

KIDNEY
BOTH SEXES

TABLE 1A. -- Characteristics of persons reported to the Connecticut Tumor Registry with an initial cancer of the kidney, renal pelvis, or ureter, 1935-82+

Category	Male	Female	Total
No. with first primary cancer*	3,284	1,831	5,115
No. who developed a second primary cancer	261	113	374
Average age at diagnosis of first cancer, yr	59	59	59
Average yr of diagnosis of first cancer	1966	1966	1966
Person-yr of follow-up	13,336	8,723	22,059
Average follow-up, yr	4.1	4.8	4.3
Percent given radiotherapy for first cancer	21.3	20.0	20.8

+ ICD-O codes = 189.0-189.2.

* 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 1B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the kidney, renal pelvis, or ureter in Connecticut, 1935-82

Microscopically confirmed	No.	Percent+
Both first and second cancers	329	88.0
Only the first cancer	42	11.2
Only the second cancer	2	0.5
Neither first nor second cancer	1	0.3
Total second primary cancers	374	100.0

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

KIDNEY
BOTH SEXES

TABLE 1C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the kidney, renal pelvis, or ureter among males and females in Connecticut, 1935-82+

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	5,115			3,311			1,494			717			5,115		
Person-yr in interval	3,301			8,654			5,228			4,877			22,059		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	64	34.10	1.9*	159	91.59	1.7*	67	57.34	1.2	84	59.78	1.4*	374	242.65	1.5*
All excluding site of initial cancer	61	33.30	1.8*	152	89.47	1.7*	63	56.03	1.1	82	58.49	1.4*	358	237.13	1.5*
Buccal cavity, pharynx	0	1.43	0.0	4	3.75	1.1	2	2.24	0.9	2	2.10	1.0	8	9.51	0.8
Lip	0	0.22	0.0	2	0.56	3.5	1	0.32	3.1	0	0.30	0.0	3	1.40	2.1
Tongue	0	0.29	0.0	0	0.75	0.0	1	0.45	2.2	1	0.41	2.4	2	1.90	1.1
Salivary gland	0	0.08	0.0	0	0.22	0.0	0	0.14	0.0	0	0.15	0.0	0	0.59	0.0
Gum, other mouth	0	0.42	0.0	1	1.10	0.9	0	0.67	0.0	0	0.63	0.0	1	2.81	0.4
Pharynx	0	0.36	0.0	1	0.96	1.0	0	0.58	0.0	1	0.53	1.9	2	2.43	0.8
Digestive system	8	10.66	0.8	25	28.40	0.9	14	17.64	0.8	26	18.53	1.4	73	75.18	1.0
Esophagus	0	0.59	0.0	0	1.55	0.0	0	0.92	0.0	0	0.87	0.0	0	3.93	0.0*
Stomach	2	1.75	1.1	4	4.48	0.9	3	2.67	1.1	4	2.66	1.5	13	11.55	1.1
Colon	3	4.26	0.7	15	11.52	1.3	7	7.30	1.0	8	8.01	1.0	33	31.07	1.1
Rectum	0	2.19	0.0	5	5.84	0.9	4	3.62	1.1	8	3.69	2.2	17	15.33	1.1
Liver, biliary	0	0.59	0.0	0	1.59	0.0	0	0.99	0.0	2	1.06	1.9	2	4.23	0.5
Pancreas	3	1.09	2.8	1	2.92	0.3	0	1.83	0.0	4	1.92	2.1	8	7.76	1.0
Respiratory system	5	5.76	0.9	22	15.49	1.4	13	9.63	1.4	11	9.51	1.2	51	40.36	1.3
Nasal cavities, sinuses	0	0.07	0.0	0	0.18	0.0	0	0.11	0.0	0	0.11	0.0	0	0.47	0.0
Larynx	0	0.63	0.0	3	1.65	1.8	0	1.00	0.0	0	0.90	0.0	3	4.17	0.7
Trachea, bronchus, lung	4	5.01	0.8	19	13.51	1.4	13	8.42	1.5	11	8.41	1.3	47	35.34	1.3
Female breast	3	2.60	1.2	8	7.13	1.1	6	4.74	1.3	6	5.18	1.2	23	19.64	1.2
Female genital tract	3	1.65	1.8	2	4.44	0.5	3	2.90	1.0	2	3.00	0.7	10	11.98	0.8
Cervix uteri	1	0.32	3.2	1	0.82	1.2	1	0.51	2.0	0	0.48	0.0	3	2.12	1.4
Corpus uteri	1	0.68	1.5	1	1.87	0.5	1	1.26	0.8	1	1.33	0.8	4	5.13	0.8
Uterus, NOS	1	0.11	8.9	0	0.27	0.0	1	0.16	6.2	0	0.16	0.0	2	0.70	2.8
Ovary, fallopian tubes	0	0.45	0.0	0	1.22	0.0	0	0.80	0.0	1	0.83	1.2	1	3.30	0.3
Prostate gland	9	4.04	2.2*	13	11.03	1.2	5	6.89	0.7	16	7.58	2.1*	43	29.53	1.5*
Testis	1	0.05	20.6	0	0.12	0.0	0	0.06	0.0	0	0.06	0.0	1	0.30	3.4
Kidney, renal pelvis, ureter	3	0.80	3.7	7	2.12	3.3*	4	1.31	3.1	2	1.29	1.5	16	5.52	2.9*
Bladder, other urinary	24	2.00	12.0*	57	5.40	10.6*	10	3.37	3.0*	8	3.60	2.2	99	14.35	6.9*
Melanoma of the skin	0	0.40	0.0	0	1.10	0.0	1	0.69	1.5	2	0.68	2.9	3	2.88	1.0
Eye	0	0.05	0.0	0	0.14	0.0	0	0.09	0.0	0	0.08	0.0	0	0.37	0.0
Brain, central nervous system	2	0.39	5.1	1	1.04	1.0	0	0.64	0.0	1	0.59	1.7	4	2.67	1.5
Thyroid gland	0	0.14	0.0	1	0.38	2.6	0	0.24	0.0	0	0.24	0.0	1	0.99	1.0
Bone	0	0.05	0.0	2	0.13	15.6*	0	0.08	0.0	1	0.08	12.9	3	0.33	9.0*
Connective tissue	2	0.16	12.3*	1	0.43	2.3	0	0.27	0.0	0	0.27	0.0	3	1.13	2.6
Lymphatic, hematopoietic system	3	2.26	1.3	11	6.12	1.8	7	3.85	1.8	4	4.10	1.0	25	16.32	1.5
Non-Hodgkin's lymphoma	0	0.78	0.0	4	2.12	1.9	4	1.34	3.0	2	1.40	1.4	10	5.63	1.8
Hodgkin's disease	0	0.17	0.0	0	0.44	0.0	0	0.27	0.0	0	0.27	0.0	0	1.14	0.0
Multiple myeloma	2	0.36	5.6	1	0.98	1.0	1	0.63	1.6	1	0.69	1.4	5	2.65	1.9
Leukemias	1	0.95	1.1	6	2.58	2.3	2	1.61	1.2	1	1.74	0.6	10	6.89	1.5
Chronic lymphocytic	0	0.29	0.0	2	0.81	2.5	1	0.51	2.0	1	0.57	1.8	4	2.17	1.8
Acute nonlymphocytic	1	0.29	3.4	2	0.81	2.5	0	0.51	0.0	0	0.57	0.0	3	2.18	1.4

+ ICD-O codes = 189.0-189.2.

* P<.05.

KIDNEY
MALES

TABLE 1D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the kidney, renal pelvis, or ureter among males in Connecticut, 1935-82+

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	3,284			2,105			913			410			3,284		
Person-yr in interval	2,104			5,412			3,106			2,714			13,336		
All second cancers	45	23.95	1.9*	113	63.78	1.8*	49	38.82	1.3	54	38.86	1.4*	261	165.30	1.6*
All excluding site of initial cancer	43	23.32	1.8*	108	62.11	1.7*	48	37.81	1.3	53	37.90	1.4*	252	161.03	1.6*
Buccal cavity, pharynx	0	1.25	0.0	4	3.26	1.2	2	1.91	1.0	2	1.73	1.2	8	8.15	1.0
Lip	0	0.21	0.0	2	0.54	3.7	1	0.30	3.3	0	0.27	0.0	3	1.32	2.3
Tongue	0	0.25	0.0	0	0.65	0.0	1	0.38	2.6	1	0.34	3.0	2	1.62	1.2
Salivary gland	0	0.06	0.0	0	0.16	0.0	0	0.10	0.0	0	0.10	0.0	0	0.42	0.0
Gum, other mouth	0	0.35	0.0	1	0.93	1.1	0	0.55	0.0	0	0.49	0.0	1	2.33	0.4
Pharynx	0	0.32	0.0	1	0.85	1.2	0	0.50	0.0	1	0.45	2.2	2	2.12	0.9
Digestive system	5	7.54	0.7	18	19.87	0.9	12	11.95	1.0	13	11.80	1.1	48	51.12	0.9
Esophagus	0	0.52	0.0	0	1.36	0.0	0	0.79	0.0	0	0.73	0.0	0	3.39	0.0
Stomach	2	1.35	1.5	4	3.43	1.2	2	2.00	1.0	2	1.87	1.1	10	8.65	1.2
Colon	1	2.79	0.4	10	7.46	1.3	6	4.57	1.3	5	4.74	1.1	22	19.55	1.1
Rectum	0	1.60	0.0	3	4.21	0.7	4	2.53	1.6	4	2.43	1.6	11	10.76	1.0
Liver, biliary	0	0.38	0.0	0	1.02	0.0	0	0.62	0.0	0	0.62	0.0	0	2.63	0.0
Pancreas	2	0.77	2.6	1	2.05	0.5	0	1.24	0.0	2	1.22	1.6	5	5.28	0.9
Respiratory system	5	5.12	1.0	16	13.68	1.2	12	8.39	1.4	8	8.09	1.0	41	35.26	1.2
Nasal cavities, sinuses	0	0.05	0.0	0	0.14	0.0	0	0.08	0.0	0	0.08	0.0	0	0.35	0.0
Larynx	0	0.59	0.0	3	1.55	1.9	0	0.93	0.0	0	0.82	0.0	3	3.89	0.8
Trachea, bronchus, lung	4	4.43	0.9	13	11.88	1.1	12	7.30	1.6	8	7.12	1.1	37	30.71	1.2
Prostate gland	9	4.04	2.2*	13	11.03	1.2	5	6.89	0.7	16	7.58	2.1*	43	29.53	1.5*
Testis	1	0.05	20.6	0	0.12	0.0	0	0.06	0.0	0	0.06	0.0	1	0.30	3.4
Kidney, renal pelvis, ureter	2	0.63	3.2	5	1.67	3.0	1	1.01	1.0	1	0.96	1.0	9	4.27	2.1
Bladder, other urinary	17	1.72	9.9*	42	4.61	9.1*	9	2.84	3.2*	6	2.94	2.0	74	12.10	6.1*
Melanoma of the skin	0	0.29	0.0	0	0.78	0.0	1	0.48	2.1	1	0.45	2.2	2	2.00	1.0
Eye	0	0.04	0.0	0	0.10	0.0	0	0.06	0.0	0	0.05	0.0	0	0.24	0.0
Brain, central nervous system	2	0.29	7.0	0	0.75	0.0	0	0.45	0.0	0	0.39	0.0	2	1.88	1.1
Thyroid gland	0	0.07	0.0	1	0.19	5.4	0	0.11	0.0	0	0.10	0.0	1	0.46	2.2
Bone	0	0.03	0.0	2	0.09	22.1*	0	0.05	0.0	0	0.05	0.0	2	0.23	8.8
Connective tissue	2	0.12	16.7*	0	0.32	0.0	0	0.19	0.0	0	0.19	0.0	2	0.81	2.5
Lymphatic, hematopoietic system	1	1.60	0.6	8	4.27	1.9	5	2.60	1.9	4	2.63	1.5	18	11.09	1.6
Non-Hodgkin's lymphoma	0	0.53	0.0	3	1.42	2.1	3	0.86	3.5	2	0.85	2.4	8	3.66	2.2
Hodgkin's disease	0	0.12	0.0	0	0.32	0.0	0	0.18	0.0	0	0.17	0.0	0	0.79	0.0
Multiple myeloma	0	0.24	0.0	1	0.65	1.5	1	0.40	2.5	1	0.42	2.4	3	1.71	1.8
Leukemias	1	0.70	1.4	4	1.88	2.1	1	1.15	0.9	1	1.19	0.8	7	4.92	1.4
Chronic lymphocytic	0	0.22	0.0	2	0.61	3.3	1	0.38	2.7	1	0.40	2.5	4	1.61	2.5
Acute nonlymphocytic	1	0.21	4.8	1	0.57	1.8	0	0.36	0.0	0	0.38	0.0	2	1.51	1.3

+ ICD-O codes = 189.0-189.2.

* P<.05.

KIDNEY
FEMALES

TABLE 1E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the kidney, renal pelvis, or ureter among females in Connecticut, 1935-82+

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	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
No. starting interval	1,831			1,206			581			307			1,831		
Person-yr in interval	1,197			3,242			2,121			2,163			8,723		
All second cancers	19	10.15	1.9*	46	27.81	1.7*	18	18.52	1.0	30	20.91	1.4	113	77.35	1.5*
All excluding site of initial cancer	18	9.98	1.8*	44	27.36	1.6*	15	18.22	0.8	29	20.57	1.4	106	76.10	1.4*
Buccal cavity, pharynx	0	0.18	0.0	0	0.49	0.0	0	0.33	0.0	0	0.37	0.0	0	1.36	0.0
Lip	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
Tongue	0	0.04	0.0	0	0.10	0.0	0	0.07	0.0	0	0.07	0.0	0	0.28	0.0
Salivary gland	0	0.02	0.0	0	0.06	0.0	0	0.04	0.0	0	0.05	0.0	0	0.17	0.0
Gum, other mouth	0	0.06	0.0	0	0.17	0.0	0	0.12	0.0	0	0.13	0.0	0	0.48	0.0
Pharynx	0	0.04	0.0	0	0.11	0.0	0	0.07	0.0	0	0.08	0.0	0	0.30	0.0
Digestive system	3	3.12	1.0	7	8.53	0.8	2	5.69	0.4	13	6.73	1.9*	25	24.06	1.0
Esophagus	0	0.07	0.0	0	0.19	0.0	0	0.13	0.0	0	0.15	0.0	0	0.54	0.0
Stomach	0	0.40	0.0	0	1.04	0.0	1	0.67	1.5	2	0.79	2.5	3	2.91	1.0
Colon	2	1.47	1.4	5	4.06	1.2	1	2.73	0.4	3	3.27	0.9	11	11.52	1.0
Rectum	0	0.60	0.0	2	1.63	1.2	0	1.09	0.0	4	1.26	3.2	6	4.56	1.3
Liver, biliary	0	0.21	0.0	0	0.57	0.0	0	0.37	0.0	2	0.44	4.5	2	1.59	1.3
Pancreas	1	0.32	3.2	0	0.87	0.0	0	0.59	0.0	2	0.70	2.8	3	2.48	1.2
Respiratory system	0	0.64	0.0	6	1.81	3.3*	1	1.24	0.8	3	1.42	2.1	10	5.10	2.0
Nasal cavities, sinuses	0	0.02	0.0	0	0.05	0.0	0	0.03	0.0	0	0.03	0.0	0	0.13	0.0
Larynx	0	0.04	0.0	0	0.10	0.0	0	0.07	0.0	0	0.08	0.0	0	0.28	0.0
Trachea, bronchus, lung	0	0.58	0.0	6	1.64	3.7*	1	1.12	0.9	3	1.29	2.3	10	4.63	2.2*
Female breast	3	2.60	1.2	8	7.13	1.1	6	4.74	1.3	6	5.18	1.2	23	19.64	1.2
Female genital tract	3	1.65	1.8	2	4.44	0.5	3	2.90	1.0	2	3.00	0.7	10	11.98	0.8
Cervix uteri	1	0.32	3.2	1	0.82	1.2	1	0.51	2.0	0	0.48	0.0	3	2.12	1.4
Corpus uteri	1	0.68	1.5	1	1.87	0.5	1	1.26	0.8	1	1.33	0.8	4	5.13	0.8
Uterus, NOS	1	0.11	8.9	0	0.27	0.0	1	0.16	6.2	0	0.16	0.0	2	0.70	2.8
Ovary, fallopian tubes	0	0.45	0.0	0	1.22	0.0	0	0.80	0.0	1	0.83	1.2	1	3.30	0.3
Kidney, renal pelvis, ureter	1	0.17	6.0	2	0.45	4.4	3	0.30	10.0*	1	0.34	3.0	7	1.25	5.6*
Bladder, other urinary	7	0.28	24.8*	15	0.79	19.1*	1	0.53	1.9	2	0.65	3.1	25	2.25	11.1*
Melanoma of the skin	0	0.11	0.0	0	0.32	0.0	0	0.21	0.0	1	0.23	4.3	1	0.88	1.1
Eye	0	0.02	0.0	0	0.05	0.0	0	0.03	0.0	0	0.04	0.0	0	0.13	0.0
Brain, central nervous system	0	0.11	0.0	1	0.29	3.4	0	0.19	0.0	1	0.20	5.1	2	0.79	2.5
Thyroid gland	0	0.07	0.0	0	0.19	0.0	0	0.13	0.0	0	0.14	0.0	0	0.53	0.0
Bone	0	0.01	0.0	0	0.04	0.0	0	0.02	0.0	1	0.03	36.0	1	0.10	9.5
Connective tissue	0	0.04	0.0	1	0.12	8.5	0	0.08	0.0	0	0.09	0.0	1	0.32	3.1
Lymphatic, hematopoietic system	2	0.66	3.0	3	1.85	1.6	2	1.25	1.6	0	1.47	0.0	7	5.23	1.3
Non-Hodgkin's lymphoma	0	0.25	0.0	1	0.70	1.4	1	0.47	2.1	0	0.55	0.0	2	1.97	1.0
Hodgkin's disease	0	0.05	0.0	0	0.12	0.0	0	0.08	0.0	0	0.09	0.0	0	0.35	0.0
Multiple myeloma	2	0.12	17.3*	0	0.33	0.0	0	0.23	0.0	0	0.27	0.0	2	0.94	2.1
Leukemias	0	0.25	0.0	2	0.70	2.9	1	0.46	2.2	0	0.56	0.0	3	1.96	1.5
Chronic lymphocytic	0	0.07	0.0	0	0.20	0.0	0	0.13	0.0	0	0.17	0.0	0	0.57	0.0
Acute nonlymphocytic	0	0.08	0.0	1	0.24	4.3	0	0.16	0.0	0	0.19	0.0	1	0.67	1.5

+ ICD-O codes = 189.0-189.2.

* P<.05.