

VI. CHILDHOOD CANCERS

The incidence of cancers among children in Oregon (0-14 years of age) is low compared to adults. In 2003, there were 110 invasive cancers diagnosed in Oregon children, and 22 children died from cancer. The 1999-2003 incidence rate for cancers in Oregon children was 15.3 per 100,000 compared to the national aggregate rate (1999-2002) of 14.7. This represents a 1% annual increase for the period 1996 through 2003 for Oregon. Oregon's 2003 childhood cancer mortality rate was 3.1.

During 1996-2003, about half of all childhood cancers in children under 14 years of age occurred in children less than 5 years of age. (See Figure VI-1.) Incidence counts were higher at very young ages (<6). These patterns are similar to national data. Mortality among children due to cancer is low. Half of the deaths occurred in children less than 7 years of age.

Nationally, childhood cancer survival rates have shown a dramatic increase over the past few decades. Since the 1960's, the five-year relative survival rate has increased from 30% to approximately 70%. Currently, the Registry does not collect follow-up data, so Oregon-specific survival data are not available.

Figure VI-2 provides brief descriptions of the cancers diagnosed among Oregon children from 1996-2003.

FIGURE VI-1



FIGURE VI-2

| Childhood Cancers in Oregon, (0-14 Years of Age) | | | | |
|--|---------------|-------------|---------------|---|
| Incidence, Average Number of Invasive Cases Per Year (1996 - 2003) | | | | |
| Primary Site | Total* | Male | Female | Synopsis |
| Leukemia | 34 | 18 | 16 | Nationally, acute leukemias are the most frequent childhood cancers with a higher incidence among boys than girls. Children with certain genetic disorders, particularly Down Syndrome, are at a higher risk for ALL. |
| <i>Acute Lymphocytic Leukemia (ALL)</i> | 27 | 14 | 13 | |
| Brain and Central Nervous System (CNS) | 23 | 12 | 11 | Nationally, brain and CNS cancers are the 2 nd most common cancers among children and are more common among boys than girls. |
| Lymphoma | 10 | 8 | 3 | Nationally, lymphoma is the 3 rd most common cancer among children. NHL rates are generally higher among males than females. HL is fairly rare in early childhood with a peak frequency at age 25-29 and again late in life. |
| <i>Hodgkin-Lymphoma (HL)</i> | 5 | 3 | 2 | |
| <i>Non-Hodgkin (NHL)</i> | 3 | 3 | 1 | |
| Sympathetic Nervous System | 7 | 4 | 3 | Nationally, neuroblastomas account for approximately 8% of all childhood cancers and normally arise during fetal life. |
| Soft Tissue Sarcomas | 7 | 3 | 4 | Nationally, 7% of childhood cancers are soft tissue sarcomas with rhabdomyosarcomas being the most common. |
| Renal Tumors (Wilms Tumor) | 6 | 2 | 3 | Nationally, kidney/renal tumors account for 6% of childhood cancers. Wilms tumors are the most common form of renal cancer in children with a peak incidence occurring under five years of age. |
| Carcinomas/Other Malignant Epithelial Neoplasms | 5 | 2 | 3 | Nationally thyroid cancer and malignant melanomas are the most common carcinomas of children. Generally, carcinomas are more common among girls than boys. |
| Germ Cell, Trophoblastic/ Other Gonadal tumors (GCTOG) | 4 | 3 | 2 | Nationally, 3% of childhood cancers are GCTOG tumors. GCTOG tumors are more common in the adolescent years (15-19 year age group). |
| Malignant Bone Cancers | 4 | 3 | 2 | Nationally, bone tumors constitute about 5% of all childhood cancers with osteosarcoma and Ewing sarcoma predominating. |
| <i>Ewing Sarcomas</i> | 2 | 1 | 1 | |
| <i>Osteosarcoma</i> | 2 | 2 | 1 | |
| Retinoblastomas | 2 | 1 | 1 | A relatively uncommon childhood tumor, which usually occurs before the age of two. |
| Hepatic Tumors | 2 | 1 | 1 | Nationally, only 1% of childhood cancers are liver tumors. Liver cancer is rare in children; Hepatoblastomas is the most common in children younger than four years of age. |
| *Due to rounding, counts for total may not equal male and female combined; calculations are rounded to the nearest whole case. National Data: 1999-2002, WONDER On-line Database. U.S. Department of Health and Human Services, National Program of Cancer Registries, Centers for Disease Control and Prevention. November 2005 | | | | |