



CBTRUS

CENTRAL BRAIN TUMOR REGISTRY OF THE UNITED STATES



FACT SHEET for PEDIATRIC BRAIN TUMORS



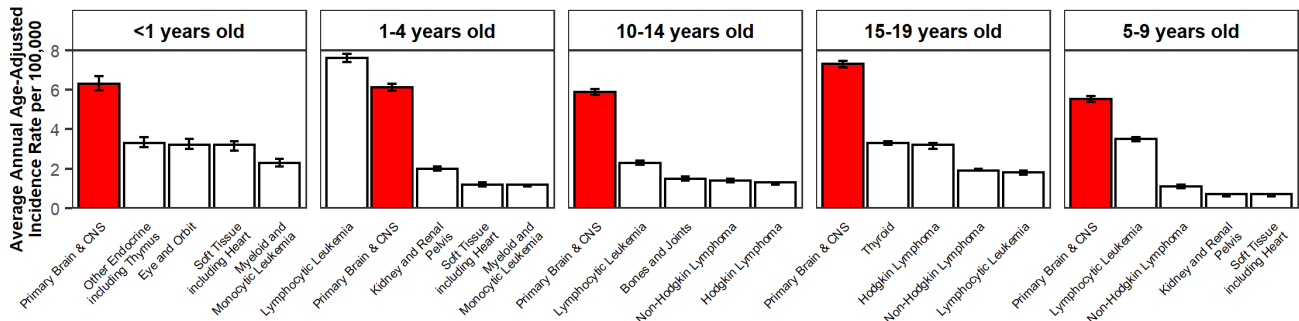
SUPPORT FOR THE PEDIATRIC FACT SHEET WAS PROVIDED BY THE PEDIATRIC BRAIN TUMOR FOUNDATION

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BRAIN TUMORS & CHILDHOOD CANCER

- Brain and other CNS tumors are the most common cancer in children age 0-19 years in the United States.
- 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 5,554 new cases of brain tumors in children age 0-19 years in 2022.

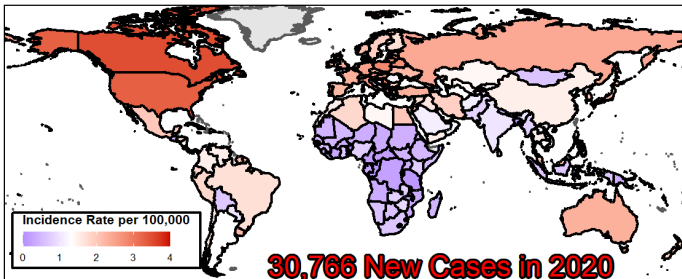
Average annual age-adjusted incidence rates of brain & other CNS tumors in comparison to other cancers in children 0-19 years



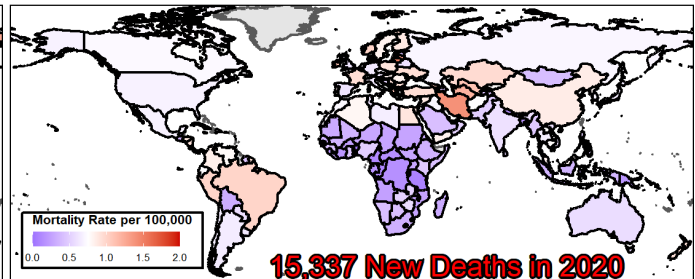
Source: CBTRUS (NPCR & SEER) and US Cancer Statistics, 2014-2018

GLOBAL INCIDENCE AND MORTALITY

- It was estimated that there were 30,766 new cases and 15,337 deaths due to 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.



Source: GLOBOCAN 2020

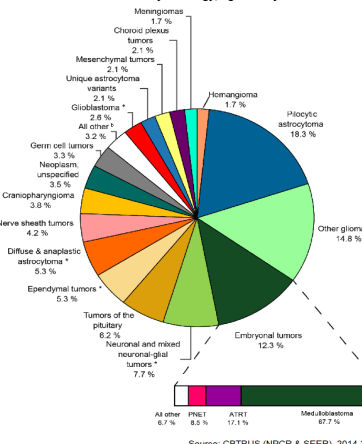


Source: GLOBOCAN 2020

HISTOLOGY DISTRIBUTION

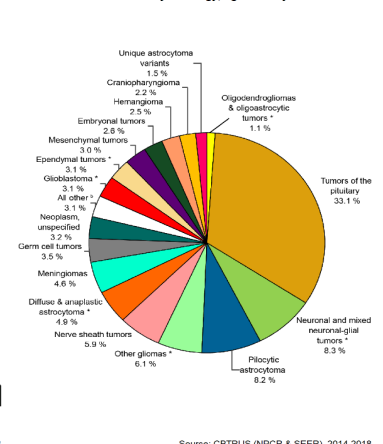
- Gliomas account for 51.2% of tumors in children age 0-14 years.
- The most common type of glioma in children age 0-14 years is pilocytic astrocytoma (18.3% of all tumors).
- Embryonal tumors account for 12.3% of all primary brain tumors in children age 0-14 years.
- Of embryonal tumors, medulloblastoma, and atypical teratoid/rhabdoid tumor account for 67.7% and 17.1%, respectively.
- Tumors of the pituitary are the most common CNS tumor in adolescents age 15-19 years (33.1% of all tumors).
- Gliomas account for 30.6% of all tumors in the adolescent age group.

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



Source: CBTRUS (NPCR & SEER), 2014-2018

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



Source: CBTRUS (NPCR & SEER), 2014-2018

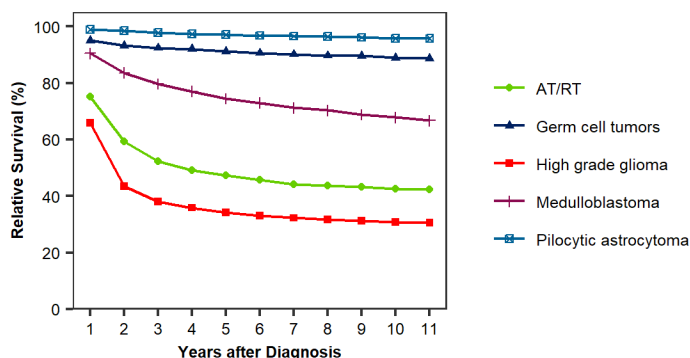
PREVALENCE IN THE UNITED STATES

- 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.

SURVIVAL AFTER DIAGNOSIS WITH CHILDHOOD BRAIN TUMORS IN THE UNITED STATES

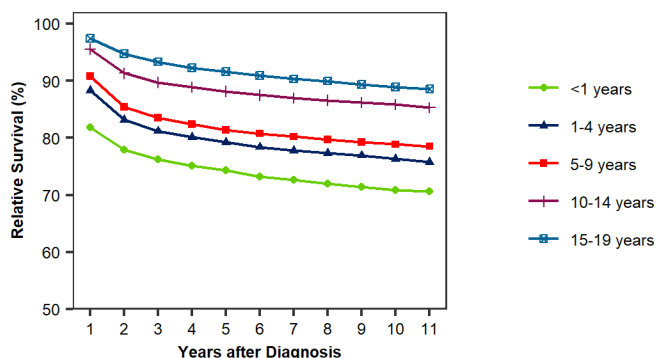
- Survival time after diagnosis with primary brain and other CNS tumors varies significantly by both histologic type of tumor and age.
- Atypical teratoid/rhabdoid tumors (ATRT) and high grade gliomas were the histologic groups with the lowest relative survival after diagnosis.
- Pilocytic astrocytoma 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.

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

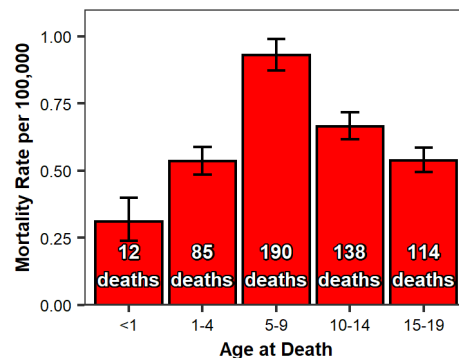


Source: NPCR, 2004-2016

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.
- High grade gliomas were the cause of the greatest proportion of deaths (44.2%), followed by medulloblastoma and ATRT.
- By site, brain stem tumors were the cause of the greatest proportion of deaths (37.7%), followed by cerebellar tumors (16.2%).
- 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.

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, 2014-2018

ACKNOWLEDGEMENTS

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