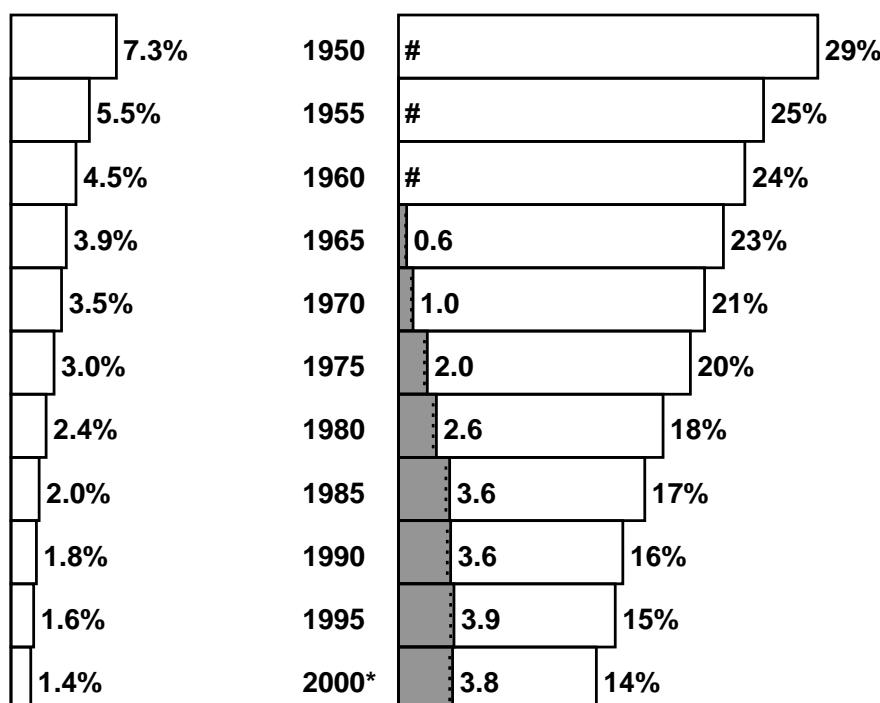
**Population  
risk of  
dying at  
ages 0-34**

**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, 22 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

**CANADA: 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	-/15	3.5/28 <b>(13%)</b>	0.5/27 <b>( 2%)</b>	4.0/70	-/11	0.0/18	0.0/25	0.0/53
1955	-/14	4.9/29 <b>(17%)</b>	1.4/32 <b>( 4%)</b>	6.3/75	-/9.4	0.1/17	0.0/27	0.1/53
1960	-/14	6.3/31 <b>(20%)</b>	2.6/37 <b>( 7%)</b>	8.9/82	-/8.8	0.0/18	0.0/31	0.0/58
1965	-/12	8.4/34 <b>(25%)</b>	3.9/41 <b>(10%)</b>	12/87	-/7.5	0.5/19 <b>( 3%)</b>	0.0/36	0.5/62
1970	-/11	11/38 <b>(28%)</b>	5.8/42 <b>(14%)</b>	17/91	-/6.4	1.0/20 <b>( 5%)</b>	0.3/38 <b>(0.7%)</b>	1.3/65
1975	-/11	12/40 <b>(30%)</b>	8.0/45 <b>(18%)</b>	20/97	-/5.7	2.2/22 <b>(10%)</b>	0.7/43 <b>( 2%)</b>	2.9/70
1980	-/10	13/40 <b>(33%)</b>	9.9/48 <b>(21%)</b>	23/98	-/4.9	3.1/22 <b>(14%)</b>	2.3/47 <b>( 5%)</b>	5.4/74
1985	-/8.2	13/38 <b>(35%)</b>	12/54 <b>(23%)</b>	25/100	-/4.0	4.5/22 <b>(21%)</b>	4.5/55 <b>( 8%)</b>	9.0/81
1990	-/7.7	13/38 <b>(35%)</b>	14/58 <b>(24%)</b>	27/104	-/3.7	5.0/22 <b>(23%)</b>	6.9/62 <b>(11%)</b>	12/88
1995	-/6.9	12/38 <b>(31%)</b>	16/66 <b>(24%)</b>	27/111	-/3.3	5.6/23 <b>(25%)</b>	10/74 <b>(14%)</b>	16/99
2000	-/5.1	10/36 <b>(27%)</b>	16/70 <b>(22%)</b>	26/112	-/2.7	5.9/22 <b>(26%)</b>	13/81 <b>(16%)</b>	19/106

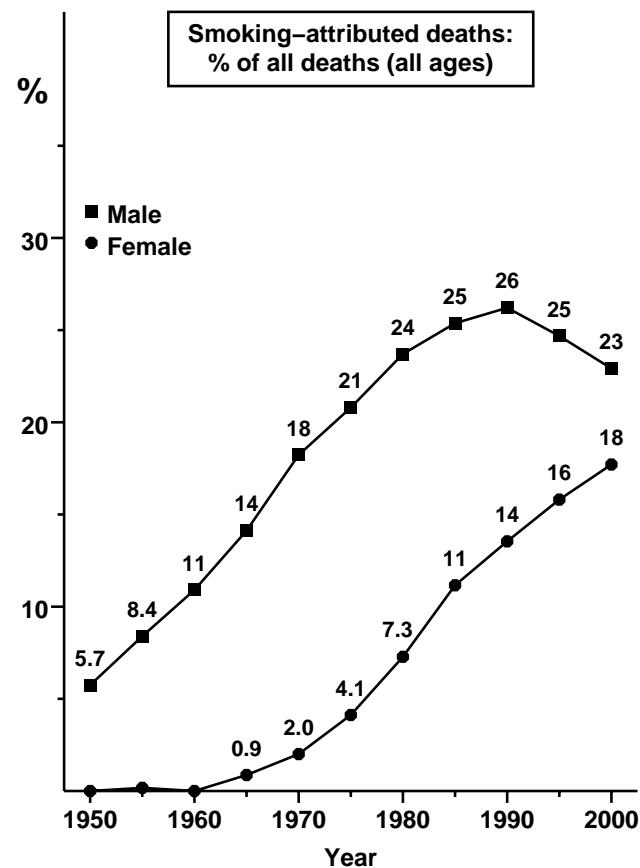
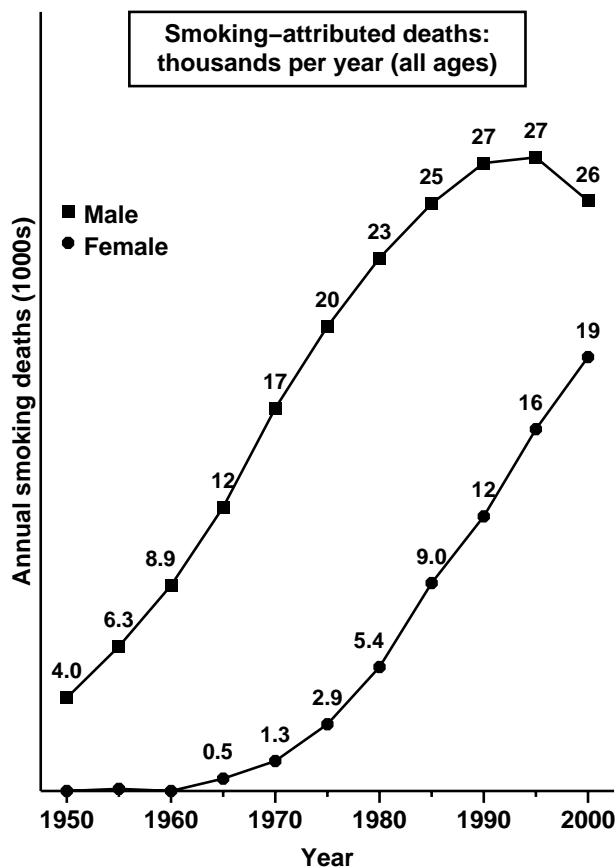
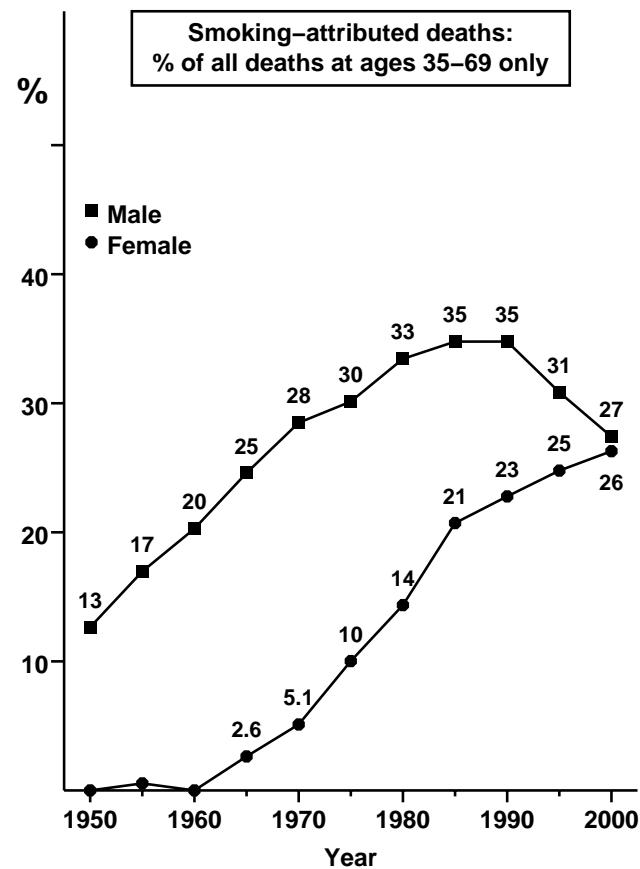
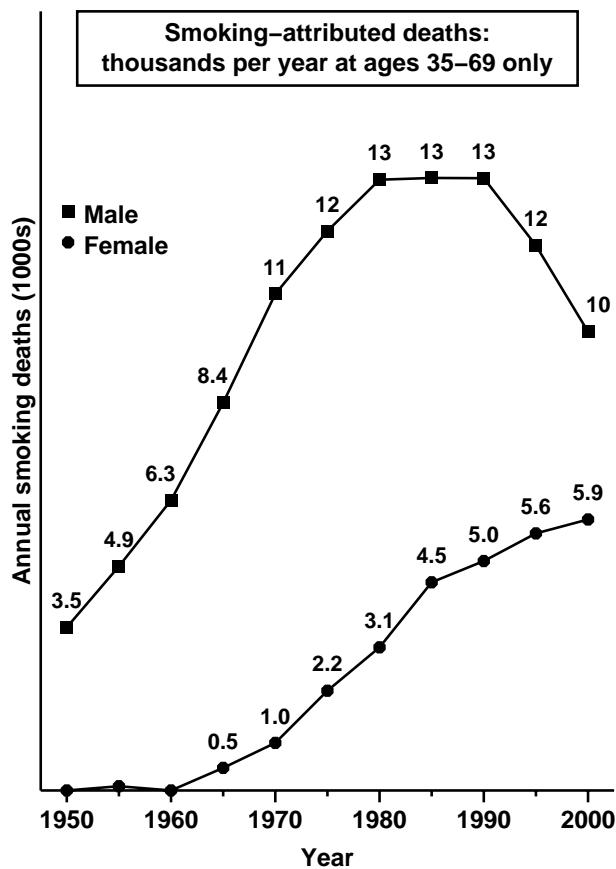
**50-year total\* (thousands), mid-1950 to mid-2000: 1200 / 8363**

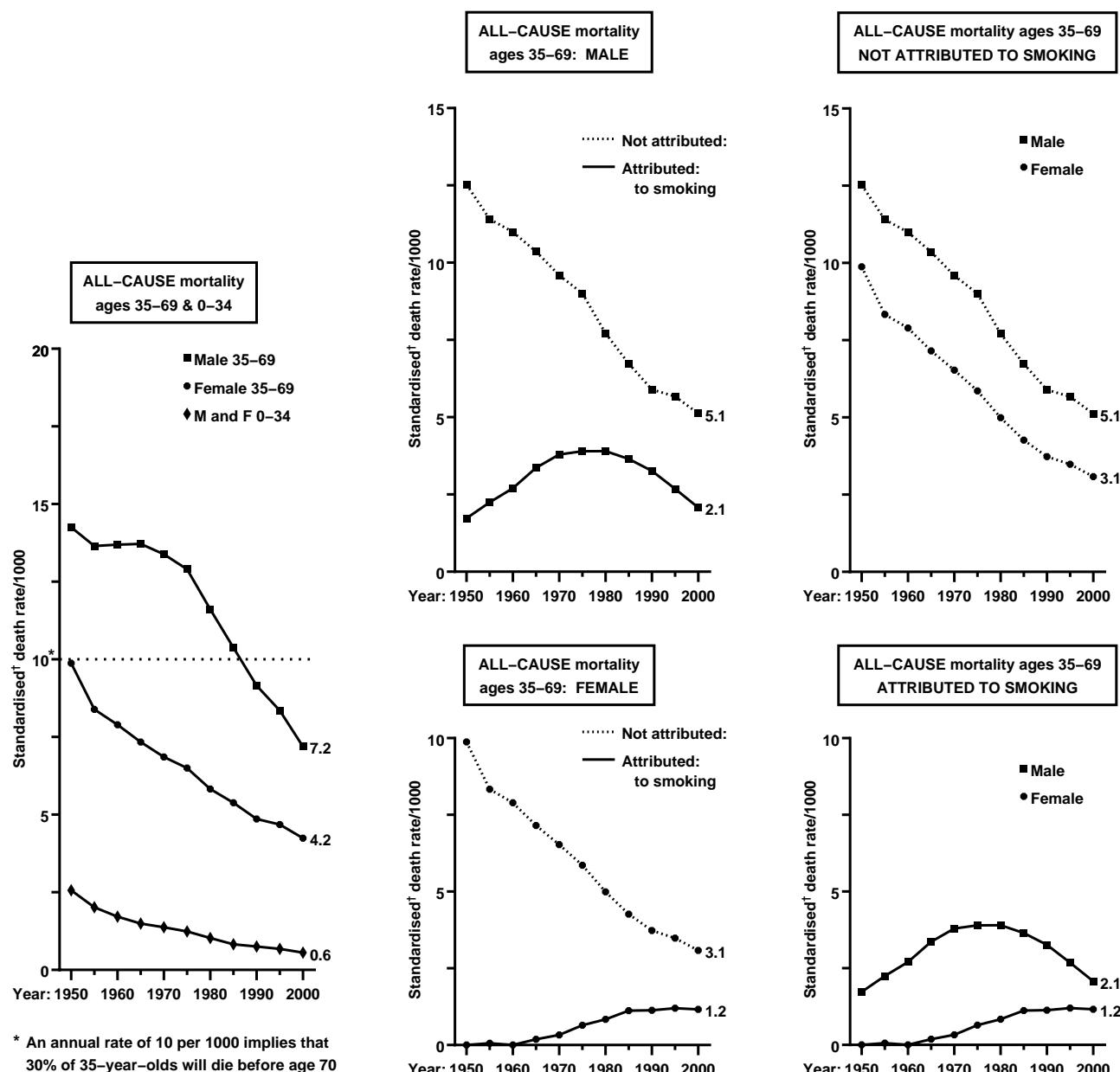
**1950-2000 by age & sex:**

-/524	505/1797 <b>(28%)</b>	412/2386 <b>(17%)</b>	917/4707	-/299	128/1013 <b>(13%)</b>	154/2344 <b>( 7%)</b>	283/3656
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\*Estimated as 10 times the sum of the annual numbers for 1955, 1965, 1975, 1985 & 1995

## 1950-2000: CANADA



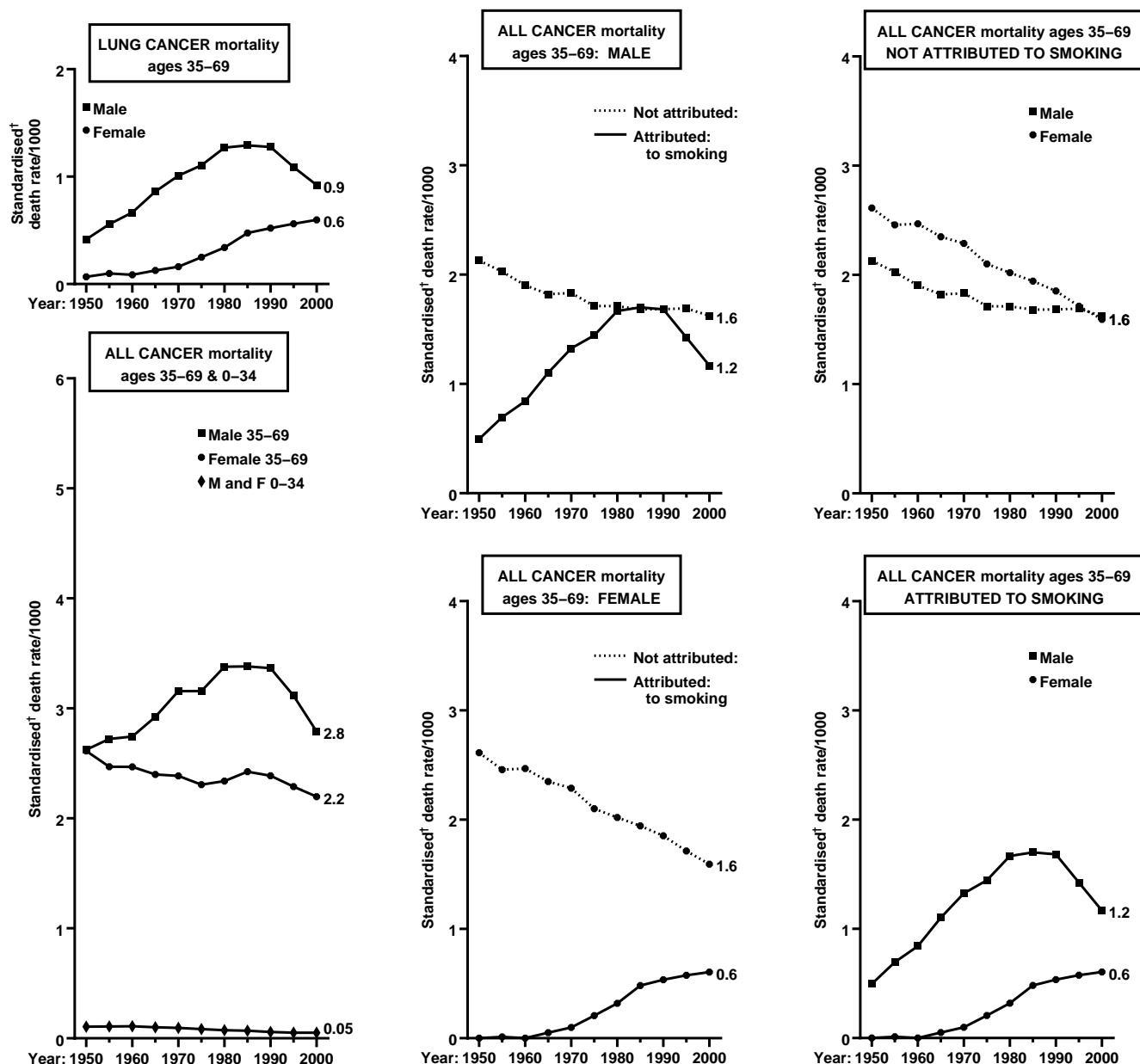
**CANADA: 1950-2000****ALL-CAUSE mortality rates attributed and not attributed to smoking**

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	-	2.94		1.73	12.5	1.46	68.1	-	2.18	0.00	9.87	0.00	56.2		
1955	-	2.42		2.24	11.4	3.41	65.5	-	1.60	0.06	8.33	0.00	51.1		
1960	-	2.10		2.70	11.0	5.67	63.3	-	1.32	0.00	7.89	0.00	47.3		
1965	-	1.86		3.36	10.4	7.81	60.2	-	1.12	0.18	7.15	0.11	43.4		
1970	-	1.72		3.79	9.59	11.0	55.4	-	1.02	0.33	6.53	0.42	38.6		
1975	-	1.60		3.89	9.00	13.1	50.7	-	0.87	0.64	5.86	0.91	35.6		
1980	-	1.34		3.90	7.71	14.0	46.0	-	0.71	0.83	4.99	2.17	30.7		
1985	-	1.08		3.64	6.73	14.4	42.4	-	0.57	1.12	4.26	3.40	27.3		
1990	-	0.99		3.26	5.89	14.1	37.4	-	0.51	1.13	3.73	4.25	23.9		
1995	-	0.89		2.68	5.67	13.0	35.8	-	0.46	1.20	3.48	5.06	22.1		
2000	-	0.71		2.07	5.12	11.1	32.1	-	0.40	1.16	3.08	5.42	19.8		

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

## 1950-2000: CANADA

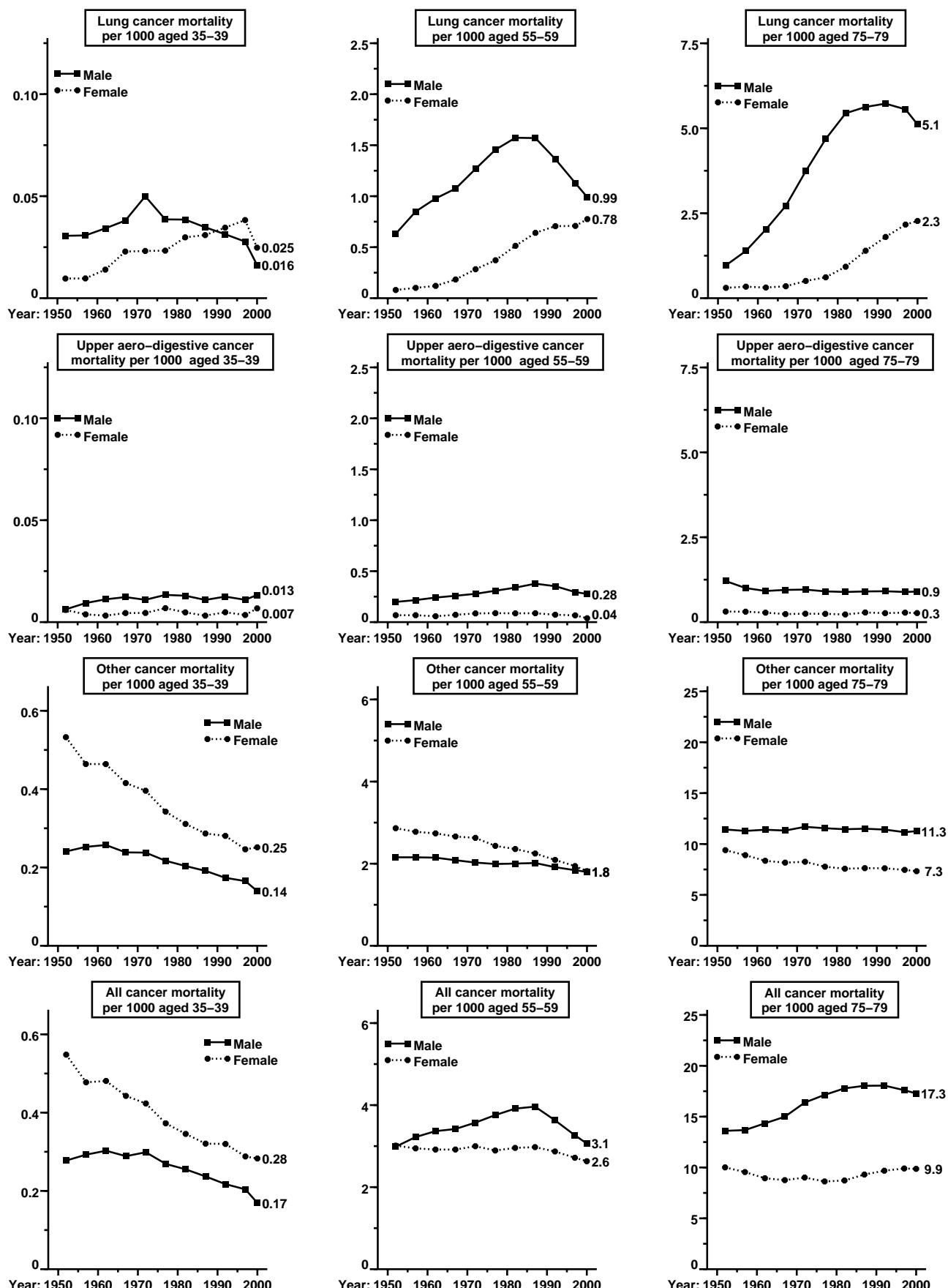
## ALL CANCER mortality rates attributed and not attributed to smoking



<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	–	0.10		0.49	2.13	0.55	10.5	–	0.11	0.00	2.61	0.00	8.68		
1955	–	0.11		0.69	2.03	1.37	10.7	–	0.11	0.01	2.46	0.00	8.39		
1960	–	0.12		0.84	1.90	2.21	10.5	–	0.10	0.00	2.47	0.00	8.25		
1965	–	0.11		1.10	1.82	2.97	9.82	–	0.09	0.05	2.35	0.02	7.90		
1970	–	0.10		1.32	1.83	4.26	9.99	–	0.09	0.10	2.29	0.11	7.65		
1975	–	0.09		1.44	1.71	5.27	9.29	–	0.07	0.21	2.10	0.25	7.53		
1980	–	0.08		1.67	1.71	6.16	9.10	–	0.07	0.32	2.02	0.70	7.06		
1985	–	0.07		1.70	1.68	6.51	9.15	–	0.07	0.48	1.94	1.21	7.13		
1990	–	0.06		1.68	1.68	6.86	8.86	–	0.05	0.53	1.85	1.61	6.83		
1995	–	0.05		1.42	1.69	6.60	9.05	–	0.05	0.57	1.71	1.98	6.67		
2000	–	0.05		1.17	1.62	5.98	9.05	–	0.05	0.60	1.59	2.32	6.40		

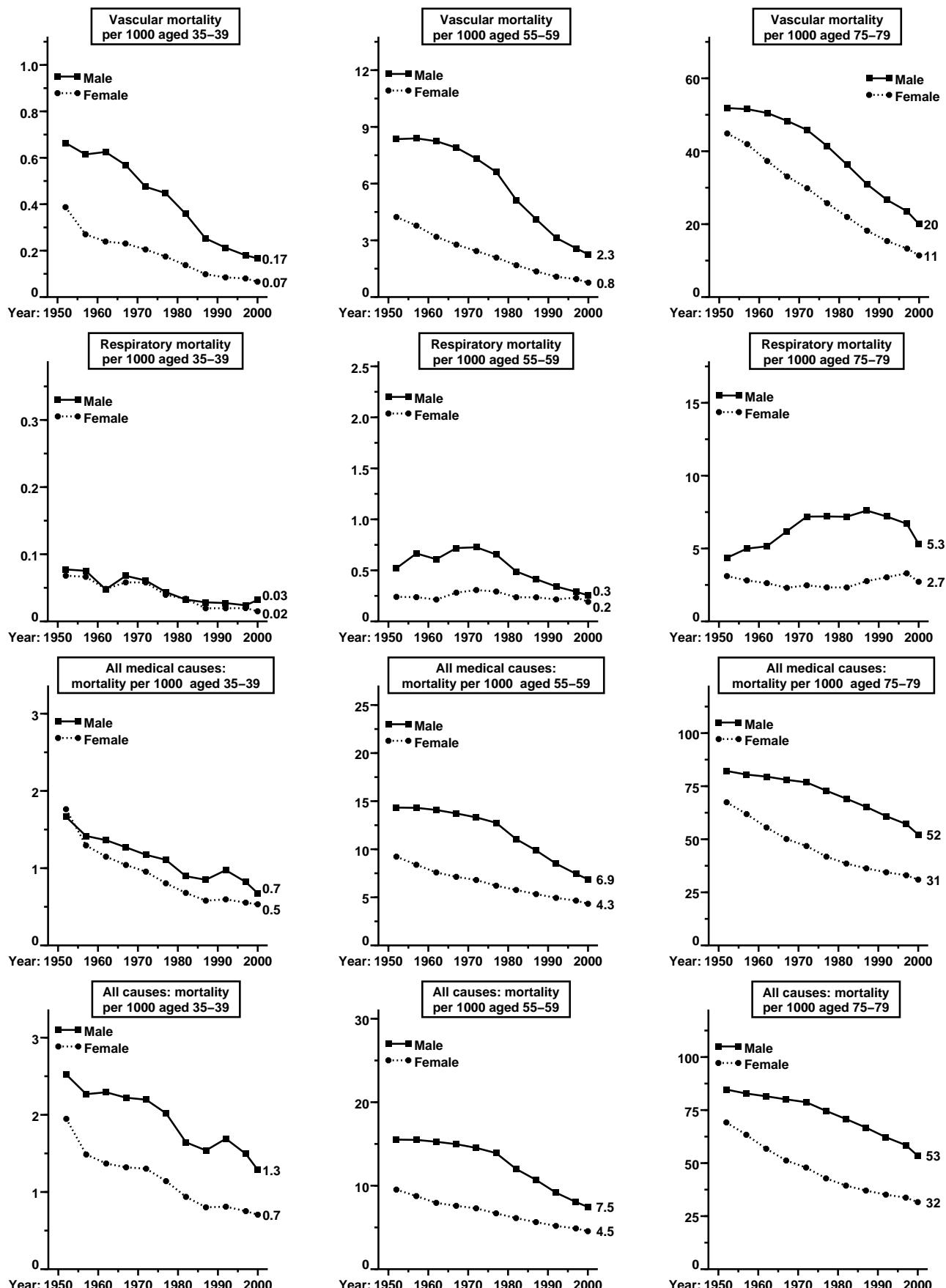
0–34 and 35–69 = means of 7 age-specific rates; 70–79 = mean of 2 rates (70–74 & 75–79)

**CANADA: 1950-2000****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

## 1950-2000: CANADA

## 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