

**TABLE 24: ONE-, TWO-, THREE-, FOUR-, FIVE, AND TEN-YEAR RELATIVE SURVIVAL RATES<sup>a,b</sup> FOR SELECTED MALIGNANT BRAIN AND CENTRAL NERVOUS SYSTEM TUMORS<sup>c</sup> BY AGE GROUPS, SEER 1973-2004**

HISTOLOGY	AGE GROUP	# CASES	1-YR	2-YR	3-YR	4-YR	5-YR	10-YR
Pilocytic astrocytoma	0-14	814	97.9	97.2	97.0	95.5	94.9	93.5
	0-19	977	97.5	97.0	96.6	95.3	94.7	93.6
	20-44	308	94.7	92.6	91.2	90.0	89.2	85.6
	45-54	54	92.8	89.2	85.2	80.4	77.9	64.3
	55-64	24	92.1	83.2	83.2	d	d	d
	65-74	18	d	d	d	d	d	d
	75+	7	d	d	d	d	d	d
	<b>TOTAL</b>		<b>1,388</b>					
Protoplasmic & fibrillary astrocytoma	0-14	114	92.0	83.8	81.0	81.0	80.1	79.1
	0-19	142	92.2	84.9	81.9	81.9	81.2	80.5
	20-44	310	89.4	81.2	72.6	63.5	57.3	38.2
	45-54	101	72.2	49.9	40.7	38.7	36.5	19.7
	55-64	93	45.7	21.7	15.9	13.6	10.1	d
	65-74	85	29.2	16.9	d	d	d	d
	75+	32	25.9	d	d	d	d	d
	<b>TOTAL</b>		<b>763</b>					
Anaplastic astrocytoma	0-14	139	71.2	57.2	52.7	49.4	49.4	45.8
	0-19	185	75.0	58.8	54.8	51.1	51.1	45.8
	20-44	942	85.2	71.1	62.0	54.3	48.0	33.1
	45-54	404	64.1	43.5	32.4	26.7	25.2	17.3
	55-64	362	44.0	19.4	13.2	9.8	5.2	d
	65-74	369	24.2	7.7	5.1	4.3	d	d
	75+	196	12.8	d	d	d	d	d
	<b>TOTAL</b>		<b>2,458</b>					
Astrocytoma, NOS	0-14	914	87.3	82.2	80.0	78.3	77.8	74.3
	0-19	1,195	87.7	81.8	79.2	77.7	76.7	73.1
	20-44	2,239	87.2	76.1	68.7	61.9	55.3	39.0
	45-54	1,008	63.3	42.2	34.4	30.4	28.0	18.6
	55-64	1,217	40.2	20.2	15.2	12.9	11.3	6.8
	65-74	1,222	22.6	9.6	6.6	6.0	5.3	2.7
	75+	631	12.5	5.7	4.2	3.9	3.7	d
	<b>TOTAL</b>		<b>7,512</b>					
Glioblastoma	0-14	195	47.8	24.6	20.1	19.0	17.8	14.6
	0-19	294	51.7	28.5	22.2	20.2	19.5	15.8
	20-44	2,031	60.4	30.4	21.1	16.5	13.8	8.9
	45-54	2,892	43.0	12.3	6.1	4.0	3.6	1.7
	55-64	4,458	31.7	6.4	2.7	1.7	1.4	0.5
	65-74	4,652	16.9	2.7	1.0	0.6	0.4	d
	75+	2,942	8.2	1.3	0.6	d	d	d
	<b>TOTAL</b>		<b>17,269</b>					
Oligodendroglioma	0-14	127	94.5	92.0	91.2	90.2	89.3	83.1
	0-19	207	94.2	90.2	88.6	88.0	86.8	82.2
	20-44	1,061	96.3	92.9	89.1	85.4	81.8	64.2
	45-54	375	91.4	83.9	77.3	71.9	66.7	43.2
	55-64	247	82.8	69.2	60.9	50.8	47.6	30.8
	65-74	131	62.4	52.1	48.9	41.2	36.0	13.8
	75+	50	48.7	33.6	21.3	d	d	d
	<b>TOTAL</b>		<b>2,071</b>					

## TABLES

**TABLE 24 (CONTINUED)**

HISTOLOGY	AGE GROUP	# CASES	1-YR	2-YR	3-YR	4-YR	5-YR	10-YR
Anaplastic oligodendroglioma	0-14	8	d	d	d	d	d	d
	0-19	13	d	d	d	d	d	d
	20-44	189	92.7	79.5	76.1	68.6	63.5	47.1
	45-54	99	85.7	67.5	63.9	53.4	49.6	40.0
	55-64	73	64.1	52.7	41.7	32.0	22.9	d
	65-74	54	43.0	28.9	27.2	22.8	d	d
	75+	27	33.5	d	d	d	d	d
	<b>TOTAL</b>	<b>455</b>						
Ependymoma/ anaplastic ependymoma	0-14	411	86.1	73.0	63.6	57.5	53.4	47.1
	0-19	462	87.2	75.3	66.0	60.6	56.9	49.3
	20-44	469	92.3	90.6	87.4	86.3	86.2	80.4
	45-54	188	92.1	88.4	83.5	82.6	79.7	72.7
	55-64	142	82.4	78.5	75.1	73.0	69.3	57.4
	65-74	79	80.4	76.3	72.3	70.6	70.6	47.1
	75+	23	67.7	67.5	55.2	d	d	d
	<b>TOTAL</b>	<b>1,363</b>						
Mixed glioma	0-14	82	89.0	81.4	77.6	73.5	72.1	64.9
	0-19	116	87.9	81.7	79.0	75.1	74.2	68.1
	20-44	453	93.8	85.7	80.4	73.7	69.2	50.6
	45-54	150	82.7	68.5	57.2	50.2	45.7	34.1
	55-64	100	77.3	48.7	37.5	31.6	28.7	14.0
	65-74	65	56.8	41.0	31.3	22.0	d	d
	75+	20	d	d	d	d	d	d
	<b>TOTAL</b>	<b>904</b>						
Glioma malignant, NOS	0-14	698	69.6	51.1	48.0	47.2	46.0	43.3
	0-19	784	70.9	53.8	50.6	49.7	48.5	44.9
	20-44	528	82.1	70.3	65.1	59.1	54.1	39.6
	45-54	280	57.0	41.0	33.5	32.0	30.3	22.7
	55-64	359	43.1	27.2	22.4	20.1	17.9	12.6
	65-74	454	24.0	12.4	11.4	8.3	7.5	5.5
	75+	515	10.8	7.2	6.0	4.7	3.6	d
	<b>TOTAL</b>	<b>2,920</b>						
Neuroepithelial	0-14	47	85.2	74.6	68.2	64.0	59.6	57.4
	0-19	63	87.4	77.9	73.0	69.8	66.5	63.2
	20-44	74	76.6	65.0	59.2	54.6	53.1	33.8
	45-54	35	51.8	31.9	23.2	d	d	d
	55-64	32	34.9	19.3	d	d	d	d
	65-74	33	18.8	d	d	d	d	d
	75+	16	d	d	d	d	d	d
	<b>TOTAL</b>	<b>253</b>						
Malignant neuronal/glioma neuronal and mixed	0-14	110	75.5	64.3	58.6	55.6	55.6	53.4
	0-19	128	75.7	66.1	59.3	55.8	54.0	52.1
	20-44	72	93.1	80.0	77.0	70.7	69.2	62.1
	45-54	56	87.7	85.8	84.3	78.2	73.3	55.0
	55-64	50	88.6	68.7	66.8	59.0	59.0	49.0
	65-74	18	d	d	d	d	d	d
	75+	16	d	d	d	d	d	d
	<b>TOTAL</b>	<b>340</b>						

**TABLE 24 (CONTINUED)**

HISTOLOGY	AGE GROUP	# CASES	1-YR	2-YR	3-YR	4-YR	5-YR	10-YR
Embryonal/primitive/ medulloblastoma	0-14	1,045	78.5	68.8	63.5	58.5	55.8	49.1
	0-19	1,157	79.8	70.2	64.9	59.9	56.8	49.8
	20-44	357	85.4	76.1	67.5	62.4	57.8	45.3
	45-54	41	80.8	73.7	71.2	68.9	58.4	43.3
	55-64	21	49.7	d	d	d	d	d
	65-74	6	d	d	d	d	d	d
	75+	5	d	d	d	d	d	d
	<b>TOTAL</b>	<b>1,587</b>						
Lymphoma	0-14	20	d	d	d	d	d	d
	0-19	37	67.6	59.2	56.2	49.8	49.6	d
	20-44	977	24.3	18.0	15.8	14.5	13.2	10.7
	45-54	407	44.9	36.4	31.6	28.7	26.4	16.1
	55-64	428	54.5	42.9	33.5	28.8	23.7	13.2
	65-74	516	46.4	31.2	23.7	18.0	15.0	7.0
	75+	354	33.6	21.0	15.8	13.3	11.4	d
	<b>TOTAL</b>	<b>2,719</b>						
<b>TOTAL:ALL BRAIN AND CNS<sup>c,e</sup></b>	0-14	5,155	81.8	72.6	68.8	66.0	64.6	60.5
	0-19	6,382	83.0	74.0	70.2	67.6	66.0	61.7
	20-44	10,597	77.4	64.7	58.4	53.3	49.2	37.5
	45-54	6,429	57.3	35.4	28.9	25.7	24.0	16.8
	55-64	8,017	40.9	19.4	14.7	12.7	11.1	7.4
	65-74	8,225	24.9	11.4	8.9	7.5	6.7	4.1
	75+	5,548	15.0	7.6	6.0	5.2	4.7	3.4
	<b>TOTAL</b>	<b>45,198</b>						

<sup>a</sup>The cohort analysis of survival rates was utilized for calculating the survival estimates presented in this table. Long-term cohort-based survival estimates reflect the survival experience of individuals diagnosed over the time period, and they may not necessarily reflect the long-term survival outlook of newly diagnosed cases.

<sup>b</sup>Rates are an estimate of the percentage of patients alive at one, two, three, four, five, and ten years, respectively.

<sup>c</sup>In contrast to survival estimates reported in previous editions of the CBTRUS statistical report, brain lymphomas, olfactory tumors of the nasal cavity, and malignant tumors of the pituitary and pineal glands are included.

<sup>d</sup>Too few cases to estimate.

<sup>e</sup>Includes histologies not listed in this table.

Abbreviations: SEER, Surveillance, Epidemiology, and End Results; NOS, not otherwise specified.