

LARYNX
BOTH SEXES

TABLE 2A. -- Characteristics of persons reported to the Danish Cancer Registry with an initial cancer of the larynx, 1943-80+

Category	Male	Female	Total
No. with first primary cancer*	3,344	503	3,847
No. who developed a second primary cancer	321	47	368
Average age at diagnosis of first cancer, yr	63	61	63
Average yr of diagnosis of first cancer	1967	1968	1967
Person-yr of follow-up	19,754	3,215	22,969
Average follow-up, yr	5.9	6.4	6.0
Percent given radiotherapy for first cancer	90	90	90

+ ICD-7 code = 161.

* Number excludes all persons who survived less than 2 mo after the diagnosis of their first primary cancer or who developed a simultaneous cancer during this period. First primary cancers diagnosed only at autopsy or by death certificate are also excluded as are in situ cancers.

TABLE 2B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the larynx in Denmark, 1943-80

Microscopically confirmed	No.	Percent+
Both first and second cancers	310	84.2
Only the first cancer	33	9.0
Only the second cancer	20	5.4
Neither first nor second cancer	5	1.4
Total second primary cancers	368	100.0

+ Minor discrepancies between table entries, and row and column sums in this and subsequent tables are due to rounding.

LARYNX
BOTH SEXES

TABLE 2C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the larynx among males and females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis												Total		
	<1 yr			1-4 yr			5-9 yr			10+ yr			O	E	O/E
No. starting interval	3,847			3,104			1,598			805			3,847		
Person-yr in interval	3,511			8,611			5,819			5,029			22,969		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	32	36.37	0.9	128	95.11	1.3*	96	71.69	1.3*	112	79.30	1.4*	368	282.46	1.3*
All excluding site of initial cancer	31	35.85	0.9	128	93.77	1.4*	96	70.70	1.4*	112	78.34	1.4*	367	278.65	1.3*
Buccal cavity, pharynx	1	1.12	0.9	3	2.84	1.1	3	2.07	1.4	9	2.06	4.4*	16	8.08	2.0*
Lip	1	0.59	1.7	2	1.48	1.4	2	1.06	1.9	3	1.06	2.8	8	4.18	1.9
Tongue	0	0.09	0.0	1	0.22	4.5	0	0.17	0.0	0	0.16	0.0	1	0.63	1.6
Salivary gland	0	0.10	0.0	0	0.25	0.0	1	0.18	5.6	0	0.18	0.0	1	0.70	1.4
Gum, other mouth	0	0.16	0.0	0	0.43	0.0	0	0.32	0.0	3	0.35	8.6*	3	1.26	2.4
Pharynx	0	0.18	0.0	0	0.47	0.0	0	0.34	0.0	3	0.33	9.1*	3	1.31	2.3
Digestive system	12	12.83	0.9	40	33.27	1.2	24	25.09	1.0	26	28.32	0.9	102	99.52	1.0
Esophagus	0	0.55	0.0	1	1.41	0.7	0	1.03	0.0	0	1.10	0.0	1	4.09	0.2
Stomach	5	3.76	1.3	12	9.53	1.3	5	7.06	0.7	8	7.65	1.0	30	27.99	1.1
Colon	2	3.07	0.7	9	8.12	1.1	8	6.22	1.3	5	7.46	0.7	24	24.87	1.0
Rectum	0	2.85	0.0	7	7.38	0.9	3	5.55	0.5	5	6.09	0.8	15	21.85	0.7
Liver, biliary	3	0.77	3.9	2	2.07	1.0	1	1.60	0.6	2	1.94	1.0	8	6.38	1.3
Pancreas	1	1.41	0.7	6	3.74	1.6	7	2.86	2.4	5	3.28	1.5	19	11.28	1.7*
Respiratory system	9	7.57	1.2	45	19.85	2.3*	41	14.89	2.8*	39	15.30	2.5*	134	57.60	2.3*
Nasal cavities, sinuses	0	0.10	0.0	0	0.25	0.0	0	0.19	0.0	0	0.19	0.0	0	0.73	0.0
Larynx	1	0.52	1.9	0	1.34	0.0	0	0.99	0.0	0	0.96	0.0	1	3.81	0.3
Trachea, bronchus, lung	8	6.64	1.2	45	17.45	2.6*	40	13.11	3.1*	38	13.46	2.8*	131	50.67	2.6*
Female breast	0	0.82	0.0	3	2.10	1.4	3	1.54	2.0	5	1.77	2.8	11	6.23	1.8
Female genital tract	0	0.76	0.0	5	1.95	2.6	1	1.40	0.7	1	1.46	0.7	7	5.57	1.3
Cervix uteri	0	0.25	0.0	4	0.62	6.5*	0	0.41	0.0	1	0.39	2.6	5	1.68	3.0
Corpus uteri	0	0.23	0.0	0	0.59	0.0	0	0.44	0.0	0	0.45	0.0	0	1.71	0.0
Uterus, NOS	0	0.02	0.0	0	0.04	0.0	0	0.03	0.0	0	0.03	0.0	0	0.11	0.0
Ovary, fallopian tubes	0	0.23	0.0	1	0.58	1.7	1	0.43	2.3	0	0.47	0.0	2	1.71	1.2
Prostate gland	3	4.09	0.7	8	11.09	0.7	10	8.78	1.1	10	10.92	0.9	31	34.88	0.9
Testis	0	0.13	0.0	0	0.30	0.0	0	0.19	0.0	0	0.16	0.0	0	0.78	0.0
Kidney, renal pelvis, ureter	0	1.20	0.0	2	3.15	0.6	0	2.36	0.0	3	2.59	1.2	5	9.31	0.5
Bladder, other urinary	2	2.89	0.7	7	7.68	0.9	8	5.84	1.4	14	6.49	2.2*	31	22.91	1.4
Melanoma of the skin	0	0.36	0.0	0	0.92	0.0	0	0.67	0.0	1	0.66	1.5	1	2.60	0.4
Eye	0	0.11	0.0	0	0.29	0.0	0	0.21	0.0	0	0.21	0.0	0	0.83	0.0
Brain, central nervous system	0	0.70	0.0	4	1.76	2.3	1	1.24	0.8	1	1.10	0.9	6	4.79	1.3
Thyroid gland	2	0.12	16.7*	0	0.31	0.0	0	0.23	0.0	0	0.25	0.0	2	0.92	2.2
Bone	0	0.07	0.0	0	0.16	0.0	0	0.12	0.0	0	0.12	0.0	0	0.47	0.0
Connective tissue	0	0.12	0.0	0	0.31	0.0	1	0.22	4.5	0	0.23	0.0	1	0.87	1.1
Lymphatic, hematopoietic system	3	2.32	1.3	11	6.10	1.8	3	4.59	0.7	2	5.10	0.4	19	18.11	1.0
Non-Hodgkin's lymphoma	1	0.63	1.6	6	1.63	3.7*	1	1.23	0.8	1	1.33	0.8	9	4.82	1.9
Hodgkin's disease	0	0.17	0.0	0	0.44	0.0	0	0.31	0.0	0	0.30	0.0	0	1.22	0.0
Multiple myeloma	0	0.44	0.0	3	1.15	2.6	0	0.88	0.0	0	1.00	0.0	3	3.46	0.9
Leukemias	2	1.06	1.9	2	2.80	0.7	2	2.12	0.9	1	2.43	0.4	7	8.42	0.8
Chronic lymphocytic	1	0.56	1.8	1	1.50	0.7	1	1.15	0.9	0	1.34	0.0	3	4.55	0.7
Acute nonlymphocytic	1	0.28	3.6	0	0.73	0.0	1	0.56	1.8	1	0.64	1.6	3	2.19	1.4

+ ICD-7 code = 161.

* P<.05.

LARYNX
MALES

TABLE 2D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the larynx among males in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
No. starting interval	3,344			2,693			1,383			692			3,344		
Person-yr in interval	3,049			7,457			5,019			4,230			19,754		
All second cancers	28	32.60	0.9	111	85.40	1.3*	86	64.38	1.3*	96	70.41	1.4*	321	252.78	1.3*
All excluding site of initial cancer	27	32.09	0.8	111	84.08	1.3*	86	63.41	1.4*	96	69.47	1.4*	320	249.04	1.3*
Buccal cavity, pharynx	1	1.07	0.9	3	2.71	1.1	3	1.97	1.5	8	1.94	4.1*	15	7.68	2.0*
Lip	1	0.58	1.7	2	1.46	1.4	2	1.05	1.9	3	1.04	2.9	8	4.12	1.9
Tongue	0	0.08	0.0	1	0.20	5.1	0	0.15	0.0	0	0.14	0.0	1	0.56	1.8
Salivary gland	0	0.09	0.0	0	0.22	0.0	1	0.16	6.3	0	0.16	0.0	1	0.62	1.6
Gum, other mouth	0	0.15	0.0	0	0.39	0.0	0	0.29	0.0	2	0.31	6.6	2	1.14	1.8
Pharynx	0	0.17	0.0	0	0.44	0.0	0	0.32	0.0	3	0.31	9.8*	3	1.24	2.4
Digestive system	11	11.62	0.9	37	30.16	1.2	23	22.66	1.0	22	25.09	0.9	93	89.54	1.0
Esophagus	0	0.52	0.0	1	1.32	0.8	0	0.96	0.0	0	1.01	0.0	1	3.81	0.3
Stomach	4	3.46	1.2	11	8.79	1.3	5	6.50	0.8	7	6.95	1.0	27	25.70	1.1
Colon	2	2.69	0.7	8	7.12	1.1	8	5.43	1.5	5	6.37	0.8	23	21.61	1.1
Rectum	0	2.63	0.0	6	6.81	0.9	3	5.11	0.6	4	5.54	0.7	13	20.08	0.6
Liver, biliary	3	0.67	4.4	2	1.80	1.1	1	1.38	0.7	1	1.62	0.6	7	5.47	1.3
Pancreas	1	1.29	0.8	6	3.41	1.8	6	2.60	2.3	5	2.91	1.7	18	10.20	1.8*
Respiratory system	9	7.36	1.2	40	19.30	2.1*	36	14.46	2.5*	37	14.78	2.5*	122	55.90	2.2*
Nasal cavities, sinuses	0	0.09	0.0	0	0.24	0.0	0	0.18	0.0	0	0.18	0.0	0	0.68	0.0
Larynx	1	0.51	1.9	0	1.32	0.0	0	0.97	0.0	0	0.94	0.0	1	3.74	0.3
Trachea, bronchus, lung	8	6.46	1.2	40	16.98	2.4*	35	12.74	2.7*	36	13.02	2.8*	119	49.20	2.4*
Prostate gland	3	4.09	0.7	8	11.09	0.7	10	8.78	1.1	10	10.92	0.9	31	34.88	0.9
Testis	0	0.13	0.0	0	0.30	0.0	0	0.19	0.0	0	0.16	0.0	0	0.78	0.0
Kidney, renal pelvis, ureter	0	1.10	0.0	2	2.89	0.7	0	2.16	0.0	3	2.34	1.3	5	8.50	0.6
Bladder, other urinary	2	2.79	0.7	7	7.41	0.9	8	5.63	1.4	13	6.20	2.1*	30	22.03	1.4
Melanoma of the skin	0	0.30	0.0	0	0.77	0.0	0	0.56	0.0	1	0.54	1.8	1	2.17	0.5
Eye	0	0.10	0.0	0	0.26	0.0	0	0.19	0.0	0	0.19	0.0	0	0.75	0.0
Brain, central nervous system	0	0.62	0.0	4	1.55	2.6	1	1.09	0.9	0	0.94	0.0	5	4.19	1.2
Thyroid gland	0	0.10	0.0	0	0.25	0.0	0	0.18	0.0	0	0.19	0.0	0	0.72	0.0
Bone	0	0.06	0.0	0	0.15	0.0	0	0.11	0.0	0	0.11	0.0	0	0.42	0.0
Connective tissue	0	0.11	0.0	0	0.28	0.0	1	0.20	5.0	0	0.20	0.0	1	0.78	1.3
Lymphatic, hematopoietic system	2	2.13	0.9	10	5.59	1.8	3	4.20	0.7	1	4.58	0.2	16	16.50	1.0
Non-Hodgkin's lymphoma	1	0.57	1.8	5	1.48	3.4*	1	1.11	0.9	1	1.17	0.9	8	4.33	1.8
Hodgkin's disease	0	0.16	0.0	0	0.40	0.0	0	0.28	0.0	0	0.27	0.0	0	1.11	0.0
Multiple myeloma	0	0.40	0.0	3	1.05	2.8	0	0.80	0.0	0	0.89	0.0	3	3.14	1.0
Leukemias	1	0.98	1.0	2	2.59	0.8	2	1.96	1.0	0	2.21	0.0	5	7.75	0.6
Chronic lymphocytic	0	0.53	0.0	1	1.41	0.7	1	1.08	0.9	0	1.24	0.0	2	4.26	0.5
Acute nonlymphocytic	1	0.25	4.1	0	0.66	0.0	1	0.51	2.0	0	0.57	0.0	2	1.98	1.0

+ ICD-7 code = 161.

* P<.05.

LARYNX
FEMALES

TABLE 2E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the larynx among females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	No. starting interval	Person-yr in interval		No. starting interval	Person-yr in interval		No. starting interval	Person-yr in interval		No. starting interval	Person-yr in interval		No. starting interval	Person-yr in interval	
	503	462		411	1,155		215	800		113	798		503	3,215	
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	4	3.77	1.1	17	9.71	1.8*	10	7.31	1.4	16	8.89	1.8*	47	29.68	1.6*
All excluding site of initial cancer	4	3.76	1.1	17	9.69	1.8*	10	7.29	1.4	16	8.87	1.8*	47	29.61	1.6*
Buccal cavity, pharynx	0	0.05	0.0	0	0.13	0.0	0	0.10	0.0	1	0.12	8.2	1	0.40	2.5
Lip	0	0.01	0.0	0	0.02	0.0	0	0.01	0.0	0	0.02	0.0	0	0.06	0.0
Tongue	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.02	0.0	0	0.07	0.0
Salivary gland	0	0.01	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.08	0.0
Gum, other mouth	0	0.01	0.0	0	0.04	0.0	0	0.03	0.0	1	0.04	24.4	1	0.12	8.2
Pharynx	0	0.01	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.07	0.0
Digestive system	1	1.21	0.8	3	3.11	1.0	1	2.43	0.4	4	3.23	1.2	9	9.98	0.9
Esophagus	0	0.03	0.0	0	0.09	0.0	0	0.07	0.0	0	0.09	0.0	0	0.28	0.0
Stomach	1	0.30	3.4	1	0.74	1.4	0	0.56	0.0	1	0.70	1.4	3	2.29	1.3
Colon	0	0.38	0.0	1	1.00	1.0	0	0.79	0.0	0	1.09	0.0	1	3.26	0.3
Rectum	0	0.22	0.0	1	0.57	1.8	0	0.44	0.0	1	0.55	1.8	2	1.77	1.1
Liver, biliary	0	0.10	0.0	0	0.27	0.0	0	0.22	0.0	1	0.32	3.1	1	0.91	1.1
Pancreas	0	0.12	0.0	0	0.33	0.0	1	0.26	3.9	0	0.37	0.0	1	1.08	0.9
Respiratory system	0	0.21	0.0	5	0.55	9.1*	5	0.43	11.7*	2	0.52	3.9	12	1.70	7.0*
Nasal cavities, sinuses	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Larynx	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.02	0.0	0	0.07	0.0
Trachea, bronchus, lung	0	0.18	0.0	5	0.47	10.6*	5	0.37	13.6*	2	0.44	4.5	12	1.47	8.2*
Female breast	0	0.82	0.0	3	2.10	1.4	3	1.54	2.0	5	1.77	2.8	11	6.23	1.8
Female genital tract	0	0.76	0.0	5	1.95	2.6	1	1.40	0.7	1	1.46	0.7	7	5.57	1.3
Cervix uteri	0	0.25	0.0	4	0.62	6.5*	0	0.41	0.0	1	0.39	2.6	5	1.68	3.0
Corpus uteri	0	0.23	0.0	0	0.59	0.0	0	0.44	0.0	0	0.45	0.0	0	1.71	0.0
Uterus, NOS	0	0.02	0.0	0	0.04	0.0	0	0.03	0.0	0	0.03	0.0	0	0.11	0.0
Ovary, fallopian tubes	0	0.23	0.0	1	0.58	1.7	1	0.43	2.3	0	0.47	0.0	2	1.71	1.2
Kidney, renal pelvis, ureter	0	0.10	0.0	0	0.26	0.0	0	0.20	0.0	0	0.25	0.0	0	0.81	0.0
Bladder, other urinary	0	0.10	0.0	0	0.27	0.0	0	0.21	0.0	1	0.29	3.4	1	0.88	1.1
Melanoma of the skin	0	0.06	0.0	0	0.15	0.0	0	0.11	0.0	0	0.12	0.0	0	0.43	0.0
Eye	0	0.01	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.08	0.0
Brain, central nervous system	0	0.08	0.0	0	0.21	0.0	0	0.15	0.0	1	0.16	6.4	1	0.60	1.7
Thyroid gland	2	0.02	81.0*	0	0.06	0.0	0	0.05	0.0	0	0.06	0.0	2	0.20	9.8*
Bone	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Connective tissue	0	0.01	0.0	0	0.03	0.0	0	0.02	0.0	0	0.03	0.0	0	0.09	0.0
Lymphatic, hematopoietic system	1	0.19	5.2	1	0.51	2.0	0	0.39	0.0	1	0.52	1.9	3	1.61	1.9
Non-Hodgkin's lymphoma	0	0.06	0.0	1	0.15	6.5	0	0.12	0.0	0	0.16	0.0	1	0.49	2.0
Hodgkin's disease	0	0.01	0.0	0	0.04	0.0	0	0.03	0.0	0	0.03	0.0	0	0.11	0.0
Multiple myeloma	0	0.04	0.0	0	0.10	0.0	0	0.08	0.0	0	0.11	0.0	0	0.32	0.0
Leukemias	1	0.08	12.5	0	0.21	0.0	0	0.16	0.0	1	0.22	4.6	2	0.67	3.0
Chronic lymphocytic	1	0.03	29.7	0	0.09	0.0	0	0.07	0.0	0	0.10	0.0	1	0.29	3.4
Acute nonlymphocytic	0	0.03	0.0	0	0.07	0.0	0	0.05	0.0	1	0.07	14.2	1	0.21	4.7

+ ICD-7 code = 161.

* P<.05.