



Chronic Myeloid Leukemia

What Is Chronic Myeloid Leukemia?

Chronic myeloid leukemia (CML) is a slowly progressing type of cancer in which too many white blood cells are formed in the bone marrow. CML then spreads to the blood, the lymph nodes, and other organs in the body. "Chronic" refers to cases where the cells live longer than they are supposed to and crowd out the normal cells, as opposed to "acute," where the cells grow rapidly.

What Are the Risk Factors for CML?

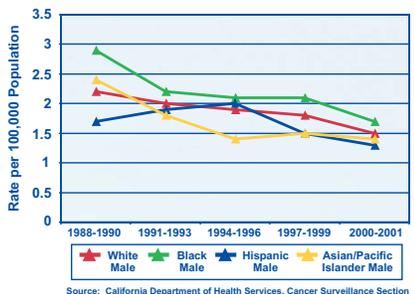
Unfortunately, there are very few known risk factors for CML. The following are risk factors that are known:

- ◆ CML affects mostly adults.
- ◆ Exposure to very high-dose radiation increases risk, but exposure at these levels is very rare.

Who Gets CML?

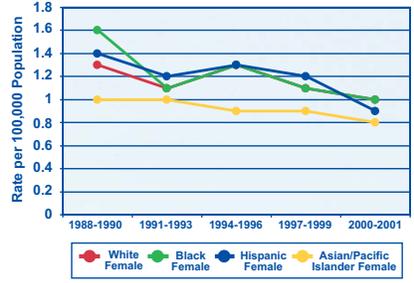
- ◆ Only about 400 new cases are diagnosed each year in California (all races combined).
- ◆ Incidence rates are similar among males and females and among all race/ethnicities.
- ◆ Incidence rates increase with increasing age.

Three-Year Chronic Myeloid Leukemia Incidence Rates Among Males, by Race/Ethnicity, 1988-2001



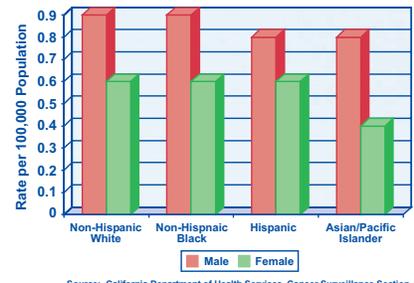
Source: California Department of Health Services, Cancer Surveillance Section

Three-Year Chronic Myeloid Leukemia Incidence Rates Among Females, by Race/Ethnicity, 1988-2001



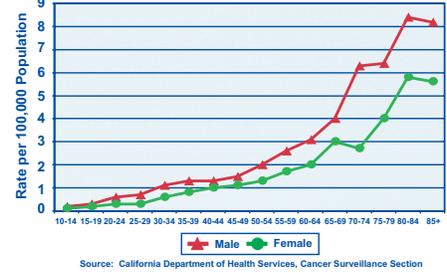
Source: California Department of Health Services, Cancer Surveillance Section

Chronic Myeloid Leukemia Mortality Rates by Race/Ethnicity and Sex, 1997-2001 Combined



Source: California Department of Health Services, Cancer Surveillance Section

Chronic Myeloid Leukemia Incidence Rates by Sex and Age, 1997-2001 Combined



Source: California Department of Health Services, Cancer Surveillance Section

What Are the Symptoms for CML?

Many people who are diagnosed with CML do not have any symptoms. Some common symptoms that may occur include fatigue, weakness, weight loss, fever, and bone pain. Unfortunately, these symptoms are very general and may be caused by something other than cancer.

What Are the Treatments for CML?

The type of treatment recommended depends on several factors, such as the stage the tumor is found at, the age of the patient, and the overall health of the patient. The following are general treatment options:

- ◆ Interferon: used to slow the growth of leukemia cells.
- ◆ Kinase inhibitors: very effective in treatment of early stages, works by slowing down or stopping cancer cells from making an abnormal enzyme (kinase) that allows them to grow.
- ◆ Chemotherapy: generally used only if other treatments have stopped working.
- ◆ Radiation therapy: useful in treating bone pain caused by CML.
- ◆ Bone marrow or peripheral stem cell transplantation

Who Survives CML?

Although survival rates for CML alone are unavailable, the five-year survival rate in California for all types of leukemia combined is 44 percent (73 percent for childhood leukemia and 38 percent for adult leukemia).

- ◆ There are approximately 200 deaths per year in California from CML.
- ◆ Mortality rates are low, at around 0.9 deaths per 100,000 population for males and 0.6 deaths per 100,000 for females.
- ◆ There are no differences in mortality rates among race/ethnicities.



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