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## **Leukemia - Acute Lymphoblastic - ALL - Childhood - Overview** [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 03/2014

**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 Childhood Acute Lymphoblastic Leukemia (ALL). To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

Leukemia is a cancer of the blood. Leukemia begins when normal blood cells change and grow uncontrollably. Acute lymphoblastic leukemia (ALL) is a cancer of the lymphocytes, a type of white blood cell involved in the body's immune system. It is the most common type of childhood cancer.

### **About lymphocytes and lymphoblasts**

Lymphocytes are made in the bone marrow, the spongy, red tissue in the inner part of the large bones. Lymphocytes are found in the blood, lymph nodes, and spleen. Healthy lymphocytes fight bacterial and viral infections. In people with ALL, new lymphocytes do not develop into mature cells, but stay as immature cells called lymphoblasts.

### **About ALL**

When a child has ALL, the lymphoblasts fill the bone marrow and crowd out other normal cells, preventing the production of red blood cells (cells that carry oxygen to tissues), many other types of normal white blood cells (cells that fight infection), and platelets (cells that help blood to clot). If the bone marrow is not functioning correctly, the child may experience anemia, easy bruising, bleeding, or infection.

- Anemia is from too few red blood cells. Anemia can lead to fatigue, irritability, sleepiness, paleness, shortness of breath, and a rapid heartbeat.
- Bruising or bleeding from injuries may occur more easily because the blood cannot clot normally when the platelet count is low.
- Infection may occur more often if the blood has too few normal white blood cells. Many types

of white blood cells are needed to fight infections caused by different germs.

The leukemic lymphoblasts may also collect in the child's lymph nodes and cause them to swell. Lymphoblasts may also spread to other organs, including the skin, liver, spleen, a girl's ovaries, a boy's testicles, and the spinal fluid.

This section is about ALL in children, sometimes called childhood ALL or pediatric ALL. Learn more about [acute lymphocytic leukemia in adults](#) [3].

## Looking for More of an Overview?

If you would like additional introductory information, explore these related items. Please note these links take you to other sections on Cancer.Net:

- [ASCO Answers Fact Sheet](#) [4]: Read a one-page fact sheet (available as a PDF) that offers an easy-to-print introduction to this type of cancer.
- [Cancer.Net Patient Education Videos](#): View short videos led by ASCO experts in [childhood cancer](#) [5] and [leukemia](#) [6] that provide basic information and areas of research.
- [Cancer.Net En Español](#): Read about [childhood ALL in Spanish](#) [7]. Infórmase sobre la [leucemia linfocítica aguda infantil en español](#) [7].

*To continue reading this guide, use the menu on the side of your screen to select another section.*

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### Links:

[1] <http://www.cancer.net/cancer-types/leukemia-acute-lymphoblastic-all-childhood/overview>

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

[3] <http://www.cancer.net/node/19037>

[4] [http://www.cancer.net/sites/cancer.net/files/asco\\_answers\\_all\\_childhood.pdf](http://www.cancer.net/sites/cancer.net/files/asco_answers_all_childhood.pdf)

[5] <http://www.cancer.net/multimedia/videos/treatments-tests-and-procedures/whats-new-childhood-cancers-care-and-treatment-greg-reaman-md>

[6] <http://www.cancer.net/multimedia/videos/treatments-tests-and-procedures/whats-new-leukemia-care-and-treatment-charles-schiffer-md>

[7] <http://www.cancer.net/es/node/18233>