

## **Lymphoma - Hodgkin - Overview** [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 06/2014

**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 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.

Hodgkin lymphoma, previously called Hodgkin's disease, is one category of lymphoma, a cancer of the lymphatic system. Lymphoma begins when cells in the lymphatic system change and grow uncontrollably. This uncontrolled growth may form a tumor, involve many parts of the lymphatic system, or spread to other parts of the body.

### **About the lymphatic system**

The lymphatic system is made up of thin tubes that branch out to all parts of the body. Its job is to fight infection and disease. The lymphatic system carries lymph, a colorless fluid containing lymphocytes. Lymphocytes are a type of white blood cell that make up part of the 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 bean-shaped organs called lymph nodes are located throughout the body at different areas in the lymphatic system. The largest groups of lymph nodes are located 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; and the tonsils, which are located in the throat.

Hodgkin lymphoma most commonly affects lymph nodes in the neck or the area between the lungs and behind the breastbone. It can also begin in groups of lymph nodes under an arm, in the groin, or in the abdomen or pelvis.

If Hodgkin lymphoma spreads, it may spread to the spleen, liver, bone marrow, or bone. Spread to other parts of the body can also occur, but it is unusual.

This section covers Hodgkin lymphoma in adults. Learn more about [childhood Hodgkin lymphoma](#) [3] or [non-Hodgkin lymphoma in adults](#) [4].

## Types of Hodgkin lymphoma

There are different types of Hodgkin lymphoma. It is important to know the type, as this may affect the choice of treatment. Doctors determine the type of Hodgkin lymphoma based on how the cells collected during a biopsy (see the [Diagnosis](#) [5] section) look under a microscope and whether the cells contain certain abnormal proteins.

The American Joint Committee on Cancer (AJCC) recognizes two major categories of Hodgkin lymphoma: classical Hodgkin lymphoma, which is divided into four subtypes based on the appearance of the cells, and nodular lymphocyte-predominant Hodgkin lymphoma.

**Classical Hodgkin lymphoma (cHL).** cHL is the most common type of Hodgkin lymphoma, occurring about 95% of the time. It is diagnosed when characteristic abnormal lymphocytes, known as Reed-Sternberg cells, are found. As mentioned above, cHL can be divided into four different subtypes:

- **Nodular sclerosis Hodgkin lymphoma:** Nodular sclerosis Hodgkin lymphoma is the most common form of cHL, affecting up to 80% of people diagnosed with cHL. It is most common in young adults, especially women. In addition to Reed-Sternberg cells, there are bands of connective tissue in the lymph node. This type of lymphoma often involves the lymph nodes in the mediastinum (chest).
- **Lymphocyte-rich classical Hodgkin lymphoma:** About 6% of people with cHL have this subtype. It is more common in men and usually involves areas other than the mediastinum. The tissue contains many normal lymphocytes, in addition to Reed-Sternberg cells.
- **Mixed cellularity Hodgkin lymphoma:** This subtype of lymphoma occurs in older adults and, commonly, in the abdomen. It carries many different cell types, including large numbers of Reed-Sternberg cells.
- **Lymphocyte-depleted Hodgkin lymphoma:** Lymphocyte-depleted Hodgkin lymphoma is the least common subtype of cHL, and about 1% of people with cHL have this form. It is most common in older adults; people with the human immunodeficiency virus (HIV), the virus that causes autoimmune deficiency syndrome or AIDS; and people in non-industrialized countries. The lymph node contains almost all Reed-Sternberg cells.

There is another type of Hodgkin lymphoma that is not a part of the cHL group, called nodular lymphocyte-predominant Hodgkin lymphoma. This type is more similar at the protein and genetic level to [B-cell non-Hodgkin lymphoma](#) [6].

**Nodular lymphocyte-predominant Hodgkin lymphoma.** About 5% of people with Hodgkin lymphoma have nodular lymphocyte-predominant Hodgkin lymphoma, which is often found in the lymph nodes in the neck, groin, or armpit. It is most common in younger patients. People with this type of Hodgkin lymphoma not only have Reed-Sternberg-like cells, but a marker called ?CD20? on the surface of the lymphoma cells as well. CD20 is a protein that is usually found in people diagnosed with B-cell non-Hodgkin lymphoma.

Nodular lymphocyte-predominant Hodgkin lymphoma is often treated differently than cHL. Some people with nodular lymphocyte-predominant Hodgkin lymphoma do not need treatment right away, while others may benefit from a treatment plan that includes radiation therapy or a limited amount of chemotherapy combined with radiation therapy. Patients with this type of lymphoma tend to have a very good prognosis, which means a very good chance of the treatment's success and the patient's recovery. However, a small number of patients with nodular lymphocyte-predominant Hodgkin lymphoma may develop a more aggressive type of non-Hodgkin lymphoma called diffuse large B-cell lymphoma [6] through a process called transformation.?

## Looking for More of an Overview?

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

- [Cancer.Net Patient Education Video](#) [7]: View a short video led by an ASCO expert in lymphoma that provides basic information and areas of research.
- [Cancer.Net En Español](#) [8]: Read about Hodgkin lymphoma in Spanish. [Infórmase sobre linfoma de Hodgkin en español](#) [8].

*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/lymphoma-hodgkin/overview>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/31272>
- [4] <http://www.cancer.net/node/31269>
- [5] <http://www.cancer.net/node/19183>
- [6] <http://www.cancer.net/node/19210>
- [7] <http://www.cancer.net/node/27381>
- [8] <http://www.cancer.net/es/node/31346>