Leukemia is a cancer that starts in the tissue that forms blood. In a person with leukemia, the bone marrow makes abnormal white blood cells, or leukemia cells. Unlike normal blood cells, leukemia cells do not die when they should. They may crowd out normal white blood and red blood cells, and platelets. This makes it hard for normal blood cells to do their work.

There are different types of leukemia, grouped by how quickly the disease develops and worsens. Leukemia is either chronic (which usually gets worse slowly) or acute (which usually worsens quickly). The types of leukemia can also be grouped by the type of white blood cell that is affected. Leukemia can start in lymphoid cells (lymphoid, lymphocytic, or lymphoblastic leukemia), or in myeloid cells (myeloid, myelogenous, or myeloblastic leukemia).

Leukemia Incidence Rates, California, 2006–2010

Between 2006 and 2010, the leukemia incidence rate for males in California was 15.7 new cases per 100,000 males per year. For females in California, the leukemia incidence rate was slightly lower at 9.7 new cases per 100,000 females per year. With respect to race/ethnicity, the highest leukemia incidence rates were found among both non-Hispanic white males and females (17.4 new cases and 10.4 new cases per 100,000 persons, respectively).

Leukemia Incidence Rates, California 2006–2010*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rates per 100,000 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Races/Ethnicities</td>
<td>15.7</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>9.7</td>
</tr>
<tr>
<td>African American</td>
<td>10.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13.5</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>8.3</td>
</tr>
</tbody>
</table>

* Rates are age-adjusted to the 2000 U.S. Population.
Source: California Cancer Registry, California Department of Public Health.
Prepared by the California Department of Public Health, California Cancer Registry.
Leukemia in California

Five-Year Relative Survival Rates
CALIFORNIA, 2001–2010

Unlike other cancers, all leukemias are staged as “distant,” reflecting the involvement of the bone marrow throughout the body.

The 5-Year Survival Rate* is:

Childhood Leukemia
(0–19 years of age)  79%
Adult Leukemia
(20+ years of age)  49%
Overall  54%

* Follow-up is through December 2010.

Risk Factors

Certain factors have been shown to be associated with an increased risk of certain types of cancer. The majority of known cancer risk factors are related to individual characteristics (such as age, race/ethnicity, or family history/genetic susceptibility) and behaviors (such as smoking, diet, physical inactivity, unsafe sex, and sun exposure).

For more information on leukemia risk factors, prevention, screening, symptoms, and treatment:

- National Cancer Institute
  Check out the NCI’s What You Need to Know About™ Cancer Index at: www.cancer.gov/cancertopics/wyntk or call the NCI Cancer Information Service: 1-800-4-CANCER
- Centers for Disease Control and Prevention
  www.cdc.gov
- American Cancer Society (ACS)
  www.cancer.org or call 1-800-227-2345