

BONE  
BOTH SEXES

TABLE 5A. -- Characteristics of persons reported to the Danish Cancer Registry with an initial cancer of the bone, 1943-80+

Category	Male	Female	Total
No. with first primary cancer*	889	653	1,542
No. who developed a second primary cancer	21	23	44
Average age at diagnosis of first cancer, yr	41	44	42
Average yr of diagnosis of first cancer	1963	1962	1963
Person-yr of follow-up	4,935	3,713	8,648
Average follow-up, yr	5.6	5.7	5.6
Percent given radiotherapy for first cancer	47	45	46

+ ICD-7 code = 196.

\* 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 5B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the bone in Denmark, 1943-80

Microscopically confirmed	No.	Percent+
Both first and second cancers	33	75.0
Only the first cancer	3	6.8
Only the second cancer	6	13.6
Neither first nor second cancer	2	4.6
Total second primary cancers	44	100.0

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

BONE  
BOTH SEXES

TABLE 5C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bone among males and 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	1,542		996			454			292			1,542		
Person-yr in interval	1,261		2,482			1,853			3,052			8,648			
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	2	5.91	0.3	11	12.07	0.9	9	9.57	0.9	22	19.93	1.1	44	47.47	0.9
All excluding site of initial cancer	2	5.89	0.3	11	12.04	0.9	9	9.55	0.9	22	19.89	1.1	44	47.36	0.9
Buccal cavity, pharynx	0	0.15	0.0	0	0.31	0.0	0	0.23	0.0	0	0.47	0.0	0	1.16	0.0
Lip	0	0.07	0.0	0	0.14	0.0	0	0.11	0.0	0	0.21	0.0	0	0.52	0.0
Tongue	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.04	0.0	0	0.11	0.0
Salivary gland	0	0.02	0.0	0	0.04	0.0	0	0.04	0.0	0	0.06	0.0	0	0.15	0.0
Gum, other mouth	0	0.02	0.0	0	0.05	0.0	0	0.04	0.0	0	0.09	0.0	0	0.20	0.0
Pharynx	0	0.03	0.0	0	0.05	0.0	0	0.04	0.0	0	0.08	0.0	0	0.19	0.0
Digestive system	1	2.14	0.5	5	4.19	1.2	1	3.26	0.3	2	6.59	0.3	9	16.18	0.6
Esophagus	0	0.08	0.0	0	0.15	0.0	0	0.11	0.0	0	0.24	0.0	0	0.58	0.0
Stomach	1	0.67	1.5	2	1.22	1.6	0	0.92	0.0	2	1.67	1.2	5	4.48	1.1
Colon	0	0.53	0.0	0	1.09	0.0	1	0.88	1.1	0	1.87	0.0	1	4.38	0.2
Rectum	0	0.44	0.0	3	0.87	3.4	0	0.66	0.0	0	1.33	0.0	3	3.30	0.9
Liver, biliary	0	0.14	0.0	0	0.27	0.0	0	0.22	0.0	0	0.51	0.0	0	1.14	0.0
Pancreas	0	0.21	0.0	0	0.43	0.0	0	0.34	0.0	0	0.76	0.0	0	1.73	0.0
Respiratory system	0	0.76	0.0	1	1.63	0.6	2	1.26	1.6	6	2.95	2.0	9	6.59	1.4
Nasal cavities, sinuses	0	0.01	0.0	0	0.03	0.0	0	0.03	0.0	0	0.04	0.0	0	0.11	0.0
Larynx	0	0.05	0.0	0	0.11	0.0	0	0.09	0.0	0	0.19	0.0	0	0.43	0.0
Trachea, bronchus, lung	0	0.65	0.0	1	1.41	0.7	2	1.08	1.9	6	2.58	2.3	9	5.72	1.6
Female breast	0	0.51	0.0	0	1.05	0.0	3	0.94	3.2	3	1.99	1.5	6	4.50	1.3
Female genital tract	0	0.50	0.0	0	1.05	0.0	1	0.93	1.1	2	1.77	1.1	3	4.26	0.7
Cervix uteri	0	0.19	0.0	0	0.40	0.0	0	0.34	0.0	0	0.63	0.0	0	1.56	0.0
Corpus uteri	0	0.13	0.0	0	0.28	0.0	0	0.25	0.0	1	0.47	2.1	1	1.13	0.9
Uterus, NOS	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.09	0.0
Ovary, fallopian tubes	0	0.14	0.0	0	0.30	0.0	1	0.26	3.8	1	0.52	1.9	2	1.22	1.6
Prostate gland	0	0.45	0.0	0	0.92	0.0	0	0.63	0.0	1	1.26	0.8	1	3.25	0.3
Testis	0	0.04	0.0	1	0.09	11.2	0	0.07	0.0	1	0.14	7.1	2	0.34	5.9
Kidney, renal pelvis, ureter	0	0.17	0.0	0	0.36	0.0	1	0.28	3.6	4	0.62	6.5*	5	1.43	3.5*
Bladder, other urinary	0	0.32	0.0	1	0.69	1.4	0	0.53	0.0	1	1.19	0.8	2	2.73	0.7
Melanoma of the skin	0	0.06	0.0	0	0.15	0.0	0	0.13	0.0	0	0.30	0.0	0	0.64	0.0
Eye	0	0.02	0.0	1	0.03	33.3	1	0.03	33.3	1	0.07	14.3	3	0.15	20.0*
Brain, central nervous system	0	0.12	0.0	1	0.27	3.7	0	0.22	0.0	1	0.44	2.3	2	1.06	1.9
Thyroid gland	1	0.03	33.3	0	0.05	0.0	0	0.05	0.0	0	0.10	0.0	1	0.23	4.3
Bone	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.04	0.0	0	0.11	0.0
Connective tissue	0	0.03	0.0	0	0.05	0.0	0	0.04	0.0	0	0.07	0.0	0	0.18	0.0
Lymphatic, hematopoietic system	0	0.38	0.0	1	0.78	1.3	0	0.62	0.0	0	1.28	0.0	1	3.06	0.3
Non-Hodgkin's lymphoma	0	0.10	0.0	0	0.20	0.0	0	0.17	0.0	0	0.35	0.0	0	0.83	0.0
Hodgkin's disease	0	0.04	0.0	1	0.09	11.1	0	0.06	0.0	0	0.12	0.0	1	0.32	3.1
Multiple myeloma	0	0.06	0.0	0	0.14	0.0	0	0.10	0.0	0	0.23	0.0	0	0.54	0.0
Leukemias	0	0.18	0.0	0	0.35	0.0	0	0.27	0.0	0	0.55	0.0	0	1.34	0.0
Chronic lymphocytic	0	0.08	0.0	0	0.17	0.0	0	0.12	0.0	0	0.26	0.0	0	0.64	0.0
Acute nonlymphocytic	0	0.05	0.0	0	0.09	0.0	0	0.07	0.0	0	0.16	0.0	0	0.37	0.0

+ ICD-7 code = 196.

\* P<.05.

BONE  
MALES

TABLE 5D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bone 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	889			582			258			163			889		
Person-yr in interval	738			1,457			1,037			1,703			4,935		
All second cancers	0	3.49	0.0	9	7.14	1.3	3	5.06	0.6	9	10.62	0.8	21	26.30	0.8
All excluding site of initial cancer	0	3.48	0.0	9	7.12	1.3	3	5.05	0.6	9	10.60	0.8	21	26.23	0.8
Buccal cavity, pharynx	0	0.12	0.0	0	0.24	0.0	0	0.17	0.0	0	0.35	0.0	0	0.88	0.0
Lip	0	0.07	0.0	0	0.13	0.0	0	0.10	0.0	0	0.19	0.0	0	0.48	0.0
Tongue	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
Salivary gland	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.08	0.0
Gum, other mouth	0	0.01	0.0	0	0.03	0.0	0	0.02	0.0	0	0.05	0.0	0	0.12	0.0
Pharynx	0	0.02	0.0	0	0.04	0.0	0	0.03	0.0	0	0.06	0.0	0	0.14	0.0
Digestive system	0	1.34	0.0	5	2.59	1.9	0	1.78	0.0	2	3.52	0.6	7	9.23	0.8
Esophagus	0	0.06	0.0	0	0.11	0.0	0	0.07	0.0	0	0.15	0.0	0	0.39	0.0
Stomach	0	0.45	0.0	2	0.80	2.5	0	0.54	0.0	2	0.96	2.1	4	2.75	1.5
Colon	0	0.29	0.0	0	0.60	0.0	0	0.42	0.0	0	0.86	0.0	0	2.18	0.0
Rectum	0	0.30	0.0	3	0.58	5.2*	0	0.40	0.0	0	0.79	0.0	3	2.07	1.4
Liver, biliary	0	0.07	0.0	0	0.14	0.0	0	0.10	0.0	0	0.22	0.0	0	0.53	0.0
Pancreas	0	0.13	0.0	0	0.28	0.0	0	0.19	0.0	0	0.42	0.0	0	1.02	0.0
Respiratory system	0	0.65	0.0	1	1.40	0.7	2	1.04	1.9	2	2.45	0.8	5	5.54	0.9
Nasal cavities, sinuses	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.08	0.0
Larynx	0	0.05	0.0	0	0.10	0.0	0	0.08	0.0	0	0.17	0.0	0	0.39	0.0
Trachea, bronchus, lung	0	0.56	0.0	1	1.22	0.8	2	0.90	2.2	2	2.15	0.9	5	4.83	1.0
Prostate gland	0	0.45	0.0	0	0.92	0.0	0	0.63	0.0	1	1.26	0.8	1	3.25	0.3
Testis	0	0.04	0.0	1	0.09	11.2	0	0.07	0.0	1	0.14	7.1	2	0.34	5.9
Kidney, renal pelvis, ureter	0	0.11	0.0	0	0.24	0.0	0	0.17	0.0	2	0.37	5.3	2	0.89	2.2
Bladder, other urinary	0	0.26	0.0	1	0.57	1.8	0	0.41	0.0	1	0.92	1.1	2	2.16	0.9
Melanoma of the skin	0	0.03	0.0	0	0.08	0.0	0	0.06	0.0	0	0.14	0.0	0	0.31	0.0
Eye	0	0.01	0.0	0	0.02	0.0	1	0.02	59.5	0	0.04	0.0	1	0.09	11.3
Brain, central nervous system	0	0.07	0.0	1	0.16	6.2	0	0.12	0.0	0	0.25	0.0	1	0.61	1.6
Thyroid gland	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.08	0.0
Bone	0	0.01	0.0	0	0.02	0.0	0	0.01	0.0	0	0.02	0.0	0	0.07	0.0
Connective tissue	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.04	0.0	0	0.11	0.0
Lymphatic, hematopoietic system	0	0.25	0.0	0	0.52	0.0	0	0.38	0.0	0	0.76	0.0	0	1.91	0.0
Non-Hodgkin's lymphoma	0	0.06	0.0	0	0.13	0.0	0	0.10	0.0	0	0.20	0.0	0	0.50	0.0
Hodgkin's disease	0	0.03	0.0	0	0.06	0.0	0	0.04	0.0	0	0.08	0.0	0	0.21	0.0
Multiple myeloma	0	0.04	0.0	0	0.09	0.0	0	0.06	0.0	0	0.13	0.0	0	0.32	0.0
Leukemias	0	0.12	0.0	0	0.24	0.0	0	0.17	0.0	0	0.34	0.0	0	0.86	0.0
Chronic lymphocytic	0	0.06	0.0	0	0.12	0.0	0	0.08	0.0	0	0.17	0.0	0	0.44	0.0
Acute nonlymphocytic	0	0.03	0.0	0	0.06	0.0	0	0.04	0.0	0	0.09	0.0	0	0.23	0.0

+ ICD-7 code = 196.

\* P<.05.

BONE  
FEMALES

TABLE 5E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bone 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		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
No. starting interval	653			414			196			129			653		
Person-yr in interval	523			1,024			816			1,350			3,713		
All second cancers	2	2.42	0.8	2	4.93	0.4	6	4.51	1.3	13	9.31	1.4	23	21.17	1.1
All excluding site of initial cancer	2	2.41	0.8	2	4.92	0.4	6	4.50	1.3	13	9.29	1.4	23	21.13	1.1
Buccal cavity, pharynx	0	0.03	0.0	0	0.07	0.0	0	0.06	0.0	0	0.12	0.0	0	0.28	0.0
Lip	0	0.00	0.0	0	0.01	0.0	0	0.01	0.0	0	0.02	0.0	0	0.04	0.0
Tongue	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.02	0.0	0	0.05	0.0
Salivary gland	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.07	0.0
Gum, other mouth	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.04	0.0	0	0.08	0.0
Pharynx	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.02	0.0	0	0.05	0.0
Digestive system	1	0.80	1.2	0	1.60	0.0	1	1.48	0.7	0	3.07	0.0	2	6.95	0.3
Esophagus	0	0.02	0.0	0	0.04	0.0	0	0.04	0.0	0	0.09	0.0	0	0.19	0.0
Stomach	1	0.22	4.5	0	0.42	0.0	0	0.38	0.0	0	0.71	0.0	1	1.73	0.6
Colon	0	0.24	0.0	0	0.49	0.0	1	0.46	2.2	0	1.01	0.0	1	2.20	0.5
Rectum	0	0.14	0.0	0	0.29	0.0	0	0.26	0.0	0	0.54	0.0	0	1.23	0.0
Liver, biliary	0	0.07	0.0	0	0.13	0.0	0	0.12	0.0	0	0.29	0.0	0	0.61	0.0
Pancreas	0	0.08	0.0	0	0.15	0.0	0	0.15	0.0	0	0.34	0.0	0	0.71	0.0
Respiratory system	0	0.11	0.0	0	0.23	0.0	0	0.22	0.0	4	0.50	8.0*	4	1.05	3.8*
Nasal cavities, sinuses	0	0.00	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.03	0.0
Larynx	0	0.00	0.0	0	0.01	0.0	0	0.01	0.0	0	0.02	0.0	0	0.04	0.0
Trachea, bronchus, lung	0	0.09	0.0	0	0.19	0.0	0	0.18	0.0	4	0.43	9.4*	4	0.89	4.5*
Female breast	0	0.51	0.0	0	1.05	0.0	3	0.94	3.2	3	1.99	1.5	6	4.50	1.3
Female genital tract	0	0.50	0.0	0	1.05	0.0	1	0.93	1.1	2	1.77	1.1	3	4.26	0.7
Cervix uteri	0	0.19	0.0	0	0.40	0.0	0	0.34	0.0	0	0.63	0.0	0	1.56	0.0
Corpus uteri	0	0.13	0.0	0	0.28	0.0	0	0.25	0.0	1	0.47	2.1	1	1.13	0.9
Uterus, NOS	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.09	0.0
Ovary, fallopian tubes	0	0.14	0.0	0	0.30	0.0	1	0.26	3.8	1	0.52	1.9	2	1.22	1.6
Kidney, renal pelvis, ureter	0	0.06	0.0	0	0.12	0.0	1	0.11	8.7	2	0.25	8.1	3	0.54	5.6*
Bladder, other urinary	0	0.06	0.0	0	0.12	0.0	0	0.12	0.0	0	0.27	0.0	0	0.57	0.0
Melanoma of the skin	0	0.03	0.0	0	0.07	0.0	0	0.07	0.0	0	0.16	0.0	0	0.33	0.0
Eye	0	0.01	0.0	1	0.01	66.8*	0	0.01	0.0	1	0.03	39.4	2	0.06	32.6*
Brain, central nervous system	0	0.05	0.0	0	0.11	0.0	0	0.10	0.0	1	0.19	5.3	1	0.45	2.2
Thyroid gland	1	0.02	59.5	0	0.03	0.0	0	0.03	0.0	0	0.07	0.0	1	0.15	6.5
Bone	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.02	0.0	0	0.04	0.0
Connective tissue	0	0.01	0.0	0	0.02	0.0	0	0.02	0.0	0	0.03	0.0	0	0.07	0.0
Lymphatic, hematopoietic system	0	0.13	0.0	1	0.26	3.8	0	0.24	0.0	0	0.52	0.0	1	1.15	0.9
Non-Hodgkin's lymphoma	0	0.04	0.0	0	0.07	0.0	0	0.07	0.0	0	0.15	0.0	0	0.33	0.0
Hodgkin's disease	0	0.01	0.0	1	0.03	36.1	0	0.02	0.0	0	0.04	0.0	1	0.11	9.2
Multiple myeloma	0	0.02	0.0	0	0.05	0.0	0	0.04	0.0	0	0.10	0.0	0	0.22	0.0
Leukemias	0	0.06	0.0	0	0.11	0.0	0	0.10	0.0	0	0.21	0.0	0	0.48	0.0
Chronic lymphocytic	0	0.02	0.0	0	0.05	0.0	0	0.04	0.0	0	0.09	0.0	0	0.20	0.0
Acute nonlymphocytic	0	0.02	0.0	0	0.03	0.0	0	0.03	0.0	0	0.07	0.0	0	0.14	0.0

+ ICD-7 code = 196.

\* P<.05.