

BLADDER
BOTH SEXES

TABLE 2A. -- Characteristics of persons reported to the Danish Cancer Registry with an initial cancer of the bladder or other urinary (including papillomas), 1943-80+

Category	Male	Female	Total
No. with first primary cancer*	15,236	4,730	19,966
No. who developed a second primary cancer	1,163	260	1,423
Average age at diagnosis of first cancer, yr	66	67	66
Average yr of diagnosis of first cancer	1968	1967	1968
Person-yr of follow-up	72,216	22,583	94,799
Average follow-up, yr	4.7	4.8	4.7
Percent given radiotherapy for first cancer	34	34	34

+ ICD-7 code = 181.

* 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 bladder or other urinary (including papillomas) in Denmark, 1943-80

Microscopically confirmed	No.	Percent+
Both first and second cancers	1,143	80.3
Only the first cancer	147	10.3
Only the second cancer	105	7.4
Neither first nor second cancer	28	2.0
Total second primary cancers	1,423	100.0

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

BLADDER
BOTH SEXES

TABLE 2C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bladder or other urinary (including papillomas) 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	19,966			13,973			6,539			3,055			19,966		
Person-yr in interval	16,765			37,347			22,808			17,879			94,799		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	199	203.60	1.0	579	462.90	1.3*	342	302.91	1.1*	303	269.89	1.1	1,423	1,239.30	1.1*
All excluding site of initial cancer	175	188.22	0.9	522	427.12	1.2*	304	279.55	1.1	277	248.93	1.1	1,278	1,143.81	1.1*
Buccal cavity, pharynx	4	5.54	0.7	17	12.43	1.4	8	7.85	1.0	7	6.66	1.1	36	32.48	1.1
Lip	3	2.77	1.1	7	6.22	1.1	3	3.86	0.8	2	3.19	0.6	15	16.05	0.9
Tongue	0	0.46	0.0	1	1.02	1.0	2	0.66	3.0	0	0.56	0.0	3	2.70	1.1
Salivary gland	1	0.51	2.0	1	1.14	0.9	0	0.72	0.0	2	0.59	3.4	4	2.96	1.4
Gum, other mouth	0	0.89	0.0	5	2.05	2.4	0	1.35	0.0	1	1.25	0.8	6	5.53	1.1
Pharynx	0	0.89	0.0	3	2.01	1.5	3	1.26	2.4	2	1.07	1.9	8	5.23	1.5
Digestive system	38	73.10	0.5*	139	163.04	0.9	96	107.01	0.9	72	95.77	0.8*	345	438.93	0.8*
Esophagus	2	2.93	0.7	2	6.41	0.3	3	4.10	0.7	4	3.55	1.1	11	16.98	0.6
Stomach	10	20.73	0.5*	33	44.60	0.7	18	28.56	0.6*	13	24.33	0.5*	74	118.22	0.6*
Colon	10	18.57	0.5*	36	42.27	0.9	30	28.50	1.1	20	26.73	0.7	96	116.06	0.8
Rectum	8	15.63	0.5	32	34.91	0.9	16	22.65	0.7	16	19.84	0.8	72	93.03	0.8*
Liver, biliary	2	4.82	0.4	12	11.14	1.1	13	7.56	1.7	7	7.15	1.0	34	30.67	1.1
Pancreas	5	8.09	0.6	20	18.64	1.1	15	12.40	1.2	11	11.31	1.0	51	50.45	1.0
Respiratory system	43	37.96	1.1	154	88.69	1.7*	92	56.78	1.6*	82	49.00	1.7*	371	232.42	1.6*
Nasal cavities, sinuses	0	0.51	0.0	2	1.14	1.8	2	0.72	2.8	1	0.62	1.6	5	2.98	1.7
Larynx	2	2.47	0.8	13	5.73	2.3*	2	3.61	0.6	5	3.05	1.6	22	14.85	1.5
Trachea, bronchus, lung	39	33.32	1.2	136	78.07	1.7*	82	50.01	1.6*	72	43.22	1.7*	329	204.61	1.6*
Female breast	7	7.89	0.9	17	17.56	1.0	8	12.23	0.7	10	11.83	0.8	42	49.52	0.8
Female genital tract	4	6.76	0.6	16	14.97	1.1	7	10.00	0.7	9	8.99	1.0	36	40.73	0.9
Cervix uteri	2	1.95	1.0	7	4.23	1.7	2	2.68	0.7	4	2.19	1.8	15	11.05	1.4
Corpus uteri	1	2.04	0.5	3	4.57	0.7	1	3.06	0.3	0	2.76	0.0	5	12.42	0.4*
Uterus, NOS	1	0.16	6.1	1	0.34	3.0	0	0.24	0.0	0	0.23	0.0	2	0.97	2.1
Ovary, fallopian tubes	0	2.12	0.0	4	4.73	0.8	2	3.22	0.6	4	2.98	1.3	10	13.06	0.8
Prostate gland	37	22.80	1.6*	62	52.58	1.2	38	34.95	1.1	42	31.93	1.3	79	142.26	1.3*
Testis	1	0.53	1.9	2	1.20	1.7	2	0.73	2.8	0	0.54	0.0	5	2.99	1.7
Kidney, renal pelvis, ureter	24	6.54	3.7*	58	15.01	3.9*	26	9.82	2.6*	20	8.69	2.3*	128	40.05	3.2*
Bladder, other urinary	24	15.38	1.6	57	35.78	1.6*	38	23.36	1.6*	26	20.96	1.2	145	95.49	1.5*
Melanoma of the skin	2	1.88	1.1	5	4.36	1.1	0	2.81	0.0	1	2.48	0.4	8	11.53	0.7
Eye	1	0.60	1.7	1	1.33	0.8	0	0.84	0.0	0	0.71	0.0	2	3.47	0.6
Brain, central nervous system	1	3.36	0.3	6	7.68	0.8	3	4.79	0.6	1	3.91	0.3	11	19.74	0.6*
Thyroid gland	1	0.73	1.4	1	1.67	0.6	0	1.11	0.0	3	1.00	3.0	5	4.53	1.1
Bone	0	0.33	0.0	0	0.75	0.0	1	0.47	2.1	2	0.39	5.1	3	1.94	1.5
Connective tissue	0	0.64	0.0	3	1.40	2.1	0	0.88	0.0	1	0.74	1.4	4	3.67	1.1
Lymphatic, hematopoietic system	9	12.84	0.7	34	29.43	1.2	18	19.32	0.9	18	17.22	1.0	79	78.82	1.0
Non-Hodgkin's lymphoma	1	3.44	0.3	11	7.93	1.4	5	5.20	1.0	8	4.64	1.7	25	21.20	1.2
Hodgkin's disease	1	0.86	1.2	3	1.94	1.5	2	1.22	1.6	2	1.00	2.0	8	5.01	1.6
Multiple myeloma	1	2.48	0.4	5	5.69	0.9	3	3.76	0.8	2	3.36	0.6	11	15.29	0.7
Leukemias	6	5.95	1.0	15	13.59	1.1	7	8.96	0.8	6	8.05	0.7	34	36.54	0.9
Chronic lymphocytic	2	3.19	0.6	8	7.26	1.1	2	4.80	0.4	4	4.32	0.9	16	19.58	0.8
Acute nonlymphocytic	4	1.54	2.6	7	3.63	1.9	3	2.42	1.2	0	2.22	0.0	14	9.81	1.4

+ ICD-7 code = 181.

* P<.05.

BLADDER
MALES

TABLE 2D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bladder or other urinary (including papillomas) among males 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	15,236			10,826			5,034			2,281			15,236		
Person-yr in interval	12,913			28,914			17,279			13,110			72,216		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	167	164.39	1.0	470	376.01	1.2*	282	241.32	1.2*	244	208.94	1.2*	1,163	990.66	1.2*
All excluding site of initial cancer	146	150.19	1.0	421	342.90	1.2*	252	219.90	1.1*	223	190.01	1.2*	1,042	902.99	1.2*
Buccal cavity, pharynx	4	5.00	0.8	15	11.24	1.3	6	7.00	0.9	4	5.80	0.7	29	29.04	1.0
Lip	3	2.69	1.1	6	6.03	1.0	2	3.73	0.5	2	3.05	0.7	13	15.51	0.8
Tongue	0	0.36	0.0	0	0.81	0.0	1	0.51	2.0	0	0.41	0.0	1	2.09	0.5
Salivary gland	1	0.40	2.5	1	0.91	1.1	0	0.57	0.0	1	0.46	2.2	3	2.35	1.3
Gum, other mouth	0	0.73	0.0	5	1.68	3.0	0	1.07	0.0	0	0.94	0.0	5	4.42	1.1
Pharynx	0	0.80	0.0	3	1.81	1.7	3	1.12	2.7	1	0.94	1.1	7	4.67	1.5
Digestive system	33	58.87	0.6*	105	131.85	0.8*	76	84.23	0.9	58	72.35	0.8	272	347.31	0.8*
Esophagus	2	2.53	0.8	2	5.54	0.4	3	3.45	0.9	4	2.87	1.4	11	14.39	0.8
Stomach	9	17.18	0.5*	24	37.26	0.6*	13	23.31	0.6*	12	19.22	0.6	58	96.96	0.6*
Colon	9	14.07	0.6	25	32.13	0.8	22	20.99	1.0	12	18.76	0.6	68	85.95	0.8
Rectum	6	13.18	0.5*	28	29.54	0.9	15	18.78	0.8	16	15.98	1.0	65	77.48	0.8
Liver, biliary	2	3.54	0.6	7	8.24	0.8	10	5.39	1.9	6	4.82	1.2	25	21.99	1.1
Pancreas	5	6.60	0.8	15	15.24	1.0	12	9.89	1.2	8	8.62	0.9	40	40.36	1.0
Respiratory system	41	35.85	1.1	144	83.87	1.7*	89	53.37	1.7*	76	45.54	1.7*	350	218.62	1.6*
Nasal cavities, sinuses	0	0.45	0.0	2	1.01	2.0	2	0.63	3.2	1	0.53	1.9	5	2.61	1.9
Larynx	1	2.39	0.4	13	5.54	2.3*	2	3.48	0.6	5	2.93	1.7	21	14.33	1.5
Trachea, bronchus, lung	38	31.53	1.2	126	73.95	1.7*	80	47.09	1.7*	67	40.25	1.7*	311	192.82	1.6*
Prostate gland	37	22.80	1.6*	62	52.58	1.2	38	34.95	1.1	42	31.93	1.3	179	142.26	1.3*
Testis	1	0.53	1.9	2	1.20	1.7	2	0.73	2.8	0	0.54	0.0	5	2.99	1.7
Kidney, renal pelvis, ureter	16	5.47	2.9*	48	12.61	3.8*	20	8.11	2.5*	13	6.97	1.9	97	33.16	2.9*
Bladder, other urinary	21	14.20	1.5	49	33.11	1.5*	30	21.42	1.4	21	18.93	1.1	121	87.67	1.4*
Melanoma of the skin	1	1.38	0.7	4	3.21	1.2	0	2.02	0.0	1	1.72	0.6	6	8.33	0.7
Eye	1	0.49	2.1	1	1.10	0.9	0	0.68	0.0	0	0.56	0.0	2	2.83	0.7
Brain, central nervous system	1	2.67	0.4	4	6.12	0.7	3	3.75	0.8	1	2.96	0.3	9	15.49	0.6
Thyroid gland	1	0.46	2.2	0	1.06	0.0	0	0.67	0.0	2	0.55	3.6	3	2.75	1.1
Bone	0	0.27	0.0	0	0.61	0.0	1	0.38	2.6	2	0.30	6.8	3	1.56	1.9
Connective tissue	0	0.52	0.0	3	1.14	2.6	0	0.70	0.0	0	0.58	0.0	3	2.94	1.0
Lymphatic, hematopoietic system	7	10.69	0.7	26	24.57	1.1	14	15.80	0.9	16	13.61	1.2	63	64.68	1.0
Non-Hodgkin's lymphoma	1	2.79	0.4	8	6.46	1.2	3	4.14	0.7	7	3.54	2.0	19	16.93	1.1
Hodgkin's disease	0	0.72	0.0	3	1.63	1.8	2	1.01	2.0	2	0.80	2.5	7	4.15	1.7
Multiple myeloma	1	2.04	0.5	4	4.69	0.9	2	3.03	0.7	2	2.62	0.8	9	12.38	0.7
Leukemias	5	5.04	1.0	11	11.54	1.0	6	7.47	0.8	5	6.51	0.8	27	30.56	0.9
Chronic lymphocytic	2	2.78	0.7	6	6.34	0.9	1	4.11	0.2	4	3.60	1.1	13	16.84	0.8
Acute nonlymphocytic	3	1.27	2.4	5	3.01	1.7	3	1.97	1.5	0	1.75	0.0	11	8.00	1.4

+ ICD-7 code = 181.

* P<.05.

BLADDER
FEMALES

TABLE 2E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the bladder or other urinary (including papillomas) among 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	
No. starting interval	4,730			3,147			1,505			774			4,730		
Person-yr in interval	3,851			8,433			5,529			4,769			22,583		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	32	39.21	0.8	109	86.89	1.3*	60	61.59	1.0	59	60.95	1.0	260	248.64	1.0
All excluding site of initial cancer	29	38.03	0.8	101	84.22	1.2	52	59.65	0.9	54	58.92	0.9	236	240.82	1.0
Buccal cavity, pharynx	0	0.54	0.0	2	1.19	1.7	2	0.85	2.3	3	0.86	3.5	7	3.44	2.0
Lip	0	0.08	0.0	1	0.19	5.4	1	0.13	7.4	0	0.14	0.0	2	0.54	3.7
Tongue	0	0.10	0.0	1	0.21	4.8	1	0.15	6.6	0	0.15	0.0	2	0.61	3.3
Salivary gland	0	0.11	0.0	0	0.23	0.0	0	0.15	0.0	1	0.13	7.7	1	0.61	1.6
Gum, other mouth	0	0.16	0.0	0	0.37	0.0	0	0.28	0.0	1	0.31	3.2	1	1.11	0.9
Pharynx	0	0.09	0.0	0	0.20	0.0	0	0.14	0.0	1	0.13	7.7	1	0.56	1.8
Digestive system	5	14.23	0.4*	34	31.19	1.1	20	22.78	0.9	14	23.42	0.6	73	91.62	0.8
Esophagus	0	0.40	0.0	0	0.87	0.0	0	0.65	0.0	0	0.68	0.0	0	2.59	0.0
Stomach	1	3.55	0.3	9	7.34	1.2	5	5.25	1.0	1	5.11	0.2	16	21.26	0.8
Colon	1	4.50	0.2	11	10.14	1.1	8	7.51	1.1	8	7.97	1.0	28	30.11	0.9
Rectum	2	2.45	0.8	4	5.37	0.7	1	3.87	0.3	0	3.86	0.0*	7	15.55	0.5*
Liver, biliary	0	1.28	0.0	5	2.90	1.7	3	2.17	1.4	1	2.33	0.4	9	8.68	1.0
Pancreas	0	1.49	0.0	5	3.40	1.5	3	2.51	1.2	3	2.69	1.1	11	10.09	1.1
Respiratory system	2	2.11	0.9	10	4.82	2.1	3	3.41	0.9	6	3.46	1.7	21	13.80	1.5
Nasal cavities, sinuses	0	0.06	0.0	0	0.13	0.0	0	0.09	0.0	0	0.09	0.0	0	0.37	0.0
Larynx	1	0.08	12.0	0	0.19	0.0	0	0.13	0.0	0	0.12	0.0	1	0.52	1.9
Trachea, bronchus, lung	1	1.79	0.6	10	4.12	2.4*	2	2.92	0.7	5	2.97	1.7	18	11.79	1.5
Female breast	7	7.89	0.9	17	17.56	1.0	8	12.23	0.7	10	11.83	0.8	42	49.52	0.8
Female genital tract	4	6.76	0.6	16	14.97	1.1	7	10.00	0.7	9	8.99	1.0	36	40.73	0.9
Cervix uteri	2	1.95	1.0	7	4.23	1.7	2	2.68	0.7	4	2.19	1.8	15	11.05	1.4
Corpus uteri	1	2.04	0.5	3	4.57	0.7	1	3.06	0.3	0	2.76	0.0	5	12.42	0.4*
Uterus, NOS	1	0.16	6.1	1	0.34	3.0	0	0.24	0.0	0	0.23	0.0	2	0.97	2.1
Ovary, fallopian tubes	0	2.12	0.0	4	4.73	0.8	2	3.22	0.6	4	2.98	1.3	10	13.06	0.8
Kidney, renal pelvis, ureter	8	1.07	7.5*	10	2.40	4.2*	6	1.71	3.5*	7	1.72	4.1*	31	6.89	4.5*
Bladder, other urinary	3	1.18	2.5	8	2.67	3.0*	8	1.94	4.1*	5	2.03	2.5	24	7.82	3.1*
Melanoma of the skin	1	0.50	2.0	1	1.15	0.9	0	0.79	0.0	0	0.76	0.0	2	3.20	0.6
Eye	0	0.11	0.0	0	0.23	0.0	0	0.16	0.0	0	0.15	0.0	0	0.64	0.0
Brain, central nervous system	0	0.69	0.0	2	1.56	1.3	0	1.04	0.0	0	0.95	0.0	2	4.25	0.5
Thyroid gland	0	0.27	0.0	1	0.61	1.6	0	0.44	0.0	1	0.45	2.2	2	1.78	1.1
Bone	0	0.06	0.0	0	0.14	0.0	0	0.09	0.0	0	0.09	0.0	0	0.38	0.0
Connective tissue	0	0.12	0.0	0	0.26	0.0	0	0.18	0.0	1	0.16	6.1	1	0.73	1.4
Lymphatic, hematopoietic system	2	2.15	0.9	8	4.86	1.6	4	3.52	1.1	2	3.61	0.6	16	14.14	1.1
Non-Hodgkin's lymphoma	0	0.65	0.0	3	1.47	2.0	2	1.06	1.9	1	1.10	0.9	6	4.27	1.4
Hodgkin's disease	1	0.14	7.1	0	0.31	0.0	0	0.21	0.0	0	0.20	0.0	1	0.86	1.2
Multiple myeloma	0	0.44	0.0	1	1.00	1.0	1	0.73	1.4	0	0.74	0.0	2	2.91	0.7
Leukemias	1	0.91	1.1	4	2.05	2.0	1	1.49	0.7	1	1.54	0.6	7	5.98	1.2
Chronic lymphocytic	0	0.41	0.0	2	0.92	2.2	1	0.69	1.5	0	0.72	0.0	3	2.74	1.1
Acute nonlymphocytic	1	0.27	3.8	2	0.62	3.2	0	0.45	0.0	0	0.47	0.0	3	1.81	1.7

+ ICD-7 code = 181.

* P<.05.