

Table 16: Primary (Malignant and Non-Malignant) Brain and Central Nervous System Tumor Age-Specific Incidence Rates^a by Major Histology Groupings, Histology and Age at Diagnosis; CBTRUS Statistical Report: NPCR and SEER, 2004-2006

Histology	Age at Diagnosis								Age at Diagnosis									
	0-14		0-19		20-34		35-44		45-54		55-64		65-74		75-84		85+	
	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.	Rate	95% C.I.
Tumors of Neuroepithelial Tissue	3.54	(3.45 -3.63)	3.32	(3.25 -3.40)	3.10	(3.02 -3.18)	4.40	(4.28 -4.52)	6.91	(6.76 -7.06)	11.87	(11.64-12.11)	17.51	(17.15-17.88)	19.37	(18.92-19.83)	11.44	(10.89-12.02)
Pilocytic astrocytoma	0.87	(0.83 -0.92)	0.80	(0.77 -0.84)	0.25	(0.22 -0.27)	0.12	(0.10 -0.14)	0.09	(0.07 -0.10)	0.07	(0.06 -0.10)	0.06	(0.04 -0.09)	0.05	(0.03 -0.08)	-	-
Protoplasmic & fibrillary astrocytoma	0.05	(0.04 -0.06)	0.04	(0.04 -0.05)	0.09	(0.08 -0.11)	0.11	(0.10 -0.14)	0.11	(0.09 -0.13)	0.15	(0.12 -0.18)	0.23	(0.19 -0.28)	0.19	(0.15 -0.25)	-	-
Anaplastic astrocytoma	0.07	(0.06 -0.08)	0.07	(0.06 -0.08)	0.29	(0.26 -0.31)	0.43	(0.39 -0.46)	0.51	(0.47 -0.55)	0.75	(0.69 -0.81)	1.05	(0.96 -1.14)	1.03	(0.93 -1.14)	0.39	(0.29 -0.51)
Unique astrocytoma variants	0.09	(0.08 -0.11)	0.10	(0.08 -0.11)	0.08	(0.07 -0.10)	0.08	(0.06 -0.09)	0.10	(0.08 -0.12)	0.13	(0.10 -0.15)	0.10	(0.07 -0.13)	0.06	(0.04 -0.09)	-	-
Astrocytoma, NOS	0.22	(0.20 -0.24)	0.22	(0.20 -0.24)	0.35	(0.32 -0.38)	0.45	(0.42 -0.49)	0.47	(0.43 -0.51)	0.61	(0.56 -0.67)	0.94	(0.86 -1.02)	1.12	(1.01 -1.23)	0.62	(0.50 -0.77)
Glioblastoma	0.11	(0.10 -0.13)	0.13	(0.12 -0.15)	0.40	(0.37 -0.43)	1.18	(1.12 -1.25)	3.73	(3.62 -3.84)	8.16	(7.97 -8.36)	13.10	(12.79-13.41)	14.49	(14.10-14.88)	8.40	(7.93 -8.89)
Oligodendroglioma	0.05	(0.04 -0.06)	0.06	(0.05 -0.08)	0.32	(0.29 -0.34)	0.51	(0.47 -0.55)	0.41	(0.37 -0.45)	0.33	(0.29 -0.37)	0.26	(0.22 -0.30)	0.18	(0.14 -0.23)	-	-
Anaplastic oligodendroglioma	0.01	(0.01 -0.02)	0.02	(0.01 -0.02)	0.09	(0.08 -0.11)	0.19	(0.16 -0.21)	0.19	(0.17 -0.22)	0.23	(0.20 -0.27)	0.22	(0.18 -0.27)	0.18	(0.14 -0.23)	-	-
Ependymoma/anaplastic ependymoma	0.27	(0.25 -0.30)	0.25	(0.23 -0.27)	0.19	(0.17 -0.22)	0.26	(0.24 -0.29)	0.31	(0.28 -0.34)	0.36	(0.32 -0.40)	0.31	(0.27 -0.36)	0.20	(0.15 -0.25)	-	-
Ependymoma variants	0.02	(0.02 -0.03)	0.03	(0.03 -0.04)	0.12	(0.11 -0.14)	0.14	(0.12 -0.16)	0.14	(0.12 -0.16)	0.12	(0.10 -0.15)	0.10	(0.07 -0.13)	0.07	(0.05 -0.10)	-	-
Mixed glioma	0.02	(0.02 -0.03)	0.03	(0.03 -0.04)	0.24	(0.22 -0.27)	0.33	(0.30 -0.36)	0.25	(0.22 -0.28)	0.26	(0.23 -0.30)	0.20	(0.17 -0.25)	0.14	(0.10 -0.18)	-	-
Glioma malignant, NOS	0.63	(0.59 -0.67)	0.53	(0.50 -0.56)	0.21	(0.19 -0.23)	0.22	(0.20 -0.25)	0.28	(0.25 -0.31)	0.38	(0.34 -0.43)	0.65	(0.58 -0.72)	1.31	(1.19 -1.43)	1.49	(1.30 -1.71)
Choroid plexus	0.10	(0.09 -0.12)	0.09	(0.08 -0.10)	0.03	(0.02 -0.04)	0.03	(0.02 -0.04)	0.02	(0.02 -0.03)	0.02	(0.01 -0.03)	-	-	-	-	-	-
Neuroepithelial	0.01	(0.01 -0.02)	0.01	(0.01 -0.02)	-	-	0.02	(0.01 -0.03)	0.03	(0.02 -0.04)	0.03	(0.02 -0.04)	0.05	(0.03 -0.07)	0.07	(0.04 -0.10)	-	-
Non-malignant and malignant neuronal/glia	0.37	(0.34 -0.40)	0.40	(0.37 -0.42)	0.26	(0.24 -0.29)	0.25	(0.22 -0.28)	0.21	(0.18 -0.23)	0.20	(0.17 -0.24)	0.18	(0.14 -0.22)	0.21	(0.16 -0.26)	-	-
Pineal parenchymal	0.04	(0.03 -0.05)	0.04	(0.03 -0.05)	0.03	(0.03 -0.04)	0.03	(0.02 -0.04)	0.03	(0.02 -0.05)	0.03	(0.02 -0.05)	0.03	(0.02 -0.05)	-	-	-	-
Embryonal/primitive/medulloblastoma	0.59	(0.56 -0.63)	0.49	(0.47 -0.52)	0.14	(0.12 -0.16)	0.07	(0.06 -0.09)	0.05	(0.04 -0.06)	0.04	(0.02 -0.05)	0.03	(0.02 -0.05)	-	-	-	-
Tumors of Cranial and Spinal Nerves	0.21	(0.19 -0.24)	0.25	(0.23 -0.27)	0.77	(0.73 -0.81)	1.68	(1.61 -1.76)	2.91	(2.81 -3.01)	3.76	(3.63 -3.89)	3.74	(3.57 -3.91)	2.81	(2.64 -2.99)	1.30	(1.12 -1.50)
Nerve sheath, non-malignant and malignant	0.21	(0.19 -0.24)	0.25	(0.23 -0.27)	0.77	(0.73 -0.81)	1.68	(1.61 -1.76)	2.91	(2.81 -3.01)	3.76	(3.63 -3.89)	3.74	(3.57 -3.91)	2.81	(2.64 -2.99)	1.30	(1.12 -1.50)
Tumors of Meninges	0.15	(0.13 -0.17)	0.20	(0.18 -0.22)	1.31	(1.25 -1.37)	4.03	(3.92 -4.14)	7.73	(7.57 -7.89)	12.88	(12.64- 3.12)	21.68	(21.29-22.09)	30.58	(30.02-31.15)	37.09	(36.09-38.11)
Meningioma	0.09	(0.08 -0.11)	0.12	(0.11 -0.14)	1.10	(1.05 -1.15)	3.74	(3.64 -3.85)	7.39	(7.24 -7.55)	12.48	(12.24-12.72)	21.27	(20.88-21.67)	30.25	(29.69-30.82)	36.90	(35.90-37.91)
Other mesenchymal, non-malignant and malignant	0.05	(0.04 -0.06)	0.05	(0.04 -0.06)	0.05	(0.04 -0.07)	0.09	(0.07 -0.11)	0.09	(0.08 -0.11)	0.12	(0.09 -0.14)	0.14	(0.11 -0.17)	0.10	(0.07 -0.13)	-	-
Hemangioblastoma	0.01	(0.01 -0.02)	0.03	(0.02 -0.04)	0.16	(0.14 -0.18)	0.20	(0.17 -0.22)	0.24	(0.22 -0.27)	0.28	(0.25 -0.32)	0.28	(0.23 -0.33)	0.24	(0.19 -0.29)	-	-
Lymphomas and Hemopoietic Neoplasms	0.02	(0.01 -0.03)	0.02	(0.02 -0.03)	0.13	(0.11 -0.14)	0.28	(0.25 -0.31)	0.49	(0.46 -0.54)	0.96	(0.89 -1.03)	1.81	(1.69 -1.93)	2.17	(2.02 -2.33)	0.95	(0.79 -1.12)
Lymphoma	0.02	(0.01 -0.03)	0.02	(0.02 -0.03)	0.13	(0.11 -0.14)	0.28	(0.25 -0.31)	0.49	(0.46 -0.54)	0.96	(0.89 -1.03)	1.81	(1.69 -1.93)	2.17	(2.02 -2.33)	0.95	(0.79 -1.12)
Germ Cell Tumors and Cysts	0.16	(0.14 -0.18)	0.18	(0.17 -0.20)	0.09	(0.07 -0.10)	0.02	(0.02 -0.03)	0.02	(0.01 -0.03)	-	-	-	-	-	-	-	-
Germ cell tumors, cysts and heterotopias	0.16	(0.14 -0.18)	0.18	(0.17 -0.20)	0.09	(0.07 -0.10)	0.02	(0.02 -0.03)	0.02	(0.01 -0.03)	-	-	-	-	-	-	-	-
Tumors of Sellar Region	0.30	(0.28 -0.33)	0.53	(0.50 -0.56)	2.11	(2.04 -2.18)	2.84	(2.74 -2.93)	3.42	(3.32 -3.53)	4.20	(4.06 -4.34)	5.82	(5.62 -6.04)	5.33	(5.10 -5.58)	3.07	(2.78 -3.37)
Pituitary	0.14	(0.13 -0.16)	0.37	(0.35 -0.40)	2.01	(1.95 -2.08)	2.69	(2.60 -2.78)	3.27	(3.17 -3.37)	4.03	(3.89 -4.16)	5.65	(5.45 -5.86)	5.19	(4.96 -5.44)	3.02	(2.74 -3.32)
Craniopharyngioma	0.16	(0.14 -0.18)	0.15	(0.14 -0.17)	0.09	(0.08 -0.11)	0.15	(0.13 -0.17)	0.15	(0.13 -0.17)	0.17	(0.15 -0.20)	0.17	(0.14 -0.21)	0.14	(0.10 -0.18)	-	-
Local Extensions from Regional Tumors	-	-	-	-	0.02	(0.01 -0.02)	0.01	(0.01 -0.02)	0.02	(0.02 -0.04)	0.03	(0.02 -0.04)	0.05	(0.03 -0.07)	0.05	(0.03 -0.08)	-	-
Chordoma/chondrosarcoma	-	-	-	-	0.02	(0.01 -0.02)	0.01	(0.01 -0.02)	0.02	(0.02 -0.04)	0.03	(0.02 -0.04)	0.05	(0.03 -0.07)	0.05	(0.03 -0.08)	-	-
Unclassified Tumors	0.18	(0.16 -0.21)	0.21	(0.19 -0.23)	0.43	(0.40 -0.46)	0.63	(0.59 -0.68)	0.85	(0.80 -0.91)	1.28	(1.20 -1.36)	2.37	(2.24 -2.51)	5.19	(4.96 -5.43)	10.29	(9.76 -10.83)
Hemangioma	0.04	(0.03 -0.05)	0.05	(0.04 -0.06)	0.12	(0.11 -0.14)	0.17	(0.15 -0.20)	0.18	(0.16 -0.21)	0.21	(0.18 -0.24)	0.25	(0.21 -0.30)	0.24	(0.19 -0.29)	0.17	(0.11 -0.25)
Neoplasm, unspecified	0.14	(0.12 -0.16)	0.16	(0.14 -0.17)	0.30	(0.28 -0.33)	0.46	(0.42 -0.50)	0.66	(0.61 -0.71)	1.05	(0.98 -1.12)	2.11	(1.99 -2.24)	4.91	(4.69 -5.14)	10.07	(9.56 -10.61)
All other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL^b	4.57	(4.46- 4.67)	4.71	(4.62 -4.79)	7.94	(7.81 -8.08)	13.90	(13.69 -4.11)	22.35	(22.09-22.62)	34.97	(34.58-35.38)	53.00	(52.38-53.63)	65.50	(64.67-66.34)	64.17	(62.85-65.50)

^aRates are per 100,000 person years and age-adjusted to the 2000 U.S. standard population.

^bRefers to all brain tumors including histologies not presented in this table.

-Counts are not presented when fewer than 16 cases were reported for the specific histology category. The suppressed cases are included in the counts for totals.

Abbreviations: CBTRUS, Central Brain Tumor Registry of the United States; NPCR, CDC's National Program of Cancer Registries; SEER, NCI's Surveillance, Epidemiology and End Results program; CI, confidence interval; NOS, not otherwise specified