



# Cancer in Adolescents & Young Adults (Ages 15 to 39 Years)

## Cancer in Adolescents and Young Adults

Each year approximately 500 males and 350 females between the ages of 15 and 39 years are diagnosed with cancer in California. While cancer incidence (rate of new cancer cases) is decreasing for males within this population, declines in incidence have not been observed among females. Cancer mortality rates (rate of cancer deaths) have seen little decrease over the last two decades for both males and females while older and younger age groups have benefitted from improvements in cancer mortality.

## Top Ten Cancer Sites in Adolescents and Young Adults

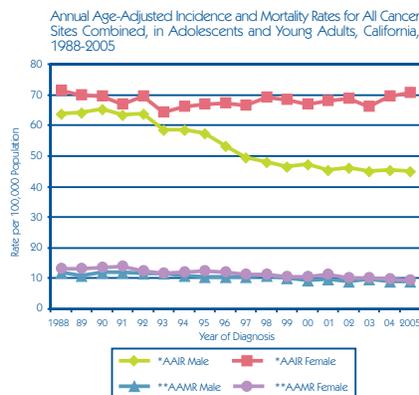
The most common cancer sites among adolescents and young adults in California are breast, thyroid, melanoma of the skin, non-Hodgkin lymphoma, Hodgkin lymphoma, leukemia (including acute lymphocytic leukemia), colorectal, brain and nervous system, testis (including germ cell), and cervix. Non-Hodgkin lymphoma, Hodgkin lymphoma, germ cell tumors, sarcomas (osteosarcoma, Ewing sarcoma and synovial sarcoma), and acute lymphocytic leukemia make-up about 22 percent of all cancers in adolescents and young adults.

- Non-Hodgkin and Hodgkin lymphoma are both cancers of cells within the lymph system.
- Germ cell tumors originate in embryonic cells which become the cells of the reproductive system. Testicular cancer accounts for 83 percent of all germ cell tumors in this population with other tumor sites including the ovaries and extragonadal sites along the midline of the body (brain and head, chest, abdomen, pelvis and lower back).
- Sarcomas: Osteosarcoma is the most common cancer of the bone and occurs in cells of the bone matrix. Ewing sarcoma is also a cancer of the bone but can be found in soft tissue outside of the bone. Synovial

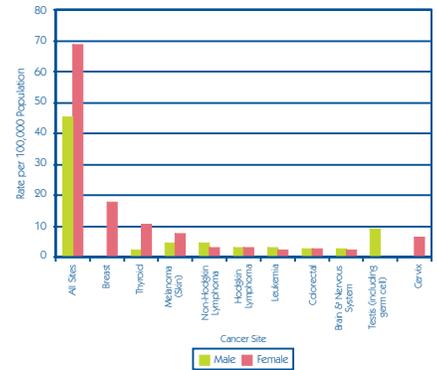
sarcoma originates in the synovial tissue (soft tissue) lining the joint cavities, tendons and bursae (fluid-filled cushioning sacs between tendons, ligaments and bone). This cancer most often develops in the legs, especially the knees, and less frequently occurs in the trunk, head and neck, or abdomen. Synovial sarcoma accounts for nearly 58 percent of sarcomas within the adolescent and young adult population in California.

- Acute lymphocytic leukemia is a cancer of the white blood cells or lymphocytes and is the most common form of leukemia among this age group.

Cancer incidence varies dramatically by age, gender, and race/ethnicity within adolescents and young adults. For example, non-Hodgkin lymphoma increases with age while the sarcomas decrease with age. For other cancers, such as germ cell, incidence peaks between the ages of 30 and 34 years. Cancer incidence also varies by gender for some cancer sites with females experiencing a greater total cancer incidence largely due to the impact of breast and thyroid cancer. Similarly, incidence rates vary by race/ethnicity. Incidence of most cancers is highest among adolescents and young adults of non-Hispanic white race. However, non-Hodgkin lymphoma is highest among the black population and acute lymphocytic leukemia is highest among the Hispanic population.

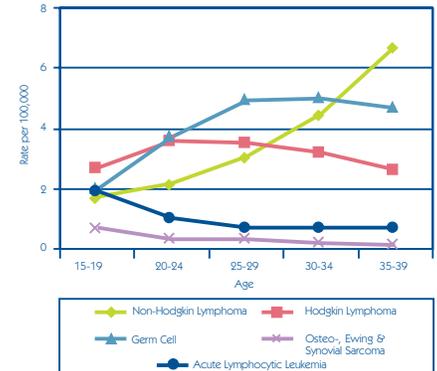


Ten Most Common Cancers in California Adolescents and Young Adults, by Cancer Site and Sex, 2001-2005



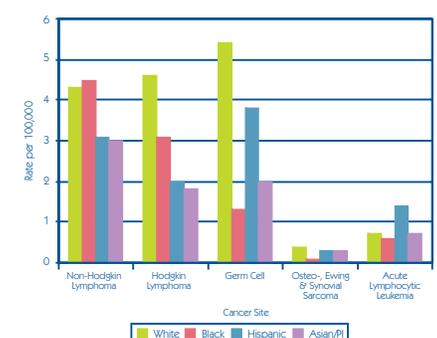
Prepared by the California Department of Public Health, Cancer Surveillance Section.

Five-year Age-Adjusted Incidence Rates for Cancer in Adolescents and Young Adults, by Cancer Site, California, 2001-2005



Prepared by the California Department of Public Health, Cancer Surveillance Section.

Five-year Age-Adjusted Incidence Rates for Cancer in Adolescents and Young Adults, by Cancer Site and Race/Ethnicity, California, 2001-2005



Prepared by the California Department of Public Health, Cancer Surveillance Section.



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