



CBTRUS

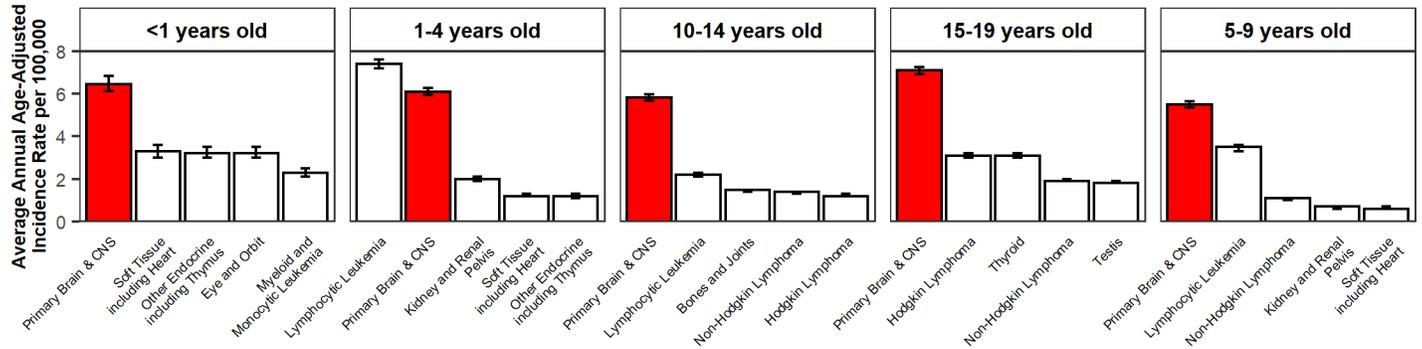
CENTRAL BRAIN TUMOR REGISTRY OF THE UNITED STATES

FACT SHEET for PEDIATRIC BRAIN TUMORS

BRAIN TUMORS & CHILDHOOD CANCER

- Brain and other CNS tumors are the most common cancer in children age 0-19 years in the United States.^{1,2}
 - For children age 5-9 years, leukemia is the only cancer more common than brain tumors.
 - Infants < 1 year old have the highest incidence of brain tumors of all children age 0-19 years.
- Brain and other CNS tumors are the largest cause of cancer-related death in children age 0-14 years in the United States. It is estimated that there will be 4,630 new cases of brain tumors in children age 0-19 years in 2021.²

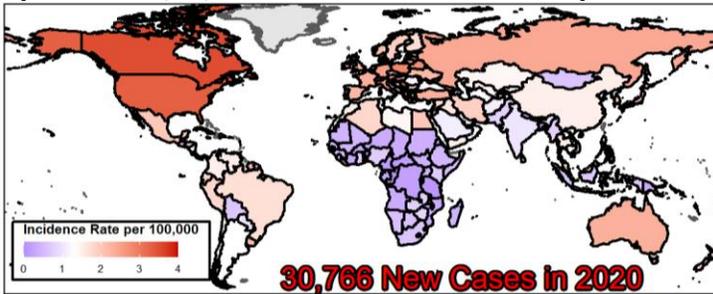
Average annual age-adjusted incidence rates of brain & other CNS tumors in comparison to other cancers in children 0-19 years



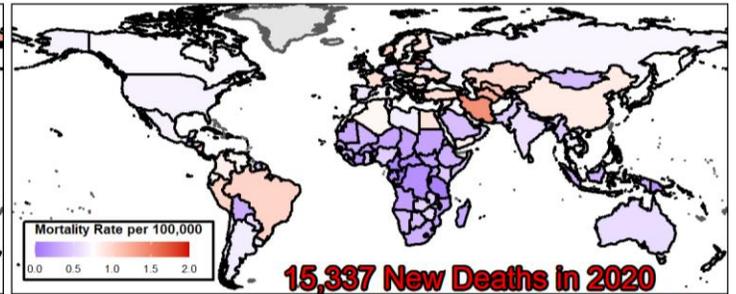
Source: CBTRUS (NPCR & SEER) and US Cancer Statistics, 2013-2017

GLOBAL INCIDENCE AND MORTALITY

- It was estimated that there were 30,766 new cases of primary brain and other CNS tumors in children and adolescents age 0-19 years in 2020, 24,388 of which were in children 0-14 years old.³
- It was estimated that there were 15,337 deaths due to primary brain and other CNS tumors in children and adolescents age 0-19 years in 2020, 11,889 of which were in children 0-14 years old.³



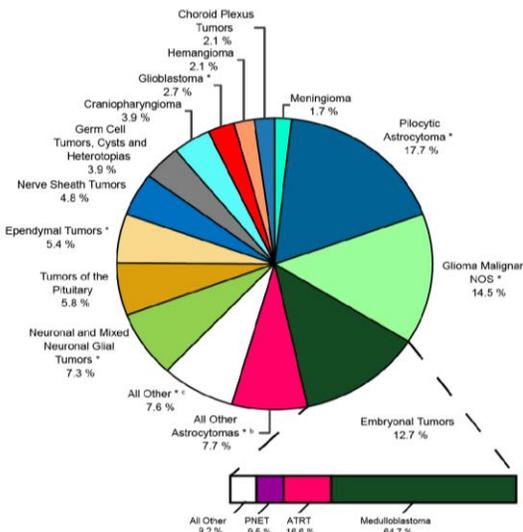
Source: GLOBOCAN 2020



Source: GLOBOCAN 2020

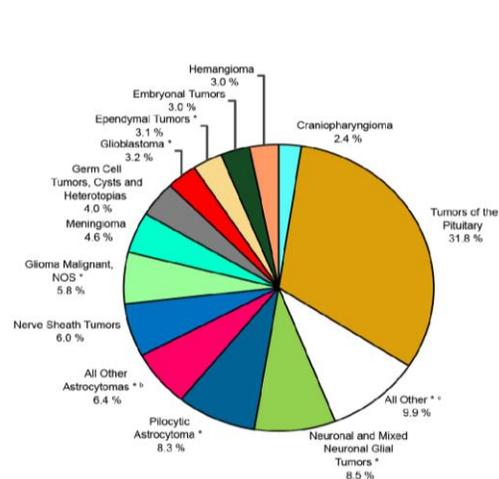
HISTOLOGY DISTRIBUTION

Distribution of Childhood Primary Brain and other CNS Tumors in the United States by Histology, Ages 0-14 years



Source: CBTRUS (NPCR & SEER), 2013-2017

Distribution of Childhood Primary Brain and other CNS Tumors in the United States by Histology, Ages 15-19 years



Source: CBTRUS (NPCR & SEER), 2013-2017

- Gliomas account for 51.6% of tumors in children age 0-14 years and 31.1% of all tumors in the adolescent age group. ²
- The most common type of glioma in children age 0-14 years is pilocytic astrocytoma (17.7% of all tumors). ²
- Embryonal tumors account for 12.7% of all primary brain tumors in children age 0-14 years. ² Of these, medulloblastoma, atypical teratoid/rhabdoid tumor and primitive neuroectodermal tumor account for 64.7%, 16.6%, and 9.5%, respectively. ²
- Tumors of the pituitary are the most common CNS tumor in adolescents age 15-19 years (31.8% of all tumors). ²

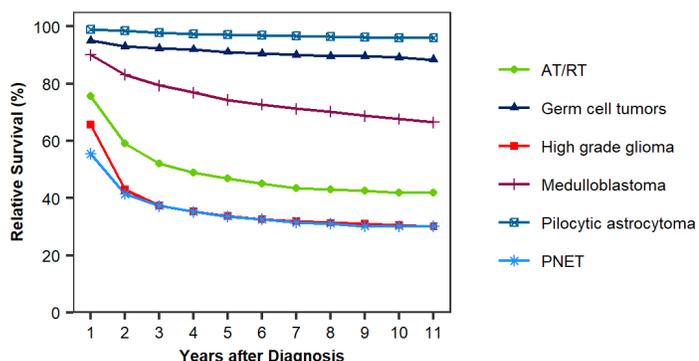
PREVALENCE IN THE UNITED STATES

- The prevalence for malignant brain and other CNS tumors in children age 0-14 years was estimated to be 22.31 per 100,000 population in 2010 meaning there were approximately 13,657 cases from children living with these tumors in 2010.⁴

SURVIVAL AFTER DIAGNOSIS WITH CHILDHOOD BRAIN TUMORS IN THE UNITED STATES

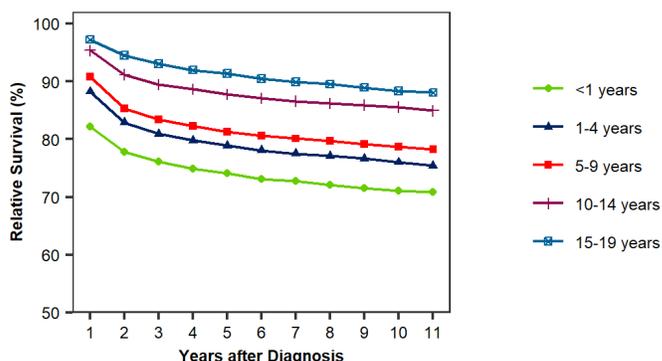
- Survival time after diagnosis with primary brain and other CNS tumors varies significantly by both histologic type of tumor and age. ^{2, 5}
 - Atypical teratoid/rhabdoid tumors (ATRT) and high-grade gliomas were the histologic groups with the lowest relative survival after diagnosis.
 - Pilocytic astrocytoma had the highest survival rates after diagnosis.
- Relative survival rates generally improved with increasing age at diagnosis, with poorest survival in those <1 years old at diagnosis. ^{2, 5}

Relative survival rates following diagnosis with primary brain or other CNS tumor (0-19 years) by selected histologies



Source: NPCR, 2004-2016

Relative survival rates following diagnosis with primary brain or other CNS tumor (0-19 years) by age at diagnosis



Source: NPCR, 2004-2016

MORTALITY DUE TO CHILDHOOD BRAIN TUMORS

Brain and other CNS tumors are the most common cause of cancer death in children age 0-14 years in the United States. ^{1, 2}

- High grade gliomas were the cause of the greatest proportion of deaths (44.9%), followed by medulloblastoma (11.5%) and ATRT (8.2%).²
- By site, brain stem tumors were the cause of the greatest proportion of deaths (37.3%), followed by cerebellar tumors (16.6%).²
- It was estimated that in 2009, a total of 47,631.5 years of potential life were lost due to brain tumors in children and adolescents age 0-19 years in the United States.⁶

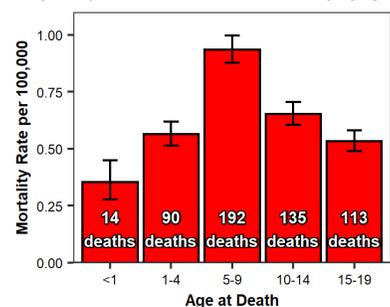
ACKNOWLEDGEMENTS

Funding for CBTRUS has been provided by the Centers for Disease Control and Prevention (CDC) under Contract No.2016-M-9030, the American Brain Tumor Association, Novocure, the Musella Foundation, The Sontag Foundation, National Brain Tumor Society, the Uncle Kory Foundation, the Pediatric Brain Tumor Foundation, the Zelda Dorin Tetenbaum Memorial Fund, as well as private and in kind donations. Contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

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Average annual age-adjusted mortality rates and average annual deaths for malignant primary brain and other CNS Tumors by age group



Source: National Vital Statistics System, 2013-2017