

BRAIN
BOTH SEXES

TABLE 3A. -- Characteristics of persons reported to the Connecticut Tumor Registry with an initial cancer of the brain or central nervous system, 1935-82+

Category	Male	Female	Total
No. with first primary cancer*	2,171	1,573	3,744
No. who developed a second primary cancer	26	22	48
Average age at diagnosis of first cancer, yr	45	45	45
Average yr of diagnosis of first cancer	1967	1968	1967
Person-yr of follow-up	5,455	4,552	10,008
Average follow-up, yr	2.5	2.9	2.7
Percent given radiotherapy for first cancer	64.1	60.9	62.8

+ ICD-O codes = 191-192.

* 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 3B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the brain or central nervous system in Connecticut, 1935-82

Microscopically confirmed	No.	Percent+
Both first and second cancers	39	81.3
Only the first cancer	4	8.3
Only the second cancer	3	6.3
Neither first nor second cancer	2	4.2
Total second primary cancers	48	100.0

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

BRAIN
BOTH SEXES

TABLE 3C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the brain or central nervous system 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	
No. starting interval	3,744			1,648			565			307			3,744		
Person-yr in interval	1,997			3,463			2,065			2,483			10,008		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	16	9.05	1.8*	13	9.00	1.4	7	5.20	1.3	12	7.02	1.7	48	30.25	1.6*
All excluding site of initial cancer	16	8.89	1.8*	13	8.81	1.5	6	5.10	1.2	11	6.89	1.6	46	29.66	1.6*
Buccal cavity, pharynx	0	0.39	0.0	0	0.37	0.0	0	0.19	0.0	1	0.27	3.8	1	1.21	0.8
Lip	0	0.05	0.0	0	0.04	0.0	0	0.02	0.0	0	0.03	0.0	0	0.14	0.0
Tongue	0	0.08	0.0	0	0.08	0.0	0	0.04	0.0	0	0.05	0.0	0	0.25	0.0
Salivary gland	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	1	0.02	47.1	1	0.09	11.4
Gum, other mouth	0	0.12	0.0	0	0.11	0.0	0	0.06	0.0	0	0.08	0.0	0	0.37	0.0
Pharynx	0	0.11	0.0	0	0.10	0.0	0	0.05	0.0	0	0.07	0.0	0	0.33	0.0
Digestive system	2	2.42	0.8	3	2.21	1.4	1	1.28	0.8	0	1.73	0.0	6	7.64	0.8
Esophagus	0	0.14	0.0	0	0.13	0.0	0	0.07	0.0	0	0.09	0.0	0	0.42	0.0
Stomach	1	0.34	2.9	1	0.31	3.2	0	0.17	0.0	0	0.23	0.0	2	1.06	1.9
Colon	0	0.97	0.0	2	0.89	2.2	1	0.53	1.9	0	0.72	0.0	3	3.12	1.0
Rectum	0	0.53	0.0	0	0.48	0.0	0	0.27	0.0	0	0.37	0.0	0	1.66	0.0
Liver, biliary	0	0.13	0.0	0	0.12	0.0	0	0.07	0.0	0	0.09	0.0	0	0.41	0.0
Pancreas	0	0.26	0.0	0	0.23	0.0	0	0.13	0.0	0	0.18	0.0	0	0.80	0.0
Respiratory system	2	1.60	1.2	1	1.40	0.7	1	0.73	1.4	2	1.07	1.9	6	4.80	1.2
Nasal cavities, sinuses	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.06	0.0
Larynx	0	0.18	0.0	0	0.16	0.0	0	0.08	0.0	1	0.12	8.6	1	0.54	1.9
Trachea, bronchus, lung	2	1.39	1.4	1	1.21	0.8	1	0.64	1.6	1	0.92	1.1	5	4.15	1.2
Female breast	0	1.05	0.0	3	1.34	2.2	1	0.87	1.2	1	1.01	1.0	5	4.27	1.2
Female genital tract	2	0.67	3.0	1	0.86	1.2	0	0.54	0.0	2	0.63	3.2	5	2.69	1.9
Cervix uteri	0	0.14	0.0	0	0.21	0.0	0	0.13	0.0	0	0.14	0.0	0	0.62	0.0
Corpus uteri	1	0.28	3.5	0	0.34	0.0	0	0.22	0.0	1	0.26	3.8	2	1.10	1.8
Uterus, NOS	0	0.03	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.11	0.0
Ovary, fallopian tubes	1	0.18	5.4	1	0.24	4.2	0	0.15	0.0	0	0.18	0.0	2	0.75	2.7
Prostate gland	3	0.68	4.4	1	0.49	2.0	0	0.26	0.0	1	0.44	2.3	5	1.87	2.7
Testis	0	0.04	0.0	0	0.06	0.0	0	0.03	0.0	0	0.07	0.0	0	0.20	0.0
Kidney, renal pelvis, ureter	0	0.22	0.0	0	0.21	0.0	0	0.11	0.0	0	0.15	0.0	0	0.70	0.0
Bladder, other urinary	0	0.46	0.0	0	0.39	0.0	0	0.22	0.0	0	0.32	0.0	0	1.39	0.0
Melanoma of the skin	1	0.17	6.0	1	0.20	5.0	2	0.11	18.0*	0	0.17	0.0	4	0.65	6.1*
Eye	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.06	0.0
Brain, central nervous system	0	0.16	0.0	0	0.19	0.0	1	0.10	9.6	1	0.13	7.6	2	0.59	3.4
Thyroid gland	0	0.06	0.0	1	0.09	10.9	0	0.06	0.0	1	0.08	11.8	2	0.29	6.8
Bone	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.09	0.0
Connective tissue	0	0.05	0.0	0	0.06	0.0	0	0.04	0.0	0	0.05	0.0	0	0.20	0.0
Lymphatic, hematopoietic system	3	0.65	4.6	2	0.71	2.8	1	0.42	2.4	1	0.58	1.7	7	2.35	3.0*
Non-Hodgkin's lymphoma	0	0.24	0.0	0	0.25	0.0	0	0.14	0.0	0	0.20	0.0	0	0.83	0.0
Hodgkin's disease	1	0.08	13.2	0	0.11	0.0	0	0.07	0.0	0	0.12	0.0	1	0.38	2.6
Multiple myeloma	1	0.09	11.0	0	0.08	0.0	0	0.05	0.0	1	0.07	14.4	2	0.29	6.8
Leukemias	1	0.24	4.1	2	0.26	7.7	1	0.15	6.7	0	0.20	0.0	4	0.85	4.7*
Chronic lymphocytic	0	0.07	0.0	0	0.06	0.0	0	0.03	0.0	0	0.05	0.0	0	0.20	0.0
Acute nonlymphocytic	0	0.08	0.0	2	0.09	22.7*	1	0.05	18.7	0	0.07	0.0	3	0.30	10.1*

+ ICD-O codes = 191-192.

* P<.05.

BRAIN
MALES

TABLE 3D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the brain or central nervous system among males 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					
	No. starting interval	2,171		927		305		165		2,171		5,455			
Person-yr in interval	1,154		1,884		1,080		1,338								
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	11	5.46	2.0*	4	4.65	0.9	5	2.33	2.1	6	3.58	1.7	26	16.02	1.6*
All excluding site of initial cancer	11	5.35	2.1*	4	4.53	0.9	4	2.27	1.8	6	3.50	1.7	25	15.66	1.6*
Buccal cavity, pharynx	0	0.32	0.0	0	0.29	0.0	0	0.14	0.0	0	0.20	0.0	0	0.94	0.0
Lip	0	0.04	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.12	0.0
Tongue	0	0.06	0.0	0	0.06	0.0	0	0.03	0.0	0	0.04	0.0	0	0.19	0.0
Salivary gland	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Gum, other mouth	0	0.09	0.0	0	0.08	0.0	0	0.04	0.0	0	0.06	0.0	0	0.28	0.0
Pharynx	0	0.09	0.0	0	0.08	0.0	0	0.04	0.0	0	0.05	0.0	0	0.26	0.0
Digestive system	2	1.57	1.3	1	1.30	0.8	0	0.64	0.0	0	0.96	0.0	3	4.46	0.7
Esophagus	0	0.12	0.0	0	0.10	0.0	0	0.05	0.0	0	0.07	0.0	0	0.34	0.0
Stomach	1	0.25	4.0	0	0.22	0.0	0	0.11	0.0	0	0.15	0.0	1	0.72	1.4
Colon	0	0.57	0.0	1	0.46	2.2	0	0.23	0.0	0	0.36	0.0	1	1.62	0.6
Rectum	0	0.35	0.0	0	0.29	0.0	0	0.14	0.0	0	0.21	0.0	0	0.99	0.0
Liver, biliary	0	0.08	0.0	0	0.07	0.0	0	0.03	0.0	0	0.05	0.0	0	0.23	0.0
Pancreas	0	0.17	0.0	0	0.14	0.0	0	0.07	0.0	0	0.10	0.0	0	0.48	0.0
Respiratory system	2	1.33	1.5	1	1.10	0.9	1	0.54	1.9	1	0.82	1.2	5	3.79	1.3
Nasal cavities, sinuses	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.04	0.0
Larynx	0	0.16	0.0	0	0.14	0.0	0	0.07	0.0	0	0.10	0.0	0	0.47	0.0
Trachea, bronchus, lung	2	1.14	1.8	1	0.94	1.1	1	0.46	2.2	1	0.70	1.4	5	3.24	1.5
Prostate gland	3	0.68	4.4	1	0.49	2.0	0	0.26	0.0	1	0.44	2.3	5	1.87	2.7
Testis	0	0.04	0.0	0	0.06	0.0	0	0.03	0.0	0	0.07	0.0	0	0.20	0.0
Kidney, renal pelvis, ureter	0	0.17	0.0	0	0.15	0.0	0	0.07	0.0	0	0.10	0.0	0	0.49	0.0
Bladder, other urinary	0	0.38	0.0	0	0.31	0.0	0	0.15	0.0	0	0.24	0.0	0	1.08	0.0
Melanoma of the skin	0	0.11	0.0	0	0.11	0.0	2	0.05	36.6*	0	0.09	0.0	2	0.37	5.4
Eye	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.03	0.0
Brain, central nervous system	0	0.11	0.0	0	0.12	0.0	1	0.06	16.9	0	0.08	0.0	1	0.36	2.7
Thyroid gland	0	0.03	0.0	1	0.03	33.7	0	0.02	0.0	1	0.03	37.7	2	0.10	20.5*
Bone	0	0.01	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Connective tissue	0	0.04	0.0	0	0.04	0.0	0	0.02	0.0	0	0.03	0.0	0	0.12	0.0
Lymphatic, hematopoietic system	2	0.42	4.7	0	0.42	0.0	1	0.22	4.5	1	0.34	3.0	4	1.40	2.8
Non-Hodgkin's lymphoma	0	0.15	0.0	0	0.15	0.0	0	0.07	0.0	0	0.11	0.0	0	0.48	0.0
Hodgkin's disease	0	0.05	0.0	0	0.07	0.0	0	0.05	0.0	0	0.07	0.0	0	0.24	0.0
Multiple myeloma	1	0.06	18.0	0	0.05	0.0	0	0.02	0.0	1	0.04	27.7	2	0.16	12.5*
Leukemias	1	0.16	6.1	0	0.16	0.0	1	0.08	12.0	0	0.12	0.0	2	0.53	3.8
Chronic lymphocytic	0	0.05	0.0	0	0.04	0.0	0	0.02	0.0	0	0.03	0.0	0	0.13	0.0
Acute nonlymphocytic	0	0.05	0.0	0	0.05	0.0	1	0.03	36.0	0	0.04	0.0	1	0.17	5.8

+ ICD-O codes = 191-192.

* P<.05.

BRAIN
FEMALES

TABLE 3E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the brain or central nervous system among females 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		
	No. starting interval	1,573		721			260			142			1,573		
Person-yr in interval	843		1,580			985			1,145			4,552			
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	5	3.59	1.4	9	4.34	2.1	2	2.87	0.7	6	3.44	1.7	22	14.23	1.5
All excluding site of initial cancer	5	3.54	1.4	9	4.27	2.1	2	2.83	0.7	5	3.39	1.5	21	14.01	1.5
Buccal cavity, pharynx	0	0.07	0.0	0	0.08	0.0	0	0.05	0.0	1	0.07	15.2	1	0.27	3.7
Lip	0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	0.01	0.0
Tongue	0	0.01	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Salivary gland	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	1	0.01	107.0*	1	0.04	27.1
Gum, other mouth	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.09	0.0
Pharynx	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	0	0.02	0.0	0	0.07	0.0
Digestive system	0	0.85	0.0	2	0.91	2.2	1	0.64	1.6	0	0.77	0.0	3	3.18	0.9
Esophagus	0	0.02	0.0	0	0.02	0.0	0	0.02	0.0	0	0.02	0.0	0	0.08	0.0
Stomach	0	0.09	0.0	1	0.10	10.1	0	0.07	0.0	0	0.08	0.0	1	0.34	3.0
Colon	0	0.40	0.0	1	0.43	2.3	1	0.31	3.3	0	0.36	0.0	2	1.50	1.3
Rectum	0	0.18	0.0	0	0.19	0.0	0	0.13	0.0	0	0.16	0.0	0	0.67	0.0
Liver, biliary	0	0.05	0.0	0	0.05	0.0	0	0.04	0.0	0	0.05	0.0	0	0.19	0.0
Pancreas	0	0.09	0.0	0	0.09	0.0	0	0.07	0.0	0	0.08	0.0	0	0.32	0.0
Respiratory system	0	0.27	0.0	0	0.30	0.0	0	0.19	0.0	1	0.25	4.1	1	1.01	1.0
Nasal cavities, sinuses	0	0.01	0.0	0	0.01	0.0	0	0.00	0.0	0	0.01	0.0	0	0.02	0.0
Larynx	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	1	0.02	61.7	1	0.07	15.1
Trachea, bronchus, lung	0	0.24	0.0	0	0.27	0.0	0	0.17	0.0	0	0.22	0.0	0	0.91	0.0
Female breast	0	1.05	0.0	3	1.34	2.2	1	0.87	1.2	1	1.01	1.0	5	4.27	1.2
Female genital tract	2	0.67	3.0	1	0.86	1.2	0	0.54	0.0	2	0.63	3.2	5	2.69	1.9
Cervix uteri	0	0.14	0.0	0	0.21	0.0	0	0.13	0.0	0	0.14	0.0	0	0.62	0.0
Corpus uteri	1	0.28	3.5	0	0.34	0.0	0	0.22	0.0	1	0.26	3.8	2	1.10	1.8
Uterus, NOS	0	0.03	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.11	0.0
Ovary, fallopian tubes	1	0.18	5.4	1	0.24	4.2	0	0.15	0.0	0	0.18	0.0	2	0.75	2.7
Kidney, renal pelvis, ureter	0	0.06	0.0	0	0.06	0.0	0	0.04	0.0	0	0.05	0.0	0	0.21	0.0
Bladder, other urinary	0	0.08	0.0	0	0.09	0.0	0	0.06	0.0	0	0.08	0.0	0	0.31	0.0
Melanoma of the skin	1	0.06	16.7	1	0.09	11.4	0	0.06	0.0	0	0.08	0.0	2	0.28	7.1
Eye	0	0.01	0.0	0	0.01	0.0	0	0.00	0.0	0	0.01	0.0	0	0.02	0.0
Brain, central nervous system	0	0.05	0.0	0	0.07	0.0	0	0.04	0.0	1	0.05	19.3	1	0.22	4.5
Thyroid gland	0	0.04	0.0	0	0.06	0.0	0	0.04	0.0	0	0.06	0.0	0	0.20	0.0
Bone	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.03	0.0
Connective tissue	0	0.02	0.0	0	0.03	0.0	0	0.02	0.0	0	0.02	0.0	0	0.08	0.0
Lymphatic, hematopoietic system	1	0.23	4.4	2	0.29	7.0	0	0.19	0.0	0	0.24	0.0	3	0.95	3.2
Non-Hodgkin's lymphoma	0	0.09	0.0	0	0.10	0.0	0	0.07	0.0	0	0.09	0.0	0	0.35	0.0
Hodgkin's disease	1	0.03	39.9	0	0.04	0.0	0	0.03	0.0	0	0.04	0.0	1	0.14	7.0
Multiple myeloma	0	0.04	0.0	0	0.04	0.0	0	0.03	0.0	0	0.03	0.0	0	0.13	0.0
Leukemias	0	0.08	0.0	2	0.10	20.2*	0	0.07	0.0	0	0.08	0.0	2	0.32	6.2
Chronic lymphocytic	0	0.02	0.0	0	0.02	0.0	0	0.01	0.0	0	0.02	0.0	0	0.07	0.0
Acute nonlymphocytic	0	0.03	0.0	2	0.04	53.2*	0	0.03	0.0	0	0.03	0.0	2	0.13	16.0*

+ ICD-O codes = 191-192.

* P<.05.