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Cancer mortality in Switzerland, 1990–1994

Summary

Data and statistics are presented on cancer death certification in Switzerland in 1990–1994, updating previous publications covering the period 1951–1989. Data for 1990–1994, grouped into 30 categories, are presented in 10 tables as 5-years age- and sex-specific absolute and percentage frequencies of deaths, and average annual crude, age-specific and age-standardized rates, at all ages and truncated for the 35–64 year age group. Male-to-female ratios of mortality rates, and ranks of the ten most frequent cancer sites have also been tabulated, and all-ages and truncated age-standardized rates for most cancer sites plotted for 9 calendar quinquennia. Total cancer mortality rates decreased in both sexes (from 268.7 in 1985–1989 to 251.8/100,000 males in 1990–1994, and from 201.5 to 190.6/100,000 females; age-standardized rates on the 1980 Swiss population), particularly at younger ages and in males. Decreases in rates were observed in males for lung (from 68.7 to 62.7/100,000), oesophagus, larynx and prostate (at younger middle age), in females, for breast and genital sites and, in both sexes, for stomach, colorectum, gall-bladder, pancreas, skin, bladder, kidney, brain and most lymphohaemopoietic neoplasms. Increases were observed for pleura in males, and for larynx and lung (from 11.9 to 14.8/100,000) in females. Thus, with the major exception of lung cancers and a few other tobacco-related neoplasms in females, cancer mortality rates in Switzerland over the period 1990–1994 were generally favourable.

Data and statistics on cancer mortality in Switzerland from 1950 to 1989 have been published in strata of sex, age groups and calendar periods^{1–3}, and are here updated with data for the five-year period 1990–1994. The materials and methods used in this report are

similar to those previously described. Briefly, death certification numbers by cause and estimates of the resident population, stratified by sex and quinquennia of age, were abstracted from files provided by the Swiss Federal Statistical Office. All cancers or groups of cancers,

classified according to the standard International Classification of Diseases (ICD), Eighth Revision⁴ were grouped in the 30 categories adopted for previous reports, besides total cancer mortality and a broad group including "other and unspecified". In particular, we grouped together all intestinal sites, melanomas and non-melanomatous skin neoplasms, all uterine neoplasms (cervix and corpus), all the neoplasms of the brain and nerves (benign and malignant), and all leukaemias and non-Hodgkin's lymphomas¹.

Results

Ten standard tables are presented, providing the following information: 1) average annual crude, age-standardized death certification rates and standardized percentages of all cancer deaths for the population at all ages, and truncated to 35–64 years (Table 1 for males, Table 2 for females). Two different standards were used: i) the 1980 Swiss Census population, corrected for census undercount and subdivided into 16 quinquennia of age from 0–4 to 75–79 plus 80 and over, and ii) the world standard population, for purposes of comparison with other countries;

Type of cancer	VIII ICD	All ages				Truncated 35–64			
		crude rate	adj. rate POP. 80*	adj. rate world	% of tumour*	crude rate	adj. rate POP. 80*	adj. rate world	% of tumour*
Mouth or pharynx	140–149	8.9	8.3	6.1	3.3	11.9	12.0	12.1	6.7
Oesophagus	150	8.0	7.4	5.2	3.0	8.0	8.0	8.2	4.5
Stomach	151	14.5	13.1	8.5	5.2	8.5	8.6	8.7	4.8
Intestines (colon and rectum)	152–154	30.1	27.1	17.4	10.7	16.2	16.5	16.6	9.2
Liver	155	8.8	8.3	5.6	3.3	7.0	7.2	7.2	4.0
Gallbladder and bile ducts	156	2.4	2.2	1.4	0.9	1.2	1.2	1.3	0.7
Pancreas	157	12.5	11.5	7.7	4.6	9.1	9.2	9.3	5.1
Other digestive sites	158, 159	1.4	1.2	0.8	0.5	0.7	0.8	0.8	0.4
Larynx	161	3.1	2.9	2.1	1.2	3.3	3.3	3.4	1.8
Lung	162	66.2	62.7	43.1	24.9	55.8	56.5	57.3	31.5
Pleura	163.0	2.2	2.0	1.4	0.8	2.0	2.0	2.0	1.1
Other respiratory sites	160, 163.1–9	1.1	1.0	0.7	0.4	1.1	1.1	1.1	0.6
Bone	170	0.6	0.6	0.5	0.2	0.4	0.4	0.4	0.3
Conn. and soft tissue sarcomas	171	0.9	0.9	0.7	0.3	1.0	1.0	1.0	0.6
Skin	172–173	6.1	5.4	3.6	2.1	4.5	4.6	4.6	2.5
Breast	174	0.3	0.3	0.2	0.1	0.3	0.3	0.3	0.2
Prostate	185	44.2	37.6	21.9	14.9	6.3	6.4	6.6	3.6
Testis	186	0.7	0.6	0.6	0.3	0.7	0.7	0.7	0.4
Other genital (males)	187	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.1
Bladder	188	11.6	10.3	6.4	4.1	4.5	4.5	4.6	2.5
Kidney	189**	7.4	6.8	4.6	2.7	5.1	5.1	5.2	2.9
Eye	190	0.4	0.3	0.2	0.1	0.3	0.3	0.3	0.2
Brain or nerves (ben. + mal.)	191–192, 225, 238	7.0	6.7	5.3	2.7	8.4	8.4	8.5	4.7
Thyroid	193	0.9	0.8	0.6	0.3	0.6	0.6	0.6	0.3
Hodgkin's disease	201	1.1	1.0	0.8	0.4	1.2	1.2	1.2	0.6
All other lymphomas	200, 202, 208, 209	10.4	9.4	6.2	3.7	5.8	5.9	6.0	3.3
Multiple myeloma	203	4.6	4.2	2.7	1.7	2.3	2.4	2.4	1.3
Leukaemias	204–207	8.9	8.1	5.8	3.2	5.0	5.0	5.1	2.8
Other sites ben. + mal.	Other	12.2	10.8	7.0	4.3	6.0	6.1	6.1	3.4
Total, all sites ben. + mal.	140–239	276.8	251.8	167.1	100.0	177.2	179.4	181.7	100.0

* Age-standardized on the 1980 Swiss population.
** Other urinary sites included.

Table 1. Cancer death certification rates per 100,000 males in Switzerland, 1990–1994.

Type of cancer	VIII ICD	All ages				Truncated 35-64			
		crude rate	adj. rate POP. 80*	adj. rate world	% of tumour*	crude rate	adj. rate POP. 80*	adj. rate world	% of tumour*
Mouth or pharynx	140-149	2.4	2.2	1.2	1.1	2.0	2.0	2.0	1.5
Oesophagus	150	2.4	2.1	1.0	1.1	1.4	1.5	1.4	1.1
Stomach	151	10.1	8.6	3.8	4.5	3.9	4.0	3.9	2.9
Intestines (colon and rectum)	152-154	26.3	22.7	10.3	11.9	11.2	11.4	10.9	8.3
Liver	155	3.4	3.0	1.5	1.6	1.8	1.8	1.7	1.3
Gallbladder and bile ducts	156	5.1	4.5	2.1	2.4	2.0	2.0	1.9	1.4
Pancreas	157	12.0	10.7	5.1	5.6	6.1	6.2	5.9	4.5
Other digestive sites	158, 159	1.6	1.4	0.6	0.7	0.5	0.5	0.5	0.4
Larynx	161	0.4	0.4	0.2	0.2	0.3	0.3	0.3	0.2
Lung	162	15.7	14.8	8.6	7.8	15.7	15.9	15.4	11.5
Pleura	163.0	0.5	0.4	0.3	0.2	0.5	0.5	0.5	0.3
Other respiratory sites	160, 163.1-.9	0.4	0.4	0.2	0.2	0.3	0.3	0.3	0.2
Bone	170	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1
Conn. and soft tissue sarcomas	171	0.8	0.8	0.5	0.4	0.8	0.8	0.8	0.6
Skin	172-173	4.9	4.2	2.2	2.2	3.4	3.4	3.3	2.4
Breast	174	47.4	42.5	23.7	22.3	42.5	43.0	41.9	31.3
Uterus (cervix and corpus)	180-182	12.1	10.9	5.5	5.7	7.6	7.7	7.5	5.6
Ovary	183	13.1	12.1	6.5	6.4	10.1	10.2	9.9	7.4
Other genital (females)	184	2.1	1.7	0.7	0.9	0.5	0.5	0.5	0.4
Bladder	188	4.5	3.8	1.6	2.0	1.3	1.3	1.3	1.0
Kidney	189**	4.6	4.3	2.2	2.2	2.8	2.8	2.7	2.0
Eye	190	0.5	0.4	0.3	0.2	0.4	0.4	0.4	0.3
Brain or nerves (ben. + mal.)	191-192, 225, 238	6.4	6.1	4.1	3.2	6.0	6.0	5.9	4.4
Thyroid	193	1.6	1.4	0.6	0.8	0.5	0.5	0.4	0.3
Hodgkin's disease	201	0.8	0.7	0.5	0.4	0.7	0.7	0.7	0.5
All other lymphomas	200, 202, 208, 209	9.1	8.0	3.8	4.2	4.0	4.1	3.9	2.9
Multiple myeloma	203	4.1	3.7	1.7	1.9	1.8	1.9	1.8	1.4
Leukaemias	204-207	6.6	5.9	3.3	3.1	3.5	3.5	3.4	2.5
Other sites ben. + mal.	Other	15.4	12.6	5.4	6.6	4.9	4.9	4.8	3.6
Total, all sites ben. + mal.	140-239	214.8	190.6	97.7	100.0	136.5	138.2	134.1	100.0

* Age-standardized on the 1980 Swiss population.

** Other urinary included.

Table 2. Cancer death certification rates per 100,000 females in Switzerland, 1990-1994.

2) average annual age-specific death certification rates for each sex and quinquennium of age from 0-4 to 75-79 plus 80 and over (Table 3 for males, Table 4 for females);

3) total number of registered deaths in the period 1990-1994 for each cancer or group of cancers, sex and age group (Table 5 for males and 6 for females);

4) average annual percentages of all cancer deaths for each sex and age group (Table 7 for males, Table 8 for females);

5) male-to-female ratios of mortality rates (Table 9), and ranks of the ten most frequent cancer sites certified in Switzerland at all ages and below age 65 (Table 10).

Age-standardized (on the 1980 Swiss Census population) death certification rates for both sexes at all ages and truncated rates for 35-64 years have also been plotted for 9 calendar quinquennia from 1951 to 1994 (Fig. 1). Trends in cancer mortality rates standardized on the world standard population, for purposes of comparison with other countries, have been published elsewhere⁵.

Swiss mortality rates for the period 1990-1994 were projected using an age-period-cohort model^{6,7}. To assess the reliability of that exercise, projected and observed age-standardized mortality rates (40 to 79 years) were compared (Table 11).

Discussion

This is essentially a statistical and technical report. A few comparisons, mainly with the previous five-year calendar period^{2,6,7}, are included, and a few comments have been added on the interpretation of data for major cancer sites, and to recall underlying long-term tendencies. However, no attempt has been made to discuss all the results at length. The tables will enable the reader who is interested in details

of the mortality statistics for any particular cancer site to draw conclusions based on the overall and truncated age-standardized rates and, mainly, on careful inspection of the matrix of age-specific rates.

The total number of cancer deaths in the quinquennium 1990-1994 was over 84,000, or more than 16,000 deaths per year. This was an increase of 2.4% as compared to the previous calendar period. However, this apparent increase is totally attributable to the aging of the population. Age-adjusted rates (based on the world standard population) actually decreased, from 178.8 to 167.1/100,000 males, and from 102.6 to 97.7/100,000 females. An even larger decrease can be observed in the truncated (35 to 64 years) rates, from 198.4 to 181.7/100,000 males, and from 139.6 to 134.1/100,000 females. In general, the downward trends were larger at younger ages, particularly in males.

Mortality from lung cancer, accounting for over 2,200 deaths per year in males and 550 in females, declined in males (from 47.5 to 43.1 at all ages, from 64.6 to 57.3 at age 35-64), whereas in females it increased (from 6.9 to 8.6, all ages, and from 11.6 to 15.4, truncated). The declines in lung cancer mortality for males were observed in all age groups above age 40, and the rises in females were also common to all age groups above 40.

The second leading site of cancer mortality in both sexes combined was the intestines (mainly colon and rectum), with about 2,000 deaths per year. Age-standardized rates showed moderately downward trends in both sexes (from 18.7 to 17.4/100,000 for males, and from 11.4 to 10.3 for females, all ages), as well as in various age groups.

Although it still accounted for over 1,600 deaths per year, breast cancer mortality declined in women from 25.1 to 23.7/100,000 at all ages, and from 44.2 to 41.9 between 35 and 64

years. Although some decline in breast cancer mortality in younger and middle-aged women had already been observed during the 1980s, this is the first consistent fall in overall breast cancer mortality rates in Switzerland, after decades of steady rises. Screening and improved treatment of the disease^{8,9} have probably contributed to these favourable trends, although their respective contributions are difficult to assess in quantitative terms.

Prostate cancer accounted for almost 1,500 deaths per year in Switzerland. Its rates remained stable at all ages (21.9/100,000), but declined from 7.3 to 6.6/100,000 for the 35-64 age-group. This indicates, therefore, that the long-term rises in certified mortality from prostate cancer also in elderly Swiss have since tended to level off.

Among other neoplasms, rates were stable for oral and pharyngeal cancer in both sexes and across age groups, and those for oesophageal cancer were somewhat downwards in males (from 5.7 to 5.2 at all ages). The long-term declines in stomach cancer rates persisted in both sexes (from 10.6 to 8.5/100,000 males, from 4.9 to 3.8/100,000 females). Mortality rates were stable for primary liver cancer, and declined somewhat in both sexes for gall-bladder and pancreatic cancer. This is interesting, since pancreatic cancer had long shown upward trends for both sexes in Switzerland, as well as in other developed countries¹⁰. Laryngeal cancer rates declined for males, but increased for females (although still on a very low level), and pleural cancer mortality (mostly mesothelioma) showed a steady rise for males, starting from the early 1970's.

Moderate declines were observed for skin cancer mortality in both sexes, and for various female genital tract neoplasms, for bladder and kidney cancer in both sexes,

Type of cancer	VIII ICD	Age																Total*		
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79		80+	
Mouth or pharynx	140-149	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.8	5.0	8.7	18.3	20.8	28.4	31.2	29.1	36.1	48.7	8.9	
Oesophagus	150	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	2.5	6.3	10.1	13.9	22.8	31.5	35.4	44.3	61.3	8.0	
Stomach	151	0.0	0.0	0.0	0.0	0.2	0.1	0.7	1.1	2.3	4.0	9.3	15.9	28.8	48.0	72.2	108.4	179.9	14.5	
Intestines (colon and rectum)	152-154	0.0	0.0	0.1	0.2	0.2	0.3	0.6	1.7	3.9	7.1	16.4	33.8	55.3	91.9	151.7	229.1	404.9	30.1	
Liver	155	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.5	1.1	2.6	6.3	15.8	25.8	37.2	51.0	60.2	60.8	8.8	
Gallbladder and bile ducts	156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.9	0.8	2.2	5.0	8.0	11.8	16.7	35.1	2.4	
Pancreas	157	0.0	0.0	0.0	0.0	0.0	0.1	0.3	1.4	1.9	5.1	9.9	16.7	30.6	43.3	68.2	90.7	117.9	12.5	
Other digestive sites	158, 159	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.5	1.0	1.2	2.4	2.1	5.7	10.0	22.8	1.4	
Larynx	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	2.1	4.3	6.7	9.8	12.0	13.3	17.7	21.1	3.1	
Lung	162	0.0	0.0	0.1	0.1	0.0	0.3	1.0	3.1	10.0	29.2	58.4	108.0	199.8	303.1	387.2	423.7	416.5	66.2	
Pleura	163.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	2.0	2.2	4.1	5.3	9.4	10.1	11.8	16.2	2.2	
Other respiratory sites	160,																			
	163.1-9	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.9	1.8	1.9	1.9	2.4	4.9	7.9	8.0	1.1	
Bone	170	0.0	0.1	0.2	0.9	0.6	0.7	0.3	0.3	0.2	0.2	0.5	0.7	1.3	1.8	1.5	1.8	2.7	0.6	
Conn. and soft tissue sarcomas	171	0.1	0.0	0.0	0.2	0.2	0.1	0.4	0.3	0.6	1.0	1.6	1.7	1.5	2.7	3.2	2.6	8.2	0.9	
Skin, total	172-173	0.0	0.1	0.1	0.0	0.4	0.9	1.0	1.8	2.6	3.4	5.1	7.4	10.2	13.2	21.3	35.9	83.5	6.1	
Breast	174	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.8	0.4	0.8	1.9	2.3	2.9	0.3	
Prostate	185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	3.7	11.8	33.0	91.3	198.4	405.0	911.7	44.2	
Testis	186	0.2	0.0	0.0	0.3	0.6	1.2	1.5	1.1	0.5	1.0	0.4	0.3	0.6	0.3	1.1	0.8	2.7	0.7	
Other genital (males)	187	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.2	0.6	0.8	1.7	3.6	8.2	0.4	
Bladder	188	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	1.0	1.9	3.3	9.4	17.4	35.9	55.4	100.2	178.2	11.6	
Kidney	189**	0.1	0.1	0.1	0.0	0.0	0.1	0.3	0.2	0.7	2.6	4.5	11.6	17.7	28.5	39.8	55.1	68.8	7.4	
Eye	190	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.3	1.0	0.6	2.0	1.1	1.8	3.1	0.4	
Brain or nerves (ben. + mal.)	191-192,																			
	225, 238	1.7	1.4	1.3	1.2	0.6	1.7	2.2	2.8	5.8	7.2	10.0	13.7	15.9	22.3	27.0	28.7	25.2	7.0	
Thyroid	193	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.3	0.6	0.8	2.4	2.7	5.3	6.2	11.6	0.9	
Hodgkin's disease	201	0.0	0.0	0.0	0.2	0.6	0.6	1.0	1.3	1.0	1.1	0.8	1.0	1.9	1.7	3.2	5.1	7.7	1.1	
All other lymphomas	200, 202,																			
	208, 209	0.3	0.4	0.2	0.7	1.1	1.0	0.8	1.7	2.7	3.4	6.2	8.3	18.5	31.6	50.3	80.5	124.7	10.4	
Multiple myeloma	203	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	1.0	1.9	4.7	9.1	15.9	26.3	38.2	53.0	4.6	
Leukaemias	204-207	1.3	2.6	1.5	1.9	1.9	1.5	1.1	1.3	2.4	4.6	5.0	7.0	13.6	23.3	38.6	52.5	112.1	8.9	
Other sites ben. + mal.	Other	0.6	0.2	0.1	0.1	0.1	0.3	0.6	0.5	1.7	3.6	5.8	12.6	18.9	36.6	49.7	88.9	189.8	12.2	
Total, all sites ben. + mal.	140-239	4.3	4.9	3.8	5.9	7.0	9.3	12.6	21.4	48.6	101.7	189.2	333.9	579.8	931.5	1366.7	1965.9	3187.4	276.8	

* Crude rate.

** Other urinary included.

Table 3. Age-specific cancer death certification rates per 100,000 males in Switzerland, 1990-1994.

Type of cancer	VIII ICD	Age											Total*						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54		55-59	60-64	65-69	70-74	75-79	80+
Mouth or pharynx	140-149	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.4	0.9	1.3	3.3	3.2	4.0	4.7	5.7	10.6	16.8	2.4
Oesophagus	150	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.7	1.4	3.6	3.5	5.3	8.0	9.2	19.3	2.4	
Stomach	151	0.0	0.0	0.0	0.0	0.1	0.3	0.5	1.3	1.5	2.4	4.1	6.3	10.7	18.8	27.4	48.3	97.4	10.1
Intestines (colon and rectum)	152-154	0.0	0.0	0.1	0.0	0.0	0.1	0.5	2.1	3.8	5.6	10.9	22.2	31.5	55.7	81.7	116.7	241.0	26.3
Liver	155	0.2	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.4	1.2	1.8	3.1	4.9	7.6	12.4	18.4	23.0	3.4
Gallbladder and bile ducts	156	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	1.2	1.9	3.2	6.7	15.3	18.3	26.3	39.7	5.1
Pancreas	157	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.6	0.9	2.8	6.4	11.0	20.3	30.1	43.3	62.0	87.6	12.0
Other digestive sites	158, 159	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	1.3	1.4	3.2	4.6	5.5	18.3	1.6
Larynx	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.4	0.6	0.6	0.8	1.6	2.5	2.7	0.4
Lung	162	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.2	5.8	12.6	18.3	26.6	39.5	46.7	54.4	72.1	57.3	15.7
Pleura	163.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.7	0.5	1.5	1.7	0.7	2.7	1.9	0.5
Other respiratory sites	160	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.4	0.1	0.7	0.6	1.7	1.7	3.1	0.4
Bone	170	0.0	0.0	0.4	0.2	0.2	0.1	0.0	0.0	0.4	0.2	0.2	0.1	0.2	0.4	0.3	1.7	2.8	0.4
Conn. and soft tissue sarcomas	171	0.2	0.1	0.2	0.1	0.3	0.3	0.2	0.3	0.3	0.7	1.0	1.3	1.7	1.6	2.7	1.7	4.0	0.8
Skin, total	172-173	0.0	0.0	0.0	0.2	0.3	0.4	0.9	1.3	2.3	3.7	3.8	5.5	4.6	9.2	7.9	16.6	44.2	4.9
Breast	174	0.0	0.0	0.0	0.0	0.1	1.1	3.3	10.3	19.5	35.6	56.4	70.8	85.6	105.8	125.0	169.0	302.5	47.4
Uterus (cervix and corpus)	180-182	0.0	0.0	0.0	0.1	0.0	0.3	0.8	2.4	3.8	4.9	8.6	12.6	17.6	30.9	43.4	52.3	82.3	12.1
Ovary	183	0.0	0.0	0.0	0.1	0.1	0.1	0.3	1.0	3.0	5.6	12.6	18.6	27.5	38.4	49.4	60.5	67.6	13.1
Other genital (females)	184	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.3	0.4	1.1	1.4	4.2	4.3	9.6	22.5	2.1
Bladder	188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	1.2	2.0	5.1	9.1	12.4	21.6	45.8	4.5
Kidney	189**	0.3	0.2	0.1	0.1	0.0	0.1	0.2	0.3	0.7	1.4	2.7	4.9	9.1	12.5	19.6	23.6	26.7	4.6
Eye	190	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.3	0.4	0.3	0.7	1.0	1.3	1.6	1.3	2.9	0.5
Brain or nerves (ben. + mal.)	191-192	2.8	1.6	1.1	0.5	0.8	1.5	1.8	1.7	2.9	5.1	5.8	10.3	13.3	16.6	19.9	25.5	21.5	6.4
Thyroid	225, 238	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.4	0.9	1.6	4.1	5.7	10.2	13.4	1.6
Hodgkin's disease	201	0.0	0.0	0.2	0.1	0.2	0.4	0.4	0.5	0.5	0.9	0.5	0.6	1.0	1.2	2.0	3.0	3.5	0.8
All other lymphomas	200, 202	0.2	0.1	0.1	0.3	0.4	0.4	0.6	0.9	1.4	2.1	3.7	6.2	13.2	19.0	29.1	48.4	72.6	9.1
Multiple myeloma	208, 209	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	2.0	3.4	6.4	11.0	16.1	22.5	28.2	4.1
Leukaemias	203	1.2	1.5	1.0	0.8	0.7	0.8	1.3	1.4	2.0	2.7	4.3	4.5	7.5	13.9	21.3	23.1	50.8	6.6
204-207		0.7	0.1	0.0	0.0	0.2	0.2	0.4	1.3	1.4	4.2	5.8	6.7	12.9	22.3	34.0	59.7	178.0	15.4
Other sites ben. + mal.		5.6	3.8	3.4	2.7	3.7	7.0	12.5	29.5	54.4	97.9	159.5	232.1	334.9	492.3	654.4	926.4	1577.4	214.8
Total, all sites ben. + mal.	140-239																		

* Crude rate.

** Other urinary included.

Table 4. Age-specific cancer death certification rates per 100,000 females in Switzerland, 1990-1994.

Type of cancer	VIII ICD	Age														Total*			
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69		70-74	75-79	80+
Mouth or pharynx	140-149	0	0	0	1	1	1	1	11	64	109	188	187	221	206	153	141	201	1485
Oesophagus	150	0	0	0	0	1	1	6	32	32	79	104	125	177	208	186	173	253	1345
Stomach	151	0	0	0	0	2	10	15	29	50	50	96	143	224	317	379	423	743	2434
Intestines (colon and rectum)	152-154	0	0	1	1	4	9	23	50	88	168	304	430	607	607	797	894	1672	5051
Liver	155	0	0	1	1	0	5	7	14	32	65	142	201	246	268	235	235	251	1469
Gallbladder and bile ducts	156	0	0	0	0	0	0	1	2	11	8	20	39	53	62	65	65	145	406
Pancreas	157	0	0	0	0	1	4	19	25	64	102	150	238	286	358	354	487	2088	
Other digestive sites	158, 159	0	0	0	0	2	0	2	1	6	10	11	19	14	30	39	94	229	
Larynx	161	0	0	0	0	0	0	1	8	26	44	60	76	79	70	69	87	87	520
Lung	162	0	0	1	1	4	14	41	129	364	600	972	1554	2002	2034	1653	1720	11089	
Pleura	163.0	0	0	0	0	2	0	3	9	31	30	44	50	72	71	58	73	444	
Other respiratory sites	160,																		
Bone	163.1-9	0	0	0	0	0	1	0	1	5	25	23	37	41	62	53	46	67	361
Conn. and soft tissue sarcomas	170	0	0	0	0	2	1	1	3	4	11	19	17	15	16	26	31	33	179
Skin, total	172-173	1	0	0	2	2	1	6	4	8	13	16	15	12	18	17	10	34	159
Breast	174	0	1	1	0	5	13	15	24	33	42	52	67	79	87	112	140	345	1016
Prostate	185	0	0	0	0	0	0	0	0	3	2	6	7	3	5	10	9	12	57
Testis	186	2	0	0	3	7	17	22	14	6	12	4	3	5	2	6	3	11	117
Other genital (males)	187	0	0	0	0	1	0	1	0	2	1	1	2	5	5	9	14	34	75
Bladder	188	0	0	0	0	0	0	1	3	13	24	34	85	135	237	291	391	736	1950
Kidney	189*	1	1	1	0	0	2	4	3	9	32	46	104	138	188	209	215	284	1237
Eye	190	0	0	0	0	0	1	0	0	0	2	3	9	5	13	6	7	13	59
Brain or nerves (ben. + mal.)	191-192,																		
Thyroid	225, 238	18	14	13	13	8	24	31	37	75	90	103	123	124	147	142	112	104	1178
Hodgkin's disease	193	0	0	0	0	1	0	0	2	0	4	6	7	19	18	28	24	48	157
All other lymphomas	201	0	0	0	2	7	8	14	17	13	14	8	9	15	11	17	20	32	187
Multiple myeloma	200, 202,																		
Leukaemias	208, 209	3	4	2	7	13	15	11	23	35	42	64	75	144	209	264	314	515	1740
Other sites ben. + mal.	203	0	0	0	0	0	0	1	0	8	12	20	42	71	105	138	149	219	765
Total, all sites ben. + mal.	204-207	14	26	15	20	24	22	16	17	31	57	51	63	106	154	203	205	463	1487
	Other	6	2	1	1	1	5	9	6	22	45	60	113	147	242	261	347	784	2052
	140-239	45	49	38	62	86	135	180	284	625	1268	1944	3004	4510	6152	7179	7670	13163	46394

* Other urinary included.

Table 5. Number of registered deaths from various cancers or groups of cancers in males. Switzerland, 1990-1994.

Type of cancer	VIII ICD	Age													Total*				
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64		65-69	70-74	75-79	80+
Mouth or pharynx	140-149	0	1	0	1	0	0	2	5	11	16	43	30	35	39	40	63	150	427
Oesophagus	150	0	0	0	0	0	0	0	3	4	9	14	34	31	44	56	55	172	422
Stomach	151	0	0	0	0	1	5	7	17	19	29	42	59	94	155	192	288	869	1777
Intestines (colon and rectum)	152-154	0	0	1	0	0	2	7	27	48	68	112	208	277	459	572	696	2150	4627
Liver	155	2	0	0	0	1	3	6	6	5	15	19	29	43	63	87	110	205	594
Gallbladder and bile ducts	156	0	0	0	0	0	0	1	2	6	14	20	30	59	126	128	157	354	897
Pancreas	157	0	0	0	0	1	1	0	8	11	34	66	103	178	248	303	370	782	2105
Other digestive sites	158, 159	0	0	1	0	0	0	1	1	2	4	2	12	12	26	32	33	163	289
Larynx	161	0	0	0	0	0	0	0	0	3	1	4	6	5	7	11	15	24	76
Lung	162	0	0	0	1	1	2	6	26	73	153	188	249	347	385	381	430	511	2753
Pleura	163-0	0	0	0	0	0	0	0	2	1	3	7	5	13	14	5	16	17	83
Other respiratory sites	160																		
Bone	163.1-9	0	0	1	0	0	0	1	0	1	5	4	1	6	5	12	10	28	74
Corin. and soft tissue sarcomas	170	0	0	4	2	2	1	0	0	5	3	2	1	2	3	2	10	25	62
Skin, total	171	2	1	2	1	4	4	3	4	4	8	10	12	15	13	19	10	36	148
Breast	172-173	0	0	0	2	4	6	12	17	29	45	39	51	40	76	55	99	394	869
Uterus (cervix and corpus)	174	0	0	0	0	1	16	46	132	245	432	581	662	752	873	875	1008	2699	8322
Ovary	180-182	0	0	0	1	0	5	11	31	48	60	89	118	155	255	304	312	734	2123
Other genital (females)	183	0	0	0	1	1	2	4	13	38	68	130	174	242	317	346	361	603	2300
Bladder	184	0	0	0	0	0	2	2	0	4	4	4	10	12	35	30	57	201	361
Kidney	188	0	0	0	0	0	0	0	3	3	6	12	19	45	75	87	129	409	788
Eye	189*	3	2	1	1	0	1	3	4	9	17	28	46	80	103	137	141	238	814
Brain of nerves (ben. + mal.)	190	0	1	0	0	1	1	0	0	4	5	3	7	9	11	11	8	26	87
Thyroid	191-192	28	15	10	5	10	22	25	22	37	62	60	96	117	137	139	152	192	1129
Hoedgkin's disease	225, 238	0	0	0	0	0	1	1	1	2	1	4	8	14	34	40	61	120	287
All other lymphomas	193	0	0	2	1	3	6	5	7	6	11	5	6	9	10	14	18	31	134
Multiple myeloma	200, 202	2	1	1	3	5	6	9	12	17	25	38	58	116	157	204	289	648	1591
Leukaemias	208, 209	0	0	0	0	0	0	0	1	5	7	21	32	56	91	113	134	252	712
Other sites ben. + mal.	203	12	14	9	8	8	11	18	18	25	33	44	42	66	115	149	138	453	1163
total, all sites ben. + mal.	204-207	7	1	0	0	2	3	5	17	18	51	60	63	113	184	238	356	1588	2706
Other urinary included	Other	56	36	32	27	45	100	175	379	683	1189	1642	2171	2943	4060	4582	5526	14074	37720

Table 6. Number of registered deaths from various cancers or groups of cancers in females: Switzerland, 1990-1994.

Type of cancer	VIII ICD	Age																Total*	
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79		80+
Mouth or pharynx	140-149	0.0	0.0	0.0	1.6	1.2	0.7	0.6	3.9	10.2	8.6	9.7	6.2	4.9	3.3	2.1	1.8	1.5	3.2
Oesophagus	150	0.0	0.0	0.0	0.0	0.0	0.7	0.6	2.1	5.1	6.2	5.3	4.2	3.9	3.4	2.6	2.3	1.9	2.9
Stomach	151	0.0	0.0	0.0	0.0	3.5	1.5	5.6	5.3	4.6	3.9	4.9	4.8	5.0	5.2	5.3	5.5	5.6	5.2
Intestines (colon and rectum)	152-154	0.0	0.0	2.6	3.2	2.3	3.0	5.0	8.1	8.0	6.9	8.6	10.1	9.5	9.9	11.1	11.7	12.7	10.9
Liver	155	0.0	0.0	2.6	1.6	1.2	0.0	2.8	2.5	2.2	2.5	3.3	4.7	4.5	4.0	3.7	3.1	1.9	3.2
Gallbladder and bile ducts	156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.9	0.4	0.7	0.9	0.9	0.9	0.8	1.1	0.9
Pancreas	157	0.0	0.0	0.0	0.0	0.0	0.7	2.2	6.7	4.0	5.0	5.2	5.0	5.3	4.6	5.0	4.6	3.7	4.5
Other digestive sites	158, 159	0.0	0.0	0.0	0.0	1.2	1.5	0.0	0.7	0.2	0.5	0.5	0.4	0.4	0.2	0.4	0.5	0.7	0.5
Larynx	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	2.1	2.3	2.0	1.7	1.3	1.0	0.9	0.7	1.1
Lung	162	0.0	0.0	2.6	1.6	0.0	3.0	7.8	14.4	20.6	28.7	30.9	32.4	34.5	32.5	28.3	21.6	13.1	23.9
Pleura	163.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.4	0.8	2.0	1.2	1.2	0.9	1.0	0.7	0.6	0.5	0.8
Other respiratory sites	160,																		
	163.1-9	0.0	0.0	0.0	0.0	2.3	0.7	0.6	1.1	0.6	0.9	1.0	0.6	0.3	0.3	0.4	0.4	0.3	0.4
Bone	170	0.0	2.0	5.3	14.5	8.1	7.4	2.2	1.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2
Conn. and soft tissue sarcomas	171	2.2	0.0	0.0	3.2	2.3	0.7	3.3	1.4	1.3	1.0	0.8	0.5	0.3	0.3	0.2	0.1	0.3	0.3
Skin, total	172-173	0.0	2.0	2.6	0.0	5.8	9.6	8.3	8.5	5.3	3.3	2.7	2.2	1.8	1.4	1.6	1.8	2.6	2.2
Breast	174	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Prostate	185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	2.0	3.5	5.7	9.8	14.5	20.6	28.6	16.0
Testis	186	4.4	0.0	0.0	4.8	8.1	12.6	12.2	4.9	1.0	0.9	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.3
Other genital (males)	187	0.0	0.0	0.0	0.0	1.2	0.0	0.6	0.0	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2
Bladder	188	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.1	2.1	1.9	1.7	2.8	3.0	3.9	4.1	5.1	5.6	4.2
Kidney	189*	2.2	2.0	2.6	0.0	0.0	1.5	2.2	1.1	1.4	2.5	2.4	3.5	3.1	3.1	2.9	2.8	2.2	2.7
Eye	190	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1
Brain or nerves (ben. + mal.)	191-192,																		
	225, 238	40.0	28.6	34.2	21.0	9.3	17.8	17.2	13.0	12.0	7.1	5.3	4.1	2.7	2.4	2.0	1.5	0.8	2.5
Thyroid	193	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.7	0.0	0.3	0.3	0.2	0.4	0.3	0.4	0.3	0.4	0.3
Hodgkin's disease	201	0.0	0.0	0.0	3.2	8.1	5.9	7.8	6.0	2.1	1.1	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.4
All other lymphomas	200, 202,																		
	208, 209	6.7	8.2	5.3	11.3	15.1	11.1	6.1	8.1	5.6	3.3	3.3	2.5	3.2	3.4	3.7	4.1	3.9	3.8
Multiple myeloma	203	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.3	0.9	1.0	1.4	1.6	1.7	1.9	1.9	1.7	1.6
Leukaemias	204-207	31.1	53.1	39.5	32.3	27.9	16.3	8.9	6.0	5.0	4.5	2.6	2.1	2.4	2.5	2.8	2.7	3.5	3.2
Other sites ben. + mal.	Other	13.3	4.1	2.6	1.6	1.2	3.7	5.0	2.1	3.5	3.5	3.1	3.8	3.3	3.9	3.6	4.5	6.0	4.4
Total, all sites ben. + mal.	140-239	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Other urinary included.

Table 7. Percent of all cancer deaths in males. Switzerland, 1990-1994.

Type of cancer	VIII ICD	Age																Total*
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	
Mouth of pharynx	140-149	0.0	2.8	0.0	3.7	0.0	0.0	1.1	1.3	1.6	1.3	2.1	1.4	1.2	1.0	0.9	1.1	1.1
Oesophagus	150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.8	0.9	1.6	1.1	1.1	1.2	1.0	1.1
Stomach	151	0.0	0.0	0.0	0.0	2.2	5.0	4.0	4.5	2.8	2.4	2.6	2.7	3.2	3.8	4.2	5.2	6.2
Intestines (colon and rectum)	152-154	0.0	0.0	3.1	0.0	0.0	2.0	4.0	7.1	7.0	5.7	6.8	9.6	9.4	11.3	12.5	12.6	15.3
Liver	155	3.6	0.0	0.0	0.0	2.2	3.0	3.4	1.6	0.7	1.3	1.2	1.3	1.5	1.6	1.9	2.0	1.5
Gallbladder and bile ducts	156	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.9	1.2	1.2	1.4	2.0	3.1	2.8	2.8	2.5
Pancreas	157	0.0	0.0	0.0	0.0	2.2	1.0	0.0	2.1	1.6	2.9	4.0	4.7	6.0	6.1	6.6	6.7	5.6
Other digestive sites	158-159	0.0	0.0	3.1	0.0	0.0	0.0	0.6	0.3	0.3	0.3	0.1	0.6	0.4	0.6	0.7	0.6	1.2
Larynx	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.2
Lung	162	0.0	0.0	0.0	3.7	2.2	2.0	3.4	6.9	10.7	12.9	11.4	11.5	11.8	9.5	8.3	7.8	3.6
Pleura, a. Other respiratory sites	160, 163	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.1	0.5	0.5	0.2	0.5	0.4	0.2	0.4	0.2
Bone	170	0.0	0.0	12.5	7.4	4.4	1.0	0.0	0.0	0.7	0.3	0.1	0.0	0.1	0.1	0.0	0.2	0.2
Conn. and soft tissue sarcomas	171	3.6	2.8	6.3	3.7	8.9	4.0	1.7	1.1	0.6	0.7	0.6	0.6	0.5	0.3	0.4	0.2	0.3
Skin, total	172-173	0.0	0.0	0.0	7.4	8.9	6.0	6.9	4.5	4.2	3.8	2.4	2.3	1.4	1.9	1.2	1.8	2.8
Breast	174	0.0	0.0	0.0	0.0	2.2	6.0	26.3	34.8	35.9	36.3	35.4	30.5	25.6	21.5	19.1	18.2	19.2
Uterus (cervix and corpus)	180-182	0.0	0.0	0.0	3.7	0.0	5.0	6.3	8.2	7.0	5.0	5.4	5.4	5.3	6.3	6.6	5.6	5.2
Ovary	183	0.0	0.0	0.0	3.7	2.2	2.0	2.3	3.4	5.6	5.7	7.9	8.0	8.2	7.8	7.6	6.5	4.3
Other genital (females)	184	0.0	0.0	0.0	0.0	0.0	2.0	1.1	0.0	0.6	0.3	0.2	0.5	0.4	0.9	0.7	1.0	1.4
Bladder	188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	0.5	0.7	0.9	1.5	1.8	1.9	2.3	2.9
Kidney	189**	5.4	5.6	3.1	3.7	0.0	1.0	1.7	1.1	1.3	1.4	1.7	2.1	2.7	2.5	3.0	2.6	1.7
Eye	190	0.0	2.8	0.0	0.0	2.2	1.0	0.0	0.0	0.6	0.4	0.2	0.3	0.3	0.3	0.2	0.1	0.2
Brain or nerves (ben. + mal.)	191-192	42.9	33.3	28.1	18.5	20.0	18.0	13.1	5.3	4.8	4.7	3.2	4.1	3.5	2.8	2.4	1.8	0.6
Thyroid	193	0.0	0.0	0.0	0.0	0.0	1.0	0.6	0.3	0.3	0.1	0.2	0.4	0.5	0.8	0.9	1.1	0.9
Hodgkin's disease	201	0.0	0.0	6.3	3.7	6.7	6.0	2.9	1.8	0.9	0.9	0.3	0.3	0.3	0.2	0.3	0.3	0.2
All other lymphomas	200, 202																	
Multiple myeloma	208, 209	3.6	2.8	3.1	11.1	11.1	6.0	5.1	3.2	2.5	2.1	2.3	2.7	3.9	3.9	4.5	5.2	4.6
Leukaemias	203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.6	1.3	1.5	1.9	2.2	2.5	2.4	1.8
Other sites ben. + mal.	204-207	21.4	38.9	28.1	29.6	17.8	11.0	10.3	4.7	3.7	2.8	2.7	1.9	2.2	2.8	3.3	2.5	3.2
Other sites ben. + mal.	Other	19.6	11.1	6.3	0.0	6.7	7.0	4.0	5.0	3.4	4.9	4.2	3.3	4.5	5.2	6.0	7.5	12.2
Total all sites ben. + mal.	140-239	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 8. Percent of all cancer deaths in females: Switzerland, 1990-1994.

Type of cancer	VIII ICD	Sex ratio*	
		all ages	35–64 years
Mouth or pharynx	140–149	5.3	6.2
Oesophagus	150	5.1	5.9
Stomach	151	2.2	2.3
Intestines (Colon and rectum)	152–154	1.7	1.5
Liver	155	3.7	4.1
Gallbladder and bile ducts	156	0.7	0.7
Pancreas	157	1.5	1.6
Other digestive sites	158, 159	1.3	1.6
Larynx	161	10.5	11.9
Trachea, bronchus and lung	162	5.0	3.7
Pleura	163.0	5.5	4.4
Other respiratory sites	160, 163.1–.9	3.5	4.1
Bone	170	2.5	2.3
Conn. and soft tissue sarcomas	171	1.2	1.3
Skin, total	172–173	1.6	1.4
Bladder	188	4.0	3.5
Kidney	189**	2.1	1.9
Eye	190	0.9	0.7
Brain and nerves (ben + mal)	191, 192, 225, 238	1.3	1.4
Thyroid	193	0.9	1.4
Hodgkin's disease	201	1.7	1.7
All other lymphomas	200, 202, 208, 209	1.7	1.5
Multiple myeloma	203	1.6	1.3
Leukaemias	204–207	1.8	1.5
Other sites (ben + mal)	other	1.3	1.3
Total, all sites, ben + mal	140–239	1.7	1.4

* Age-standardized on the world population.

** Other urinary included.

Table 9. Sex ratios (MIF) for cancer mortality in Switzerland, 1990–1994.

Rank	All ages		< 65 years	
	males	females	males	females
1	Lung	Breast	Lung	Breast
2	Prostate	Intestines	Intestines	Lung
3	Intestines	Lung	Mouth or pharynx	Intestines
4	Stomach	Ovary	Brain and nerves	Ovary
5	Pancreas	Uterus, total	Pancreas	Uterus, total
6	Bladder	Pancreas	Stomach	Brain and nerves
7	Non-Hodgkin's lymphomas	Stomach	Oesophagus	Pancreas
8	Mouth or pharynx	Non-Hodgkin's lymphomas	Liver	Leukaemias
9	Leukaemias	Leukaemias	Leukaemias	Non-Hodgkin's lymphomas
10	Oesophagus	Gallbladder	Non-Hodgkin's lymphomas	Stomach

Table 10. Ranks of the ten most frequent cancer sites certified in Switzerland, 1990–1994.

Cancer site	Sex	Observed	Projected (range)*
Mouth or pharynx	M	18.9	28.2 (23.4–26.0)
Oesophagus	M	15.9	18.0 (17.1–19.0)
Stomach	M	23.8	25.0 (25.0–27.5)
	F	9.8	10.1 (10.1–12.0)
Intestines	M	47.6	46.9 (46.9–48.8)
	F	27.7	28.3 (28.3–30.2)
Pancreas	M	22.7	22.8 (21.6–22.8)
	F	14.9	13.8 (13.8–15.4)
Larynx	M	6.4	10.4 (9.2–10.4)
Lung	M	135.4	168.3 (145.1–168.3)
	F	27.0	21.3 (21.3–25.5)
Breast	F	67.5	71.9 (68.3–75.5)
Ovary		20.0	20.3 (19.3–20.4)
Prostate		49.7	45.1 (45.1–49.3)
Bladder	M	17.0	18.7 (18.1–19.1)
Total, all sites	M	464.3	485.6 (447.4–497.1)
	F	269.1	258.1 (241.8–268.7)

* The projected rates were derived from models based on linear regression on the logarithms of the eight previous calendar periods, as described in references 6–7. The range was based on the other models, including that with fixed period values and (whenever available) those with *a priori* defined period coefficients in relation to available knowledge or projections on trends in risk factor exposure. Besides observing the generalized excellent fit of the projections, it may be useful to observe how the decline in lung cancer for males has been even greater than projected assuming a 5% decline in smoking-related bronchial carcinoma, whereas for females the rise has been towards the upper limit, which assumed a 5% increase in smoking-related lung cancer deaths.

Table 11. Comparison of observed and projected age-adjusted (Europe) mortality rates at ages 40–79 for 11 cancer sites. Switzerland, 1990–1994.

and for brain neoplasms, mostly at younger and middle ages.

Mortality rates declined for Hodgkin's disease, probably reflecting improvement in treatment (as for testicular cancer), but also for other lymphomas, myelomas and leukaemias, where the impact of treatment was likely to have been more modest¹¹. A certain misclassification between Hodgkin's and non-Hodgkin's lymphomas on Swiss death certificates has however been reported in the past¹², and

may account for part of these trends.

In conclusion, therefore, mortality rates in Switzerland over the period 1990–1994 were generally favourable and downwards for both sexes and most cancer sites, with the major exception of lung cancer and a few other tobacco-related neoplasms in females^{3,13,14}. Table 11 shows that the observed rates for males were close to the lower range of projected ones for several neoplasms, and specifically

for tobacco-related ones^{6,7}, with a total observed cancer mortality rate at age 40–79 of 464/100,000, compared with projected rates between 447 and 497. Observed rates for females, at 269/100,000, were at the upper limit of the projected range.

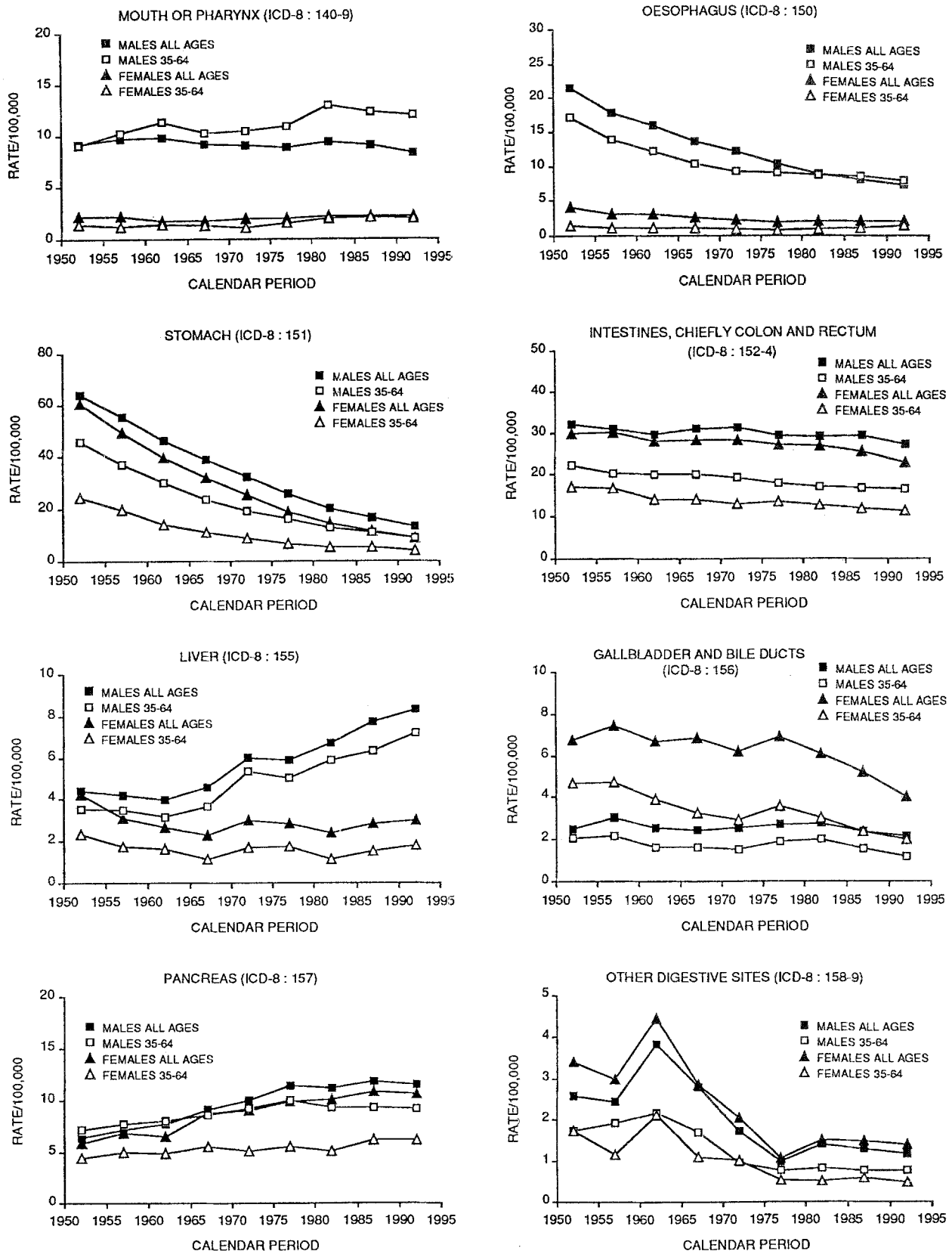


Figure 1. Trends in cancer mortality in Switzerland from 1951 to 1994. Age-standardized (1980 Swiss Census population) rates per 100,000 males and females of all ages and at ages 35-64.

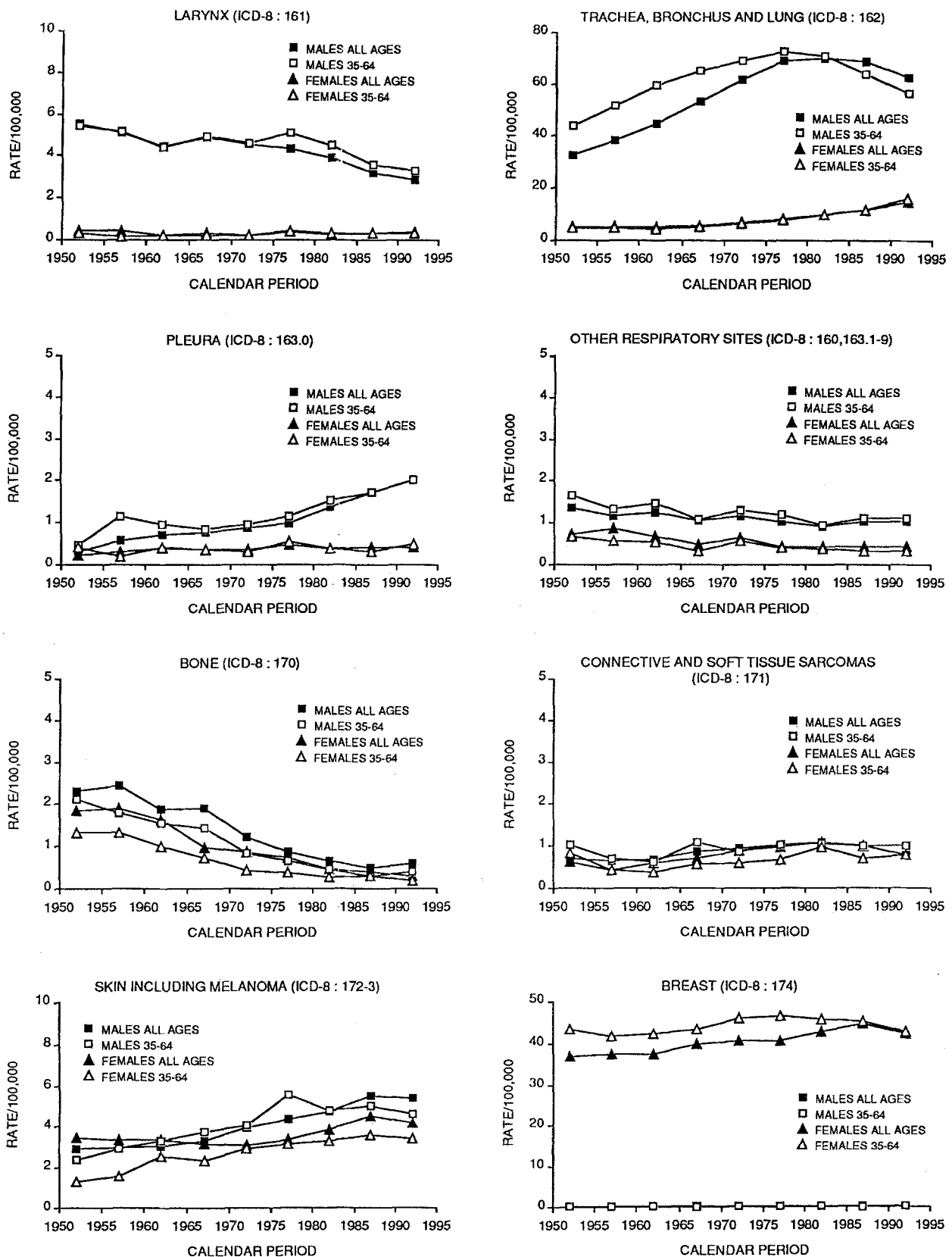


Figure 1b.

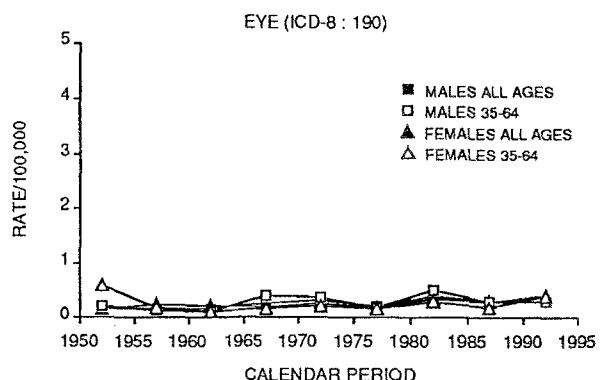
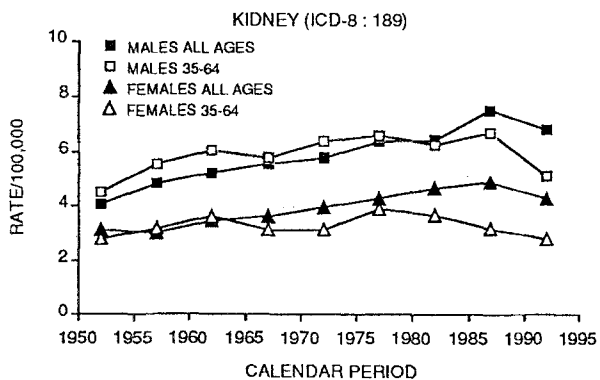
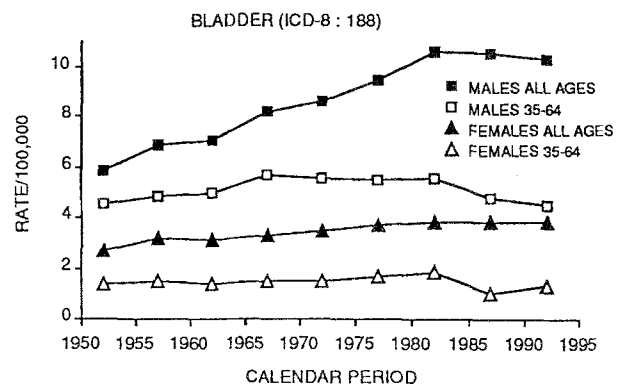
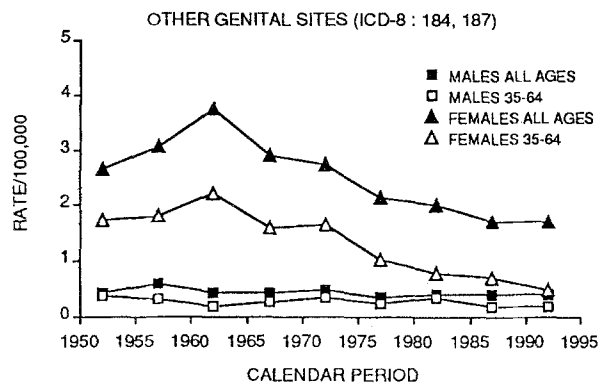
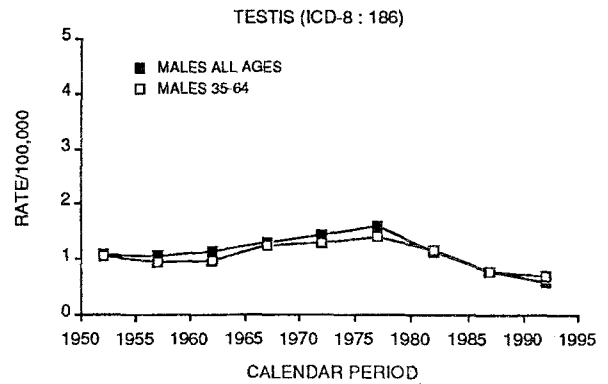
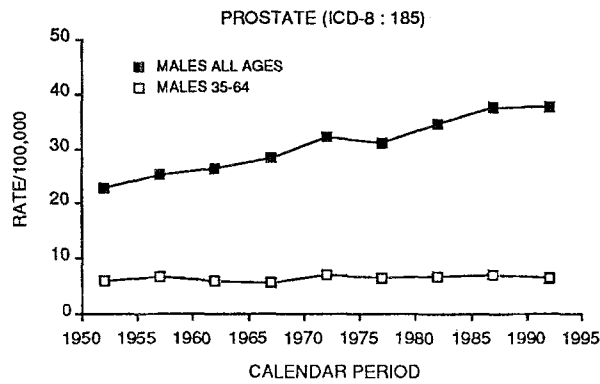
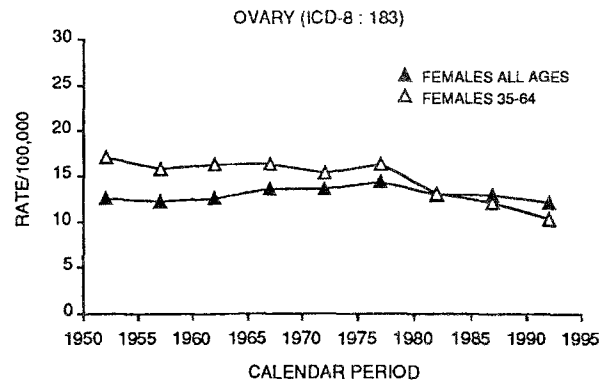
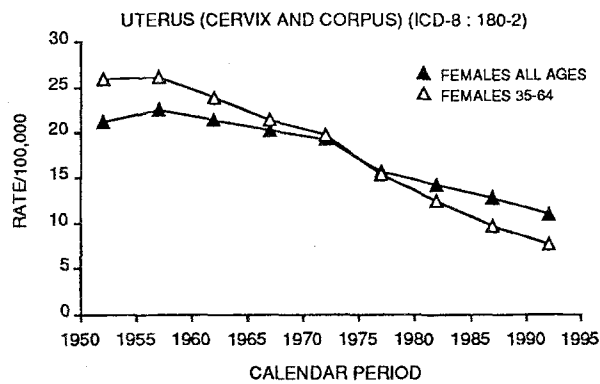


Figure 1c.

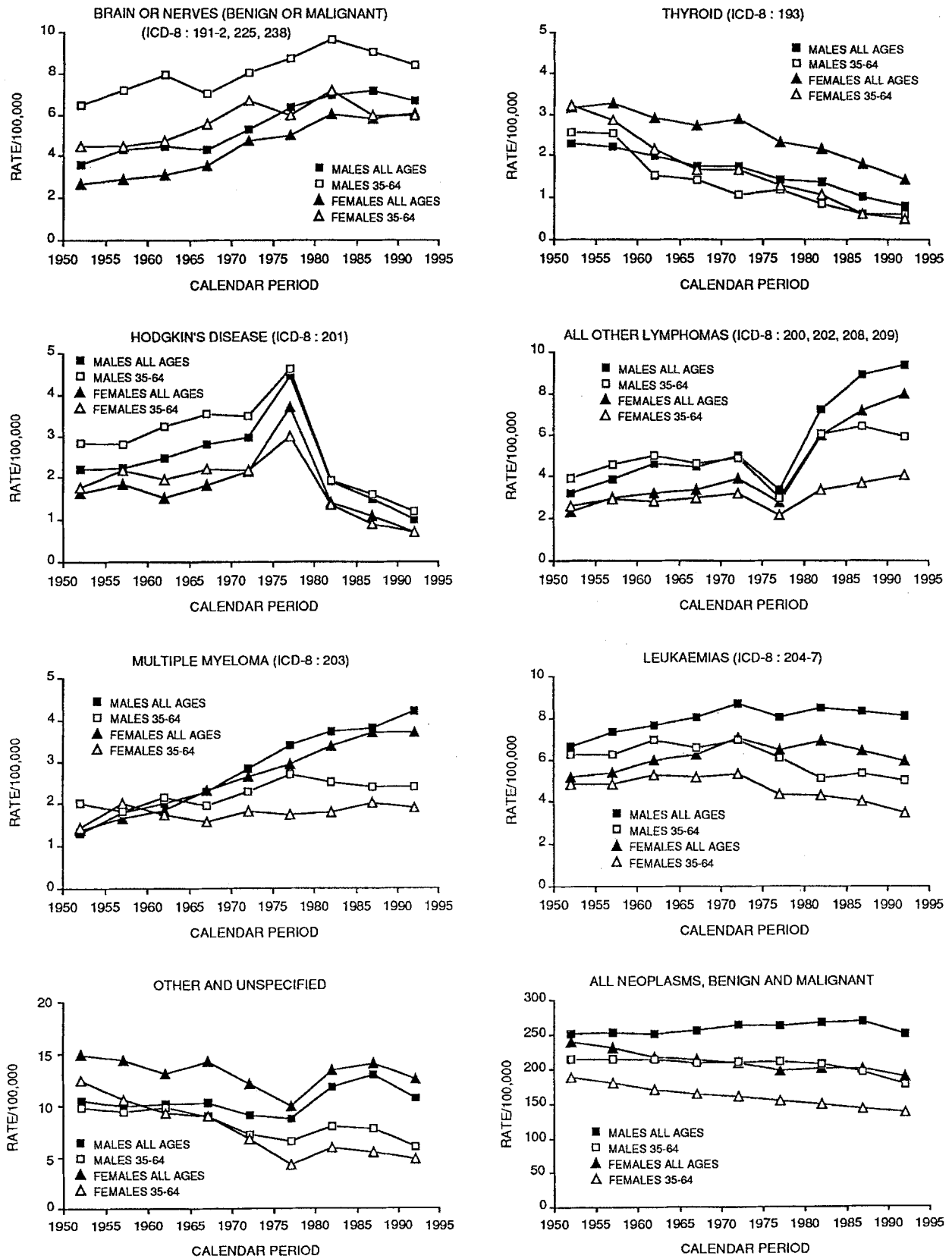


Figure 1d.

Zusammenfassung

Krebssterblichkeit in der Schweiz, 1990–1994

Um die vorhergehenden Publikationen über die Zeitspanne 1951–1989 zu aktualisieren, werden die schweizerischen Krebsmortalitätsstatistiken 1990–1994 präsentiert. Die Daten für 1990–1994, unterteilt in 30 Kategorien, werden in 10 Tabellen dargestellt, und zwar als absolute und relative Todeshäufigkeiten, nach Geschlecht und 5-Jahres-Altersklassen sowie als brutto Jahresmittelwerte, altersstandardisiert. Zusätzlich zu einem Vergleich Männer/Frauen und zu einer Rangliste der 10 häufigsten Krebsarten wird mittels einer Graphik die Entwicklung in bezug auf die häufigsten Krebsarten für neun 5-Jahres-Perioden aufgezeigt (standardisierte Werte; alle Altersgruppen und nur 35–64jährige). Die Mortalitätsrate für Krebs ist, gesamthaft gesehen, für beide Geschlechter gesunken (altersstandardisiert auf die Schweizer Bevölkerung 1980), insbesondere bei den jungen Männern. Bei den Männern hat man Senkungen der Mortalitätsrate bei folgenden Krebsarten verzeichnet: Lungenkrebs, Speiseröhre, Kehlkopf und Prostata (in mittleren Jahren); bei Frauen: Brust und Geschlechtsorgane; bei beiden Geschlechtern: Magen, Kolorektum, Gallenblase, Bauchspeicheldrüse, Haut, Harnblase, Nieren, Hirn und die meisten Lymphdrüsenkrebsarten. Zunehmende Krebsmortalitätsraten sind beobachtet worden für: Pleura beim Mann, Kehlkopf und Lunge bei der Frau. In der Zeitspanne 1990–1994 kann also, mit Ausnahme von Pleura-, Lungenkrebs und einigen anderen mit dem Tabakrauch zusammenhängenden Krebsarten bei der Frau, eine günstige Entwicklung der gesamthaften Krebsmortalität in der Schweiz festgestellt werden.

Résumé

Mortalité par cancer en Suisse, 1990–1994

Afin d'actualiser les séries déjà publiées pour 1951–1989, on présente les statistiques suisses de mortalité par cancer pour la période quinquennale 1990–1994. Les données de certification de décès pour 30 localisations ou groupes de localisations cancéreuses, sont présentées dans 10 tableaux sous la forme de fréquences absolues ou relatives de décès, par sexe et classes d'âge quinquennales, ainsi que de taux moyens annuels bruts et corrigés pour l'âge. En plus des rapports homme/femme des taux de mortalité et du rang des 10 localisations les plus fréquentes, on montre graphiquement l'évolution au cours de 9 périodes quinquennales des taux standardisés (tous âges et 35–64 ans) pour les principaux cancers. Les taux de mortalité pour l'ensemble des cancers ont diminué chez les deux sexes, surtout chez l'homme jeune. Chez l'homme, des diminutions ont été relevées pour le poumon, l'oesophage, le larynx et la prostate (classes d'âge moyen), chez la femme pour le sein et plusieurs organes génitaux, chez les deux sexes pour l'estomac, le colorectum, la vésicule biliaire, le pancréas, la peau, la vessie, les reins, le cerveau et la plupart des tumeurs du système lympho-hématopoïétique. Des augmentations de taux de mortalité ont été observées pour la plèvre chez l'homme et pour le larynx et les poumons chez la femme. Ainsi, au cours de la période 1990–1994, à l'exception de la plèvre, des poumons et de quelques autres tumeurs liées au tabac chez la femme, la mortalité cancéreuse en Suisse a évolué d'une manière globalement favorable.

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