

Lymphoma - Non-Hodgkin - Childhood

This section has been reviewed and approved by the [Cancer.Net Editorial Board \[1\]](#), September / 2012

Overview

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 Non-Hodgkin Lymphoma. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

About the lymphatic system

The lymphatic system is made up of thin tubes that branch out to all parts of the body. The lymph system carries lymph, a colorless fluid containing lymphocytes (a type of white blood cell). Lymphocytes are part of our immune system and help fight germs in the body. B-lymphocytes (also called B cells) make antibodies to fight bacteria, and T-lymphocytes (also called T cells) kill viruses and foreign cells and trigger the B cells to make antibodies.

Groups of tiny, bean-shaped organs called lymph nodes are located throughout the body at different sites in the lymphatic system. The largest areas of lymph nodes are found in the abdomen, groin, pelvis, underarms, and neck. Other parts of the lymphatic system include the spleen, which makes lymphocytes and filters the blood; the thymus, an organ under the breastbone; the tonsils, located in the throat; and the bone marrow, the spongy red tissue inside bones that makes white blood cells (cells that fight infection), red blood cells (cells that carry oxygen throughout the body), and platelets (cells that help the blood to clot).

About non-Hodgkin lymphoma

Non-Hodgkin lymphoma (NHL) is a term that refers to several, very different types of lymphoma. Lymphoma is a cancer of the lymph system. Lymphoma usually begins when cells in the lymph system change and grow uncontrollably, which may form a tumor. Occasionally, lymphoma can also begin outside the lymph node system (called extranodal), especially in children.

Because lymph tissue is found in so many parts of the body, NHL can start almost anywhere and can spread to almost any organ in the body. It most often begins in the lymph nodes, liver, or spleen but can also involve the stomach, intestines, skin, thyroid gland, or any other part of the body.

This section covers NHL in children. Learn more about [adult NHL \[2\]](#).

Types of non-Hodgkin lymphoma in children

There are three major categories of NHL in children. They are distinguished from one another by how the cells look under a microscope.

Burkitt lymphoma. This type of B-cell lymphoma commonly affects the bone marrow and central nervous system (brain and spinal cord). Burkitt lymphoma is one of the fastest growing types of cancer. It most often develops in the abdomen and may spread to other organs, including the brain. Burkitt lymphoma accounts for about 40% of NHL in children in the United States.

Large cell non-Hodgkin lymphoma (LCL). LCL, which accounts for about 25% of childhood NHL, may develop in the throat, abdomen, lymph tissue of the neck, or near the thymus (behind the breastbone). LCL is further classified into subtypes. The most common subtypes of LCL include large B-cell lymphoma (15%), which develops from B cells, and anaplastic large cell lymphoma (ALCL; 10%), which commonly develops from T cells but can arise rarely from B cells.

Lymphoblastic lymphoma (LBL). LBL accounts for about 30% of all childhood NHL. It most often develops in lymph nodes in the chest area (mediastinum) behind the breastbone (near the thymus gland) and can spread to the surface of the brain, the bone marrow, other lymph nodes, and the membranes surrounding the heart and lungs.

Find out more about [basic cancer terms used in this section \[3\]](#).

Looking for More of an Overview?

If you would like additional introductory information, explore this related item on Cancer.Net:

- [ASCO Answers Fact Sheet \[4\]](#): Read a one-page fact sheet (available in PDF) that offers an easy-to-print introduction for this type of cancer.
- Cancer.Net Patient Education Videos: View two short videos led by ASCO experts in [lymphoma \[5\]](#) and [childhood cancers \[6\]](#) that provide

basic information and areas of research.

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

Links:

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