

[Leukemia - Acute Myeloid - AML - Introduction](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 01/2016

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Adult Acute Myeloid Leukemia. To see other pages, use the menu. Think of that menu as a roadmap to this final full guide.

Leukemia is a cancer of the blood. Leukemia begins when healthy blood cells change and grow out of control. Acute myeloid leukemia (AML) is a disorder of the process that normally produces neutrophils, red blood cells, and/or platelets, which are types of healthy blood cells. AML may sometimes be called acute myelogenous leukemia, acute myelocytic leukemia, or acute nonlymphocytic leukemia. Unlike chronic leukemia, acute leukemia develops quickly and generally needs immediate treatment. AML occurs in people of all ages but is most common in adults older than 65.

About neutrophils

Neutrophils are normal white blood cells with granules inside the cell. They are also sometimes called mature granulocytes. Neutrophils fight infections caused by bacteria and other organisms. Mature neutrophils grow from immature white blood cells, also called progenitors, in a process called differentiation. The production of mature neutrophils usually is highly regulated. For example, the body rapidly makes more neutrophils during an infection and returns to a regular level of production when the infection is controlled.

About AML

In AML, damage to the genetic material or DNA in the blood-forming cells cause problems with the blood cell development. This type of damage is called an acquired mutation. When blood

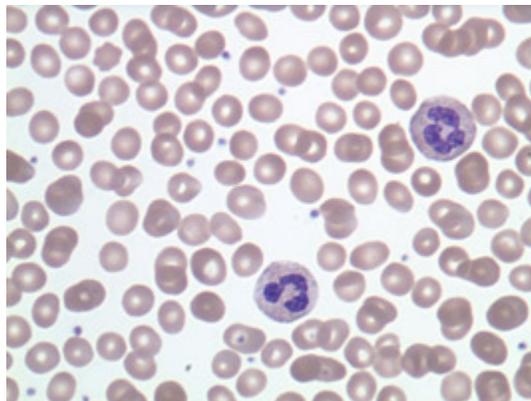
cells do not develop as expected, it causes a build-up of many immature cells called myeloblasts or blasts. Blasts do not act like fully developed, healthy blood cells and do not help a person's immune system work. These acquired mutations and the large number of blasts also reduces the number of healthy blood cells, including:

- Red blood cells, which carry oxygen
- Platelets, which help the blood to clot

Therefore, people with AML are likely to have the following symptoms:

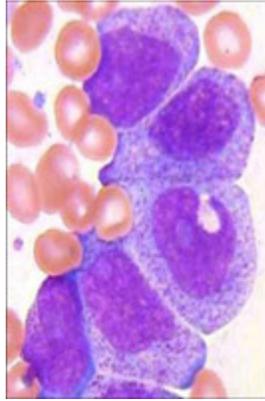
- Anemia from too few red blood cells
- Infections because they do not have enough mature neutrophils
- Easy bruising or bleeding because of a low numbers of platelets

AML is usually found in the blood and bone marrow, the spongy, red tissue in the inner part of the large bones, but it can sometimes also spread to other parts of the body, such as the brain, skin, and gums. Occasionally, AML cells can form a solid tumor called a myeloid sarcoma or chloroma that can develop anywhere in the body.



Normal peripheral blood with two neutrophils

[Click to Enlarge](#)



AML disease
[Click to Enlarge](#)

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This section is about AML in adults. Read about [childhood AML](#) [3].

Looking for More of an Introduction?

If you would like more of an introduction, explore these related items. Please note these links will take you to other sections on Cancer.Net:

- **ASCO Answers Fact Sheet:** [Read a 1-page fact sheet](#) [4] that offers an introduction to this type of leukemia. This fact sheet is available as a PDF, so it is easy to print out.
- **Cancer.Net Patient Education Video:** [View a short video](#) [5] led by an ASCO expert in leukemia that provides basic information and areas of research.
- **Cancer.Net En Español:** [Read about AML in Spanish](#) [6]. [Infórmase sobre leucemia mieloide aguda](#) [6].

The [next section in this guide is Statistics](#) [7]. It helps explain how many people are diagnosed with this disease and general survival rates. Or, use the menu to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/leukemia-acute-myeloid-aml/introduction>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/31281>

[4] http://www.cancer.net/sites/cancer.net/files/asco_answers_aml.pdf

[5] <http://www.cancer.net/node/27376>

[6] <http://www.cancer.net/es/node/31352>

[7] <http://www.cancer.net/node/19066>