

# School Guide for Students with Lymphoma

## What is Lymphoma?

Lymphoma is the most common blood cancer in the United States and represents nearly 5 percent of all new cancers each year. Children and adolescents between the ages of 10-19 years are at the highest risk of developing lymphoma during the ages of 10-19 years. There are two types of lymphomas, Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL). Both cancers begin in white blood cells called lymphocytes. Lymphocytes are part of the immune system, which protects you from germs. The different types of lymphoma are determined by the particular abnormal lymphocytes detected.

Lymphoma is a cancer that starts in the lymphatic system, which is part of the body's immune system. The disease begins when a white blood cell divides and becomes abnormal. These abnormal cells keep dividing and build up. Because lymphatic tissue is in many parts of the body, lymphoma can start anywhere usually in a lymph node and spread to other parts of the body. HL is diagnosed when either Reed-Sternberg cells or Hodgkin cells are present. HL is more common in adolescents and young adults. NHL begins when a lymphocyte (usually a B cell) becomes abnormal.

Lymphomas may be grouped by how quickly they are likely to grow: Indolent lymphomas grow slowly and may cause fewer symptoms. Aggressive lymphomas grow and spread more quickly and may cause severe symptoms.

## Treatment Received

Depending on the type of lymphoma, children may receive different standard treatments, including surgery, chemotherapy, radiation therapy, stem cell transplant, biological therapy, plasmapheresis, or targeted therapy. Below are some of the most common therapies:

- Chemotherapy may be given by mouth, through the vein or into the spinal fluid using a spinal tap. Chemotherapy is administered in cycles, each cycle lasting several weeks.
- Radiation therapy uses high-energy rays to kill non-Hodgkin lymphoma cells. It can shrink tumors and help control pain. Radiation therapy may be given five times a week for several weeks.
- Chemotherapy and radiation treatment may require you go to the hospital or clinic for daily or weekly therapy for several weeks.
- Stem cell transplant replaces cells in the bone marrow that have been destroyed by drugs, radiation, or disease. Stem cells are injected into the patient and make healthy blood cells. A stem cell transplant may use healthy stem cells from the patient that were saved before treatment or from a donor. This may be combined with high doses of chemotherapy and sometimes radiation.

## How can Lymphoma affect School Performance?

Children who are receiving treatment may attend school when it is medically appropriate as determined by their physician. Children may experience side effects of treatment both in the short and long term that can affect his or her education. These possibility of such school problems should be kept in mind for ANY child with lymphoma during and after treatment.

- Frequent absence from school
- Less interaction with friends
- Possible drop in grades (A's to C's)
- Slower processing speed
- Difficulty with planning and organization
- Short term memory loss; trouble retaining new material
- Potential academic delays in reading comprehension, spelling and math
- Visual-spatial problems
- Difficulty with fine motor skills (problems with writing quickly or accurately)
- Possible speech and language delays
- Signs of ADHD (such as distractibility, impulsivity, concentration, tendency to "space out")
- Emotional implications such as: low self-esteem; poor body image; depression; feelings of loneliness and isolation; irritability or easily frustrated
- Withdrawn behavior; fear of trying new things; difficulty with peer relationships
- Struggle with loss of independence
- Physical complications such as: mouth or throat sores; diarrhea and constipation; nausea and vomiting; hair loss; skin rashes
- Possible problems with eyesight or hearing
- Fatigue, anemia, decreased energy, weight loss or motor weakness

## Factors that increase the risk for learning problems include

- Diagnosis at a very young age
- Treatment involving the central nervous system (spinal cord and brain); intrathecal chemotherapy
- Radiation to the total body or to the head
- Female gender – Girls may be more at risk for cognitive late effects

## How can schools assist students with Lymphoma?

### Academic

- Start academic interventions right away under one of two laws: IDEA (Other Health Impairment) or Section 504
- Provide assessment to determine specific academic needs and provide appropriate accommodations and modifications necessary (including speech, OT, PT evaluations; Vision Impairment or Auditory impairment services, if needed)
- Provide homebound services, when necessary, to help with instruction
- Assign a moderate workload that overall emphasizes quality vs. quantity
- Provide extended school year (during winter, spring and/or summer) to allow more time to complete assignments and to stay at peer grade level
- Provide extra time for class work, homework, quizzes, and tests.
- Assist with fine motor delays, provide the student with a computer for note taking and assignments. Provide numerous handwriting opportunities and assign shorter tasks, focusing on quality of handwriting.
- Provide the student with an organizational checklist for routine activities, materials needed, and steps to follow, in order to assist with organization
- Assist with limited memory through use multiple modalities (auditory, visual, tactile) when presenting information. Also record information on tape and provide activities that practice recall skills
- Assist with reading comprehension, use context clues to identify the meanings of words and phrases. Also pre-record material, and highlight important points before reading
- "Chunk" information for easier comprehension
- Develop a list of spelling rules and require the student to refer to rules when writing. Ask the student to verbally explain how he/she spells words using these rules
- Review abstract concepts daily, such as math skills. Introduce the new concepts only after the student has a mastery of those previously presented
- Allow use of calculator, example sheets and formula step sheets in Math
- Allow use of word banks on tests and quizzes
- Allow open notes while test taking

### Social/Emotional

- Allow student to wear hat or scarf
- Provide counseling and guidance to address emotional/ social effects
- Reduce the emphasis on competition. Competitive activities may cause undue stress, causing the student to hurry and make mistakes. The repetitive failure may cause the student to avoid situations, assignments, or responsibilities.
- Provide the student with various opportunities to achieve academic and social success, making adjustments, if necessary.

### Physical

- Provide two sets of books – 1 for home, 1 for school (due to fatigue)
- Allow student to carry water bottle (to prevent dehydration)
- Allow bathroom and clinic passes, as needed.
- Provide an alternative to physical education activities that involve contact sports, strenuous exercises, and long distance running.
- Allow student to leave class 5 minute early to get to next class
- Allow student to have a mid-morning and afternoon snack, if needed.
- Provide a shortened work day or rest period, if needed
- Give the student a locker close to his/her classes, or 2 lockers if necessary.
- Provide the student a parking space close to the school entrance.
- Provide elevator access, when necessary.

In the years following a child's diagnosis, it is important to make sure that the parent/guardian and school are communicating well. Frequent parent-teacher conferences can be helpful to assess any changes in learning the child may experience as a result of their condition and/or treatment. When parents and schools know what learning problems may occur over time, they can better anticipate the needs of the child.

### Other Resources

<http://www.cancer.gov/publications/patient-education/wyntk-hodgkin>  
<http://www.cancer.gov/publications/patient-education/wyntk-non-hodgkin-lymphoma> <http://www.survivorshipguidelines.org/>  
<http://www.ils.org/content/nationalcontent/resourcecenter/freeducationmaterials/childhoodbloodcancer/pdf/childhoodleukemialymphoma.pdf>

### School Services Department

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