

What is chronic myeloid leukemia? — Chronic myeloid leukemia, called "CML," is a type of blood cancer. Blood is made up of different types of cells. Blood cells are made in the center of your bones, in a part called the bone marrow.

People with CML have an abnormal gene in some of their blood cells. This gene causes the bone marrow to make abnormal blood cells. These abnormal blood cells can grow out of control, get into the blood, and travel around the body. Sometimes, these cells collect in certain parts of the body.

When the bone marrow makes abnormal blood cells, it does not make enough of the normal blood cells a person's body needs. This can cause symptoms.

There are 3 stages, or "phases," of CML:

- During the **chronic phase**, the cancer grows very slowly. Most people are in this phase when their CML is diagnosed. This phase can last for years.
- During the **accelerated phase**, the cancer begins to grow faster.
- During the **blast phase**, the cancer is fast-growing and can be fatal.

Treatment depends, in part, on the phase of your CML.

What are the symptoms of CML? — CML does not always cause symptoms, especially at first. When it does cause symptoms, the most common ones are:

- Feeling very tired and weak
- Sweating much more than usual
- Losing weight without trying
- Feeling full after eating a small amount of food
- Bleeding more easily than normal

Is there a test for CML? — Yes. Your doctor or nurse will talk with you, do an exam, and do blood tests. They might also do a bone marrow biopsy. For this test, a doctor takes a small sample of the bone marrow. The sample is then examined under a microscope to see if abnormal (cancer) cells are present.

How is CML treated? — Doctors can treat CML in different ways. When CML is first diagnosed and in the chronic phase, it is treated with pills called "tyrosine kinase inhibitors" or "TKIs." TKIs kill the blood cells that have the abnormal CML gene. When these blood cells are gone, the bone marrow can work normally again. TKIs do not cure CML, but they can control it for many years. If you take a TKI, it

is very important to take every single dose. Skipping pills can allow the CML to grow out of control. Most people with CML must take a TKI for the rest of their life.

People who have too many side effects from their TKI, or whose CML starts to grow faster, can have other treatments. These can include:

- Another TKI – Different TKIs have different side effects. Also, one TKI might work better to control your CML than another. If one TKI doesn't work for you, another might.
- Chemotherapy – Chemotherapy is the medical term for medicines that kill cancer cells or stop them from growing.
- Bone marrow transplant (also called "stem cell transplant") – This treatment replaces cells in the bone marrow that are killed by chemotherapy or radiation. These "donor" cells can come from another person whose cells match yours in specific ways.
- A type of medicine called "interferon alfa"

Treatment also involves regular follow-up visits, exams, and blood tests. Some people, but not everyone, might need additional bone marrow biopsies.

What else should I do? — It's important to follow all your doctor's instructions about visits, tests, and treatment. It's also important to talk to your doctor about any side effects or problems you have during treatment.

Getting treated for CML involves making many choices, such as what treatment to have and when.

Always let your doctors and nurses know how you feel about a treatment. Any time you are offered a treatment, ask:

- What are the benefits of this treatment? Is it likely to help me live longer? Will it reduce or prevent symptoms?
- What are the downsides to this treatment?
- Are there other options besides this treatment?
- What happens if I do not have this treatment?