

Understanding

High-Grade Non-Hodgkin Lymphoma

Caring for people with cancer

Understanding

High-Grade Non-Hodgkin Lymphoma

This booklet has been written to help you understand more about high-grade non-Hodgkin lymphoma. It has been prepared and checked by haematologists, cancer doctors, nurses and patients. The information is an agreed view on this lymphoma, its diagnosis and treatment and key aspects of living with it.

If you are a patient, your doctor or nurse may wish to go through the booklet with you and mark sections that are important for you. You can also list below any contact names and information you may need.

Specialist nurse	Tel:
Family doctor (GP)	Tel:
Haematologist	Tel:
Medical oncologist	Tel:
Radiation oncologist	Tel:
Radiation therapist	Tel:
Medical social worker	Tel:
Hospital day ward	Tel:
Emergency number	Tel:
Treatments	Review dates

If you like, you can also add:

Your name

Address

This booklet has been produced by Nursing Services in the Irish Cancer Society to meet the need for improved communication, information and support for cancer patients and their families throughout diagnosis and treatment. We would like to thank all those patients, families and professionals whose support and advice made this publication possible.

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Introduction

This booklet has been written to help you learn more about the highgrade form of non-Hodgkin lymphoma (NHL) in adults. It describes what it is and how it is diagnosed and treated. The booklet is divided into five parts.

- Part 1 gives an introduction to lymphomas, including symptoms and diagnosis.
- Part 2 discusses the different treatments used for high-grade NHL, and possible side-effects.
- Part 3 discusses the different subtypes of high-grade NHL in more detail.
- Part 4 discusses how you can cope with your feelings and the emotional effects of having lymphoma.
- Part 5 gives information on further sources of help and support. This includes helpful organisations, books, support groups and websites.

We hope the booklet answers some of your questions and encourages you to discuss them with your doctors and nurses. We cannot advise you about which treatment to choose. This decision can only be made by you and your doctors when all your test results are ready. If you have lowgrade NHL, call the National Cancer Helpline on 1800 200 700 for a copy of the booklet, Understanding Low-Grade Non-Hodgkin Lymphoma. You can also visit a Daffodil Centre or download a copy from www.cancer.ie

Reading this booklet

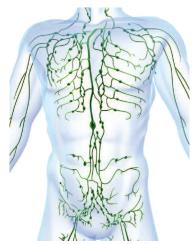
Remember you do not need to know everything about high-grade lymphomas. There are so many different subtypes that it can all be very confusing. Read about the subtype that is relevant to you. If you cannot remember what type you have, ask your doctor or nurse to write it down for you. Read a section about a particular item as it happens to you. Then when you feel relaxed and want to know more, read another section. If you do not understand something that has been written, discuss it with your doctor or nurse. You can also call the National Cancer Helpline on Freefone 1800 200 700 for information. It is open Monday–Thursday 9am–7pm and Friday 9am–5pm. You can also visit a Daffodil Centre if one is located in your hospital. See page 66 for more about Daffodil Centres.

About lymphoma

What is the lymphatic system?

The lymphatic system is an important part of your immune system that helps you fight infection. It refers to the tissues and organs that make, store and carry white blood cells.

Like your blood system it is made up of a network of tiny tubes that pass all around your body. These tubes contain a clear fluid called lymph that has white blood cells to fight infection. These white blood cells are called lymphocytes. They destroy and remove viruses, bacteria

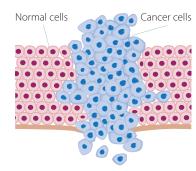


Lymphatic system

and fungi from your body. The lymphatic system is made up of your bone marrow, tonsils, spleen, thymus and lymph nodes. Throughout your body, there are hundreds of small glands called lymph nodes. Larger glands can also be found in your neck, armpit, chest and abdomen. You may only become aware of them if they become swollen or enlarged.

What is lymphoma?

Lymphoma is cancer of the lymphatic system. All cancers are a disease of the body's cells, which are the building blocks of your body. Normally, cells grow and divide in a controlled way and replace old cells when needed to keep your body healthy.



In lymphoma, the cells that are affected are lymphocytes. These white cells grow out of control and do not die off as they naturally would. The abnormal cells start to collect in your lymphatic system, particularly in your lymph nodes. They in turn cause swellings known as lymphomas. Sometimes lymphomas begin in organs such as your stomach or thyroid. One in three lymphomas occurs in places other than lymph nodes.

For information about the types of lymphoma, see page 12.

How common is lymphoma?

In Ireland, non-Hodgkin lymphoma is the fifth most common cancer in men and the eighth in women. Each year about 306 women and 420 men are diagnosed with it. It affects men slightly more than women and in general can occur at any age, but usually over 60.

What causes lymphoma?

The exact cause of lymphoma is unknown. Even so, research continues to look for possible causes. Lymphoma is not inherited, but some people may be at greater risk of developing it. For example:

- Reduced immunity: Lymphomas are more likely to develop if your immunity is reduced due to an illness (like HIV) or if taking medication to prevent rejection after an organ transplant. It may also occur if you have been treated for another cancer.
- Chemicals: In a small number of cases, working with chemicals such as insecticides and herbicides seems to increase the risk of developing lymphoma.
- Immune system conditions: If you develop conditions that affect your immune system, you may be more at risk of getting lymphoma later in life. These conditions include rheumatoid arthritis, haemolytic anaemia, coeliac disease, Sjögren's syndrome, lupus and psoriasis.
- Viruses and bacteria: Certain viruses can help lymphoma to develop. For example, Epstein-Barr virus, hepatitis C virus, and human T-cell leukaemia virus 1. But like other cancers, lymphoma is not infectious and cannot be passed on to other people.

What are the symptoms of lymphoma?

With a high-grade lymphoma, symptoms often appear early. The first symptom is usually a lump or painless swelling of the lymph nodes in your neck, armpit or groin that does not go away. Other symptoms, known as B symptoms, may include the following:

- Night sweats these can be drenching
- High temperatures or fevers
- Loss of appetite
- Unexplained weight loss
- Feeling tiredness all the time (fatigue)
- Itchy skin
- Skin rash

Sometimes you might have lymphoma in other areas of your body, for example, your stomach, bowel, skin or brain. In these cases the symptoms can be quite different. For example, with lymphoma in your bowel or stomach, you may experience abdominal pain, diarrhoea or indigestion.

Remember that all of these symptoms can be caused by conditions other than lymphoma. But do get them checked out by your doctor, who will decide what to do.



To sum up

- The lymphatic system is an important part of your immune system that helps you fight infection.
- Lymphoma is cancer of the lymphatic system.
- In Ireland, lymphoma is the fourth most common cancer in men and the sixth in women.
- The exact cause of lymphoma is unknown. Risk factors include reduced immunity, exposure to chemicals, immune system conditions and viruses.
- The main symptom of lymphoma is a lump or painless swelling in your neck, armpit or groin.

How is lymphoma diagnosed and staged?

Most people begin by visiting their family doctor (GP). In most cases it is not possible for your GP to confirm a diagnosis of lymphoma. If your GP has concerns about you, he or she will refer you to a hospital for further tests. At the hospital the doctor will ask you questions about your health before doing a physical exam. The following tests will be done:

- Blood tests
- Lymph node biopsy

Blood tests: These blood tests will include a blood count to see how many red cells, white cells and platelets are in your blood. Blood tests to check if your kidneys and liver are working well will be done too. Blood tests can also show if you have any infections and can give information on how your lymphoma might behave.

Lymph node biopsy: Your doctor may have to remove a lymph node or take a biopsy from another area and examine it under a microscope. A biopsy is a sample of cells and can confirm if you have lymphoma or not. This test can sometimes be done under local anaesthetic, but in most cases a general anaesthetic is needed.

Before the test you may be given a mild sedative to help you relax. A local anaesthetic is placed on your skin to numb the area. A small cut is then made through your skin and the lymph node is removed and sent to the laboratory to be examined. A couple of stitches are generally needed at the biopsy site. This test can be uncomfortable but only lasts about 5–10 minutes. As soon as the sedation has worn off you can go home. But you will have to arrange for someone to take you home, as you will be feeling sleepy. You cannot drive for 24 hours after the test.

A general anaesthetic may be needed if the lymph node is not easy to locate. In this case you will not be allowed to eat or drink for a few hours before the test. You may also be given a sedative. This will help you feel more relaxed when going to theatre. The test takes about 15–20 minutes to do. After the test you cannot eat or drink anything for at least 4 hours. You should be allowed to go home the next day.

If the enlarged lymph nodes are in your chest or abdomen, you may need open surgery to get a suitable sample to examine. If the biopsy shows that you have lymphoma it will also show the type of lymphoma.

Further tests

If the biopsy shows that you have non-Hodgkin lymphoma, your doctor will refer you to a specialist, either a haematologist or a medical oncologist. The specialist will want to do further tests. This is known as staging. These extra tests are important because they will show if the disease is found in other tissues. It will also help your doctors to decide on the best treatment for you. The staging tests will show:

- The number and location of affected lymph nodes.
- If the affected lymph nodes are above or below your diaphragm. Your diaphragm is the thin muscle under your lungs and heart that separates your chest from your abdomen.
- If the disease is found in your bone marrow or in places outside the lymphatic system, such as your liver.

Tests may include:

Chest X-ray

Bone marrow biopsy

CT scan

MRI scan

Ultrasound scan

Lumbar puncture

PET scan

Chest X-ray: Usually a chest X-ray is done to check your general health.

CT scan: This is a special type of X-ray that builds up a detailed picture of the tissues inside your body. For the test, you lie still on a table which moves your body into a doughnut-shaped machine. You will not feel a thing as the scan is painless. For some CT scans you may be asked to fast for 4 hours beforehand.



CT scan

For others, you may be given a special drink or injection which helps show up certain parts of your body on the scan. Do let the radiographer know if you have asthma or are allergic to iodine before you take the drink or injection.

Understanding high-grade non-Hodgkin lymphoma

At first the injection might make you feel hot all over for a few minutes. The preparation for a CT scan can vary between hospitals but your doctor or nurse will tell you what to do. This test is usually done as an outpatient in the X-ray department.

Ultrasound scan: This is a special scan that builds up a picture of the tissues inside your liver and upper abdomen using sound waves. You will be asked to lie on your back and a gel will be spread over the area to be scanned. A small device like a microphone, which makes sound waves, is used to take the scan. The sound waves are then changed into a black and white picture by a computer. This test is painless and only lasts about 10 minutes. It is done in the X-ray department of the hospital.

PET scan: PET or positron emission tomography is a scan used in the staging of lymphomas. It is also a useful way of seeing how you are responding to treatment. PET uses a low dose of radioactive sugar (glucose) to measure activity in your cells.

A CT scan is usually done together with the PET scan. Once you are relaxed, the sugar is injected into your arm and travels to all the cells in your body. Because cancer cells absorb large amounts of the sugar, there will be more radioactivity where the cancer cells are located. After an hour, the scan is taken and can show if the lymphoma is found in other tissues and organs. Before the test, you may have to fast for a few hours and the scan itself may take up to 1 hour. PET is safe to use and there are no side-effects.

Bone marrow biopsy: You might have a bone marrow aspiration and biopsy as part of the staging. Aspiration means removing some bone marrow fluid, whereas biopsy means removing a small piece of bone with marrow cells in it. Both samples are examined under a microscope to see if there are any lymphoma cells present. The samples are usually taken from the back of your pelvis at the hip bone.

Before the test you will be given a local anaesthetic to numb the area. After that, a needle is passed through your skin into your bone marrow. A tiny sample of the bone and bone marrow is then taken. You will feel some discomfort during it but it usually takes just 15–20 minutes to do. The area may feel tender and sore for a few days afterwards. You may need to take a mild painkiller for a day or two.



Bone marrow biopsy

MRI scan: This type of scan uses magnetic energy to build up a picture of the tissues inside your body. It does not hurt but it can be quite noisy. You will be given earplugs to wear during the scan. Before the scan you might have an injection to show up certain areas of your body. During the scan you cannot wear any metal jewellery and if you have certain medical devices implanted in your body, like pacemakers, you are usually not suitable for the test. Your doctor will advise you about this. Most people can go home afterwards.

Lumbar puncture: You might have a lumber puncture done before starting treatment. This test will show if there are any lymphoma cells in the spinal fluid around your brain and within your spinal cord. You will be asked to lie down on a couch on your side with your knees curled up under your chest. A local anaesthetic will be injected into the lower part of your back. A thin needle will then be put in and a small amount of spinal fluid withdrawn. It is possible to give chemotherapy in the spinal fluid after the sample has been removed.

Your doctors will look at the sample under a microscope to see if any lymphoma cells are present. This test is not painful, but you may feel discomfort during it. You will not be allowed to sit up or get out of bed for 1-2 hours afterwards. This can vary, so your nurse will tell you what to do before you have the test. Repeated lumbar punctures and injections of chemotherapy may be needed as part of your treatment.



National Cancer Helpline Freefone 1800 200 700

Waiting for results

It may take at least a few weeks for all the test results to come back. Naturally, this can be an anxious time for you. You might find it helpful to talk to a relative or close friend during this time. Do talk to your doctor, specialist nurse or GP if you need further information. Or you may wish to call the National Cancer Helpline on 1800 200 700 to speak to one of our specially trained nurses or a patient volunteer. You can also visit a Daffodil Centre.



To sum up

- Lymphoma is diagnosed by a lymph node biopsy and blood tests.
- Depending on the biopsy results, you may need other tests:
 - Chest X-ray
- Bone marrow biopsy

CT scan

- MRI scan
- Ultrasound scan
- Lumbar puncture (and possibly chemotherapy into the spinal fluid)

PET scan

How are lymphomas classified?

Lymphoma is classified or grouped in different ways. There are two main types: Hodgkin lymphoma and non-Hodgkin lymphoma. Even though they are very alike in many ways, their treatment is not the same. The only way to tell the difference is by looking at the cells under the microscope. In Hodgkin lymphoma the cells have a particular appearance and are called Reed-Sternberg cells. Any lymphoma that does not have these Reed-Sternberg cells is called non-Hodgkin lymphoma.

Types of lymphocytes: The white blood cells that are affected in lymphoma are lymphocytes. There are two types of lymphocytes: B-cells and T-cells. B-cells are made in your bone marrow and make antibodies to fight infection. T-cells are made in your thymus gland behind your breastbone and help your immune system fight infection and disease in other ways. So you can have either a B-cell lymphoma

or a T-cell lymphoma. B-cell lymphomas are more common in non-Hodgkin lymphoma. T-cell lymphomas occur more rarely, mainly in children and young adults.

Low grade or high grade: Lymphomas can be broadly divided into high and low grades. The appearance of the cells under the microscope tells how quickly they are growing. Some non-Hodgkin lymphomas grow slowly and need little or no treatment for many years. These are low-grade lymphomas, which are also called indolent lymphomas. Other lymphomas grow rapidly and may cause serious ill health if not treated quickly. These are the high-grade lymphomas or aggressive lymphomas. They can be either B-cell lymphomas or T-cell lymphomas.

The classification of your lymphoma will give your doctor more information, in particular about:

- What type of lymphocyte has become cancerous
- How quickly it is growing
- What parts of your body might be affected
- What is the most suitable treatment for it

Treatment for lymphoma, even at an advanced stage, can be very successful. Many people can be cured or their disease controlled for many years.

What does high-grade non-Hodgkin lymphoma mean?

High-grade non-Hodgkin lymphoma refers to a range of different fast-growing lymphomas. They usually cause symptoms and will need treatment straight away. It is possible to cure most of them.

Subtypes: See page 43 for more details about the most common high-grade subtypes.

Do ask your doctor or nurse for more information about your grade or subtype of non-Hodgkin lymphoma. You can also contact the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre.

What are the stages of non-Hodgkin lymphoma?

The stage refers to how much of your body is affected by the lymphoma. Knowing the type and the extent of the cancer helps your doctors to decide on the right treatment for you. Different systems can be used to stage non-Hodgkin lymphoma. A basic one is the number system. Here non-Hodgkin lymphoma is defined as stages 1-4, depending on how many lymph nodes or organs are involved.

Stage 1	One group of lymph nodes is affected on one side of your diaphragm or a single organ
Stage 2	Two or more groups of lymph nodes are affected on one side of your diaphragm
Stage 3	Lymph nodes are affected on both sides of your diaphragm
Stage 4	Lymphoma can be found in organs outside your lymphatic system or in your bone marrow

Doctors also use a letter code – either A or B – to say if you have symptoms other than swollen glands or not. For example, weight loss, fever and night sweats. If you have no symptoms, your disease will be classified as A. If you have symptoms, it is B. Sometimes lymphomas can occur at unusual places outside your lymph nodes. For example, in your stomach. This is called extranodal lymphoma and the stage will include the letter E (standing for extranodal).

- Early stage: This includes stage 1 and possibly stage 2.
- Advanced stage: This is usually stage 2, 3 or 4.

High-grade lymphoma is not like other cancers. Their advanced stage may mean the disease cannot be cured and treatment options are limited. This is not true for lymphoma. It is possible to treat and cure advanced stage lymphoma.

Once your doctors know the subtype of lymphoma and the stage and grade, they can plan the best treatment for you. If you need more

information, do ask your doctor or nurse. They can explain the stages of non-Hodgkin lymphoma in more detail.



To sum up

- There are two main types of lymphoma: Hodgkin and non-Hodgkin.
- There are two types of lymphocytes, giving rise to a B-cell lymphoma or a T-cell lymphoma.
- Non-Hodgkin lymphomas can be high grade or low grade. The grade depends on the appearance of the cells under the microscope.
- High-grade types grow more quickly and are also called aggressive.
- Low-grade types grow much slower and are also called indolent.
- Staging refers to how much of your body is affected by the disease. There are four stages of lymphoma (1 to 4).
- It is possible to treat and cure advanced stage lymphoma.





Treatment and side-effects

How is high-grade non-Hodgkin lymphoma treated?

High-grade lymphomas are faster growing and usually need to be treated fairly quickly. Your type of treatment will depend on where the disease is, your subtype and stage. Your doctor will also take into account your age and general health. A team of specialists will be involved in planning your treatment.

Aims of treatment

High-grade lymphomas respond very well to treatment. They can be cured in many cases. The aim of treatment is to get a long-term remission. Remission means the lymphoma is no longer active and is under control. It has been reduced or got rid of completely. Remission can be either partial or complete. A complete remission means there are no visible signs of the lymphoma after treatment. With partial remission, the lymphoma has been reduced by at least a half but is not completely gone. The longer you are in remission, the less likely the lymphoma will return. A relapse is when the disease comes back after treatment.

It is more usual to say your disease is in remission rather than cured, as high-grade lymphomas can recur. If it does relapse, it can be treated again.

Treatment of limited disease (stage 1A)

Stage 1A is where only one group of lymph nodes is affected by the lymphoma and you have no B symptoms. In this case, you might receive one or more of the following treatments:

- Radiotherapy: You might be given radiotherapy alone to the affected nodes.
- Chemotherapy and antibody therapy: Your doctor might decide to give you a short course of chemotherapy and an antibody therapy called a monoclonal antibody as well as radiotherapy. This is done to increase the chances of curing the disease.

People diagnosed with early stage disease are fairly rare. For more information, see page 29 on radiotherapy, page 19 on chemotherapy, and page 28 on antibody therapy.

Treatment of all other stages

Most high-grade lymphomas are usually treated like they were at an advanced stage.

- Chemotherapy and antibody therapy: Intensive chemotherapy is often given to shrink high-grade lymphomas very quickly. You might get three or four different drugs with or without an antibody therapy. Steroids are often given as well to kill the lymphoma cells and to improve how the chemotherapy works.
- Intrathecal chemotherapy: Sometimes these lymphomas can affect your brain and spinal cord. Chemotherapy given into a vein generally cannot reach these areas. So if the lymphoma is found in your brain or spinal fluid or your doctor thinks you are at high risk of it developing, you will get chemotherapy into the spinal fluid (intrathecal). This is given during a lumbar puncture.

For more information, see page 11 on lumbar puncture, page 19 on chemotherapy, page 29 on radiotherapy, and page 28 on antibody therapy.

Relapse

A relapse is when the disease comes back after treatment. If it does or there is a high risk of it happening, other treatments may be used. These can include high-dose therapy with a stem cell transplant. A relapse can happen several months or years after treatment.

Refractory disease

If the lymphoma did not respond to the first course of treatment or came back very quickly afterwards, this is called refractory disease. It is much harder to treat than a relapse. Chemotherapy or antibody therapy may be used to treat it.

What if I am unsure about what treatment to have?

Before starting treatment your doctor will explain why you need the treatment and what its aims are. You may be asked to sign a consent form giving your permission for the treatment to be given to you. Before you sign, make sure you are aware of the advantages and disadvantages of the treatment and any other options available to you. Give yourself time to think about the decision. If you are unsure or confused, do ask your nurses and doctors to explain it again.

You are free not to have the treatment either, but it is best to discuss any of your concerns with your doctor before you come to this decision. He or she will explain what might happen if you did not have the treatment. Even though the possible benefits of each treatment may vary slightly between patients, in general chemotherapy and radiotherapy can cure your lymphoma or put it into remission. If you are still unsure and would like a second opinion, discuss it with your doctor. Most doctors are willing to refer patients to another haematologist or medical oncologist for a second opinion.

Chemotherapy

Chemotherapy is a treatment using drugs that can cure or control lymphoma. These drugs can be used on their own or with each other. Chemotherapy can also be given before or after radiotherapy. The drugs used in chemotherapy are carried in your bloodstream to almost every part of your body.

It is not possible to get all the treatment you need during one hospital visit, so you may have to attend it regularly for 3-6 months. There is usually a rest period between each treatment visit to allow your body time to recover from the effects of the drugs. Normally each visit to the hospital where chemotherapy is given is called a cycle. The number of cycles you have will depend on the stage of the lymphoma and how well it is responding to treatment.

How is chemotherapy given?

Chemotherapy for fast-growing lymphomas is usually given into a vein. It can be given as an injection or by an infusion into a vein (drip). A number of drugs may be used with each other. You may have to spend some time in hospital for this treatment. However, most treatments can be given in day care. Treatments are often given over several months.

If you have lymphoma cells in your brain and spinal fluid or your doctor thinks you may be at high risk, you will need extra treatment. You may be given special chemotherapy injections into the spinal fluid. To do this, a series of lumbar punctures will be done and the chemotherapy given at the same time. This is called intrathecal chemotherapy.

Central line: If your treatment involves a lot of injections or infusions, it may help to have a central line put into a large vein. This device can be left in place throughout your treatment. It will make it much easier for you to get treatment and spare you the discomfort of repeated needle jabs.

A central line is a narrow flexible plastic tubing (a catheter) put into a main vein and brought out through your chest or arm. You will be given a local anaesthetic beforehand. In most cases, it takes about 10–15 minutes to put in. Removing it is very simple, sometimes needing a small local anaesthetic.



Central line

Portacath: There are other ways to have easy access to your veins for taking blood samples and giving treatment. Sometimes the tube is attached to a port called a portacath. This is a small round plastic or metal disc placed under your skin. The port can be used for as long as is needed. Talk to your doctor or nurse, who will explain the different options to you.

What chemotherapy drugs are used?

There are many chemotherapy drugs used to treat high-grade lymphoma. You may be given one drug or a combination of them. Most treatment schedules include steroids. The drugs most commonly used include:

 CHOP – cyclophosphamide, doxorubicin, vincristine and prednisolone

Bendamustine is a newer drug sometimes used in high-grade lymphomas. In recent years, an antibody therapy called rituximab has been developed and is now used in the treatment of most B-cell lymphomas. It is an antibody which specifically targets cells that carry a marker on their surface known as CD20. It is usually combined with the drugs listed above, though it can sometimes be used on its own. See page 28 for more about the antibody therapy called monoclonal antibodies.

What happens if my lymphoma recurs?

Many people have no further problems after their first treatment but for some the lymphoma does recur. This is called a relapse in high-grade non-Hodgkin lymphoma. A relapse is more likely within the first 2 years after treatment. Remember even if the lymphoma recurs it may be possible for you to have further treatment.

The treatment you receive will be planned by your doctors. It will depend on your age, overall health and what treatment you received before. Usually a different combination of chemotherapy drugs can be given. A stem cell transplant may be possible for some people.

What are the side-effects of treatment?

The side-effects of chemotherapy vary from one person to another and depend on the drugs used. These unwanted effects happen because the chemotherapy can affect both the lymphoma cells and normal cells. In many cases side-effects can be well controlled with medication.

Before you start your treatment ask your doctor about any possible side-effects. Do tell him or her about the way you are feeling during

your treatment as most side-effects can be eased with medication. In most cases, the side-effects go away once the treatment ends or soon afterwards. Your doctor or nurse can give you something to stop most of them or make them easier to cope with.

Side-effects may include:

InfectionBruisingDiarrhoeaConstipation

Tiredness (fatigue)Numbness or pins and needles in hands and feet

Sore mouthHair loss (alopecia)

Loss of appetiteInfertility

Infection: Chemotherapy can make you more likely to get infections. This happens because most chemotherapy drugs affect the bone marrow that makes the white blood cells that fight infection. If you do not have enough white cells, even minor infections such as a cold or sore throat could make you quite ill. During treatment cycles you will have regular blood tests to make sure you have enough white blood cells. If they are low, your doctor might decide to give you growth factors. These are hormones that occur naturally and can help to control how blood cells are made. The most common one is G-CSF, which stands for granulocyte colony-stimulating factor. It can boost the number of white cells made.

You will be asked to watch out for signs of infection at all times, especially if your white cells are low. These signs could include feeling shivery and unwell or running a high temperature of 37.5°C or higher. If this happens tell your doctor straight away. He or she will tell you what to do. Some hospitals prefer you to ring them directly. Check this out with your nurse or doctor before you start treatment. If you have a high temperature or feel unwell, you will need a blood test. You may need antibiotics to treat the infection.

While on treatment you will be more at risk of picking up infections. Try to avoid close contact (such as hugging or kissing) with people who have colds or flu and other infections such as chickenpox, shingles or measles. Let your doctor know if you are in contact with these or any other infections. Do wash your hands often during the

day, especially before you eat and after going to the bathroom. Also, try to avoid crowds. Infection can be a very serious complication of chemotherapy. It needs to be treated as soon as possible. Talk to your doctor or nurse, who will give you more information.

Bruising: Platelets in your blood help to clot and stop any bleeding if you hurt yourself. If there are not enough platelets in your blood (thrombocytopaenia), you may bleed or bruise more easily, even from a minor injury. Let your doctor or nurse know straight away if you are bruising easily or if you notice tiny red spots under your skin, which can look like a rash (petechiae). He or she will give you advice on what to do.



Tips & Hints – anaemia, infection, bleeding



- Take plenty of rests and breaks if you are feeling tired or fatigued.
- Avoid close contact, such as hugging or kissing, with people who have colds, flu's and other infections, especially chickenpox, shingles or measles.
- Wash your hands often during the day, especially before eating and after going to the toilet.
- Take care to avoid injury. Use an electric razor when shaving. Wear thick rubber gloves when gardening to protect yourself from cuts.
- Contact the hospital immediately if you have a temperature of 37.5°C (99.5°F) or higher, shortness of breath or bleeding that cannot be stopped.

Tiredness (fatigue): You may feel very tired during treatment. This tiredness can last for some months after treatment has ended. If this happens, do take things easier. Do less than you normally would and rest as much as you can. Ask your family or friends to help you at work or at home. The tiredness can also be due to having fewer red blood cells (anaemia) because of changes in your bone marrow caused by chemotherapy. See page 39 for more information about feeling tired and fatigue. You can also call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a free copy of the booklet, *Coping with Fatigue*, or download it from **www.cancer.ie**

Nausea and vomiting: Not everyone feels sick with chemotherapy. But if you do it can happen before, during or after treatment. It may last for several hours or for a few days after treatment. There is medication available that prevents or reduces nausea and vomiting. These are called anti-emetics. Ask your doctor to give you medication to stop you feeling sick and follow his or her instructions while you are on treatment.

Sore mouth: Some drugs used to treat lymphoma can cause a sore mouth. They can also cause little ulcers to appear on your tongue, gums and inside the cheeks of your mouth. Try to keep your teeth, gums and mouth very clean, as this will reduce the risk of getting a mouth infection. Clean your teeth after each meal, using a very soft toothbrush. If you have dentures, remove them if your gums are sore. There are special mouthwashes that you can use too. Your nurse will show you how to use them properly.

Loss of appetite: It is good to eat as best you can while on chemotherapy. Eat smaller amounts more often. If you do not feel like eating during treatment, you could try replacing some meals with special food supplements. The hospital dietitian will be available to help you. You can also call the National Cancer Helpline on 1800 200 700 for a copy of the booklet, *Diet and Cancer*. Or you can visit a Daffodil Centre or download a copy from www.cancer.ie

Diarrhoea: Passing watery bowel motions more than three times a day is known as diarrhoea. You might also have cramping or abdominal pain. Tell your doctor, as he or she can give you medication to prevent this. Drink plenty of clear fluids. Let your doctor know if the diarrhoea lasts for longer than 24 hours.

Constipation: Chemotherapy may slow down the movement of your bowel and your regular bowel habit may change. As a result, you may have difficulty passing a bowel motion. This is called constipation. If this occurs, let your doctor or nurse know as soon as possible. You may need to drink more clear fluids or take a laxative. In some cases your doctor may have to adjust your treatment.

Numbness or pins and needles in hands and feet: Some chemotherapy drugs can cause tingling or a burning sensation in your

hands and feet. This is known as peripheral neuropathy. You may also have trouble picking up small objects or buttoning up a shirt or cardigan. This effect is almost always temporary and goes away after treatment stops. But do tell your doctor or nurse if this happens, as some changes may need to be made to your treatment. For a free factsheet on peripheral neuropathy, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre.

Hair loss (alopecia): Some drugs may also cause hair loss. The amount of hair loss depends on the drugs you are given. Your hair might just thin out a little bit. If you do lose your hair, it can happen about 2–3 weeks after your first cycle of chemotherapy. You may get a tingling sensation in your scalp a day or two beforehand. Try not to worry as your hair will grow again once treatment ends.

It is normal to feel upset at the thought of losing your hair. Talk to your nurse or medical social worker about your feelings. He or she will help you to find ways to cope with hair loss. You might like to wear a wig, hat, scarf or turban. The staff can give you names of hairdressers and wig suppliers. Ask them too if you can get financial assistance towards the cost of a wig. For some patients the amount of hair loss is small and a wig may not be needed. For more information, especially on wig suppliers, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a copy of the free factsheet called *Hair Loss and Cancer Treatment*. You can also download a copy from www.cancer.ie



Tips & Hints – hair care



- If the drugs are likely to cause hair loss, it can help to have your hair cut short before treatment. The weight of long hair pulls on your scalp and may make your hair fall out faster.
- Use gentle hair products.
- Do not perm your hair during chemotherapy, or for 3 months afterwards.
- If you colour your hair, use a mild vegetable-based colourant. Ask your chemotherapy nurse or hairdresser for advice.
- Try not to brush or comb your hair too roughly use a soft or baby brush.

- Avoid using hair dryers, curling tongs and curlers. Pat your hair gently after washing it.
- Use a gentle, unperfumed moisturiser on your scalp if it becomes dry, flaky or itchy. Natural oils such as almond oil or olive oil are suitable.
- If you are likely to lose your hair, ask your doctor or nurse about wigs early on, so that the wig will be as close a match to your normal hair.
- You may like to wear a hat or scarf when you go out. There are also turbans which can be worn in the house.

Infertility: Some of the drugs used to treat non-Hodgkin lymphoma may cause infertility. It may be temporary or permanent. See page 35 for more information.

Other side-effects

If you have a side-effect or symptom other than those listed above that concerns you, tell your doctor or nurse straight away. He or she will tell you what to do. For more information about chemotherapy and its side-effects, contact the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a free copy of the booklet *Understanding Chemotherapy* or download it from **www.cancer.ie**

Steroid therapy

Steroids are drugs often given with chemotherapy drugs to help treat non-Hodgkin lymphoma. They can kill the lymphoma cells and bring symptoms under control quite quickly. They are also given to help with some of the side-effects you might experience. In fact, they can help you feel better quite quickly.

Side-effects of steroid therapy: There are a number of side-effects to steroids. In the short term these include:

Increased appetite

Feeling more energetic

Stomach upset

Difficulty in getting to sleep

It is better to take steroids as early in the day as possible. Take them no later than four o'clock in the afternoon if getting to sleep is a problem for you.

Other side-effects: If you have to take steroids for some time, you may have some other temporary side-effects. These may include:

- Puffiness of your eyelids, hands, fingers and feet
- Raised blood pressure
- Increased level of sugar in your blood

If you develop high blood sugars your doctor will prescribe treatment. This will need to be taken daily to bring your blood sugar back to normal. Your doctor may also reduce the amount of steroids you are taking.

Long-term effects of steroids: Sometimes treatment for non-Hodgkin lymphoma involves taking steroids for a long time. This can have an effect on your body. You will notice that you put on weight, especially on your face, waist and shoulders. Your face will fill out and appear more rounded. You may also have a lowered resistance to infection. Try to avoid close contact with people who have colds, flu or any kind of infection while you are taking steroids. Do remember that all these side-effects are temporary and will gradually disappear once you are no longer taking steroids.

It is important that you keep taking the exact dosage your doctor prescribes. He or she will explain your steroid medication to you in more detail.



To sum up

- Chemotherapy is a treatment using drugs to cure or control lymphoma.
- The drugs are usually given directly into a vein as an injection or through an infusion (drip).
- The side-effects vary depending on the drugs used. Most side-effects are well controlled with medication.
- Steroids are drugs often given with chemotherapy to help treat non-Hodgkin lymphoma. They can kill lymphoma cells and improve your symptoms.

National Cancer Helpline Freefone 1800 200 700

Antibody therapy (biological therapies)

Biological therapies use your body's immune system to control or destroy cancer cells. There are many different types of biological therapies. Antibody therapy or immunotherapy is the kind used in lymphoma. The drugs are called monoclonal antibodies and they can find a particular type of cancer cell in your body. They attach themselves to a protein on the surface of the lymphoma cells and destroy them.

Monoclonal antibodies can be used alone with chemotherapy or with radiotherapy. The treatment can be given as part of the first treatment or if the disease recurs. The most common monoclonal antibody is rituximab (MabThera®). The treatment can be given in different ways. You might have it on its own by weekly infusion into a vein.

What are the side-effects?

Usually most people notice no side-effects when given a monoclonal antibody on its own. But allergic reactions to them can happen. If they occur, it is usually during the first infusion. For this reason, the first dose is given slowly over a number of hours. But you will be watched closely during this time. Symptoms include:

- Fever and chills
- Flu-like symptoms
- Low blood pressure

Do tell your doctor or nurse if you get a swollen feeling in your tongue or throat, irritation of your nose, breathing problems, wheeze, cough, skin itching or rash. You will also be given medication before treatment begins to make these side-effects less likely. This medication might make you drowsy, so it is best not to drive home afterwards. These symptoms normally go away once the infusion is slowed down or when it ends.

Delayed side-effects: These are rare. But your white cell count may drop (neutropenia), making you more prone to infection. Your doctor and nurse will explain this treatment to you in more detail.



To sum up

- Antibody therapy uses your body's immune system to control or destroy cancer cells.
- The ones used most often to treat lymphoma are monoclonal antibodies.
- They attach themselves to the cancer cells and destroy them.
- The most common monoclonal antibody is rituximab (MabThera®).

Radiotherapy

Radiotherapy is rarely used for high-grade lymphomas. It is a treatment where high-energy X-rays are aimed at a cancer to cure or shrink it. In non-Hodgkin lymphoma the X-rays are usually delivered through a machine called a linear accelerator. This is known as external beam radiotherapy.



External beam radiotherapy

Radiotherapy is a local form of treatment. The beams are only aimed at the lymphoma. It may be used on its own when the lymphoma is found in one or two groups of lymph nodes in the same part of your body. It may also be given after a course of chemotherapy.

Radiotherapy can also be used if the lymphoma is found in the fluid around your brain or if there is a high risk that it may develop there. Treatment planning is a very important part of radiotherapy so it may take a few visits before your treatment can go ahead.

What are the side-effects of treatment?

Radiotherapy is given directly to the site of the lymphoma and nearby lymph nodes. As a result, the side-effects that occur are related to the part of your body being treated. Some people have only mild symptoms, while for others the side-effects can be more severe. It depends on how much treatment you need and what part of your body is being treated. The most common side-effects that may occur are:

Difficulty swallowing or sore throat

Skin changes

Sore mouth

Tiredness (fatigue)

Nausea and vomiting

Shortness of breath

Weight loss

Hair loss

Diarrhoea

For more information about the side-effects of radiotherapy, contact the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a free copy of the booklet *Understanding Radiotherapy* or download it from **www.cancer.ie**



To sum up

- Radiotherapy is where high-energy X-rays are aimed at the lymphoma to cure or shrink it.
- It is given directly to the lymphoma site and nearby lymph nodes.
- It only affects the lymphoma in the area being treated.

Stem cell transplant

There are a few situations where you might benefit from a stem cell transplant after high-dose chemotherapy. These include:

- If there is a high risk of the lymphoma coming back after treatment.
- If your first treatment has failed, that is, the disease has not responded (refractory).
- If the lymphoma has returned (relapsed).
- If you are involved in a clinical trial.

If this is relevant to you, your doctor and nurse will discuss it with you.

Healthy stem cells can be collected and removed from your body before treatment and returned to you afterwards. These stem cells can restore or rescue the bone marrow destroyed during the high-dose treatment. The stem cells are taken from blood or bone marrow. When your own stem cells are used it is called an autologous transplant. If stem cells are taken from a donor, it is called an allogeneic transplant.

There are various stages or steps when having a stem cell transplant. Your doctor and nurse will explain each step as it happens. For more information, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a copy of the booklets, *Understanding Stem Cell Collection* or *Understanding Autologous Stem Cell Transplants*. You can also download them from www.cancer.ie



To sum up

- High-dose treatment with a stem cell transplant can be given if there is a high risk of the lymphoma returning or it is has relapsed, or if treatment has failed.
- By taking stem cells from your body before treatment and returning them afterwards, your bone marrow can be rescued and allowed to make new blood cells.



Research – what is a clinical trial?

Research into new ways of treating lymphoma goes on all the time.

Some look at new anti-cancer treatments, while others look at new ways to stop or slow the growth of lymphoma cells. The best times to give chemotherapy, biological therapy, radiotherapy or a stem cell transplant are also being studied. Doctors are also looking at the use of high-dose treatments in groups of patients who, in the past, were not thought to be suitable for this type of treatment.

Even though the word 'research' or 'new drug' sometimes scares people, there is no need for fear. Before a drug or treatment is used on patients, it goes through many stages to make sure it is safe to use.

Phases of research

There are many stages or phases when research is being done. If a drug or treatment looks as if it might be useful in treating lymphoma, it is given to patients in research studies called clinical trials. These aim to find a safe dose, see what side-effects may occur and which lymphomas can be treated. If early studies suggest that a new drug may be both safe and effective, more trials are carried out. These aim to:

- Find out if the treatment is better than ones already in use.
- Find out if there are more benefits when the new treatment is given together with current ones.
- Compare the new treatment with current best standard treatments.

Taking part in clinical trials

Your doctor may ask you to try a new treatment. There are many benefits to this. You will be helping to improve knowledge about lymphoma and new treatments. There is no need for worry as you will be carefully monitored during and after the study. You might also receive a treatment that later proves to be better than the current best standard treatment.

You cannot be included in a clinical trial without your permission. You can only give this consent if the trial has been fully explained to you, so that you understand what it is about. This is called informed consent. You will also need time to think about it and discuss it with your family or friends. If you decide not to take part, you will still be given the best proven treatment available. Even after agreeing to take part in a trial, you can still withdraw at any time if you change your mind. As part of research into the causes of cancer, your doctors may ask your permission to store some samples of your cancer cells or blood. For a factsheet called *Cancer and Clinical Trials*, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can also download it from www.cancer.ie

After treatment

What follow-up do I need?

Once your treatment is finished you will have to come back for regular check-ups. This is known as follow-up. In the beginning these will be quite often. The intervals will depend on the type of high-grade lymphoma you have and your response to treatment. The visits include seeing your doctor and having tests such as X-rays, scans and blood tests. These visits will continue for a number of years but will become less frequent as time goes by.

These visits are important as they will allow your doctor to check for signs of recurrence and to follow up on any ongoing side-effects that you may have. He or she can also check for signs of new side-effects that may develop after you have finished treatment. It is better to be aware of these as early as possible so that suitable treatment can be given. If you are between check-ups or you have a symptom or problem that worries you, let your doctor know as soon as possible.

Getting back to normal

Tiredness: It can take at least a year for you to get over the effects of treatment. You may still feel tired and lacking in energy. You may not feel ready to lead as active a life as you did before treatment. It is better not to fight these feelings but to allow your body the time it needs to recover.

Work and activities: You may have problems to solve or decisions to make which you deferred because of treatment. These issues may include changing jobs, getting back to work or study and if you can have children or not. If you stopped working during treatment, you can start to go back to your job. But you might want to take it slowly at first by working part-time or reduced hours. You can also resume other activities such as sport, hobbies and other pastimes.

Taking care of your health: Watch out for any signs of infection or other problems. In particular, some people may experience pneumonia or other lung problems. You may find that you have excess mucus, coughing, pain, blocked sinuses or the sniffles. It is best to get the flu

vaccine each winter too and the pneumonia vaccine every 5 years. Also, take good care of your mouth, teeth or dentures, as they can be a source of infection. If you develop any bowel problems, such as ongoing abdominal pain, diarrhoea, bleeding or constipation, contact your doctor as soon as possible.

Cancer risk: Having lymphoma puts you at a higher risk of developing other cancers. For example: bladder, lung, stomach and myeloid leukaemias. It is best to lead a healthy life and visit for doctor if any symptoms develop.

Holidays and insurance: You may decide to go on a holiday once your treatment is over. Check with your doctor first about any special precautions to take or vaccinations you may need. It is best to have travel insurance too. Some insurance companies now provide cover for lymphoma patients. Contact the National Cancer Helpline on 1800 200 700 for more details.

Should I quit smoking?

It is never too late to quit smoking. If you quit, it reduces your chances of developing other cancers and illnesses. These include emphysema, heart disease, stroke and osteoporosis. Smoking can also affect the treatment of cancer. For example, it can reduce how well chemotherapy or radiotherapy works. It can also make their sideeffects worse. Sometimes it may cause rarer side-effects such as breathing and heart problems. This is because radiotherapy can make body organs like the lungs more sensitive to tobacco smoke.

Like many others, you may find giving up smoking hard. But with the right information and support you can do it. If you would like advice or support on quitting, call the National Smokers' Quitline on CallSave 1850 201 203. It is open Monday to Saturday from 8am to 10pm.

If you would like further personal support locally, the helpline can put you in touch with the smoking cessation officer in your area. For more information on giving up smoking, see www.quit.ie. Some hospitals also have stop smoking clinics. Ask your doctor or nurse if there is one in your hospital.

Will treatment affect my sex life?

There is no medical reason why you cannot have sex if you are getting chemotherapy or radiotherapy. Even so, coming to terms with the fact that you have lymphoma can take a while. Your emotions are likely to be turned upside down. You may find it hard to relax when you have a lot on your mind. You may also be feeling tired from the effects of treatment or travelling to the hospital. As a result you may lose interest in sex. This is a normal way to feel at this time.

One common fear is that lymphoma can be passed on to your partner during sex. But this is not true. It is perfectly safe for you to resume having sex. There is no set time for you to be ready to have sex again. It varies from person to person. Once you return to your usual routines your interest in sex should return too. If you have a supportive partner, you may find that talking about your feelings will help ease your anxiety.

Even if you do not feel like having sex, you can still enjoy a close and loving relationship with your partner. If not having sex becomes a problem for you, do seek help. Do not feel guilty or embarrassed to talk to your doctor or nurse about what is troubling you. He or she may refer you for specialist counselling if you think that would help.

Will treatment affect my fertility?

Many couples go on to have healthy babies after one or other partner has been treated for lymphoma. However, some treatments for lymphoma and sometimes the disease itself can cause infertility. This infertility may be temporary or permanent. Before you start treatment your doctor will talk to you about this in more detail. If you have a partner, you may find it helpful to see the doctor together so that you can both talk about your fears and worries.

For women

Chemotherapy: Some drugs used to treat non-Hodgkin lymphoma can affect your ovaries. This means that your periods may stop during or for a few months after treatment. You may get hot flushes, a dry vagina or

other symptoms of the menopause. If it is temporary, your periods may return to normal after a few months. This happens in about a third of women who have short-term infertility brought on by chemotherapy. In general the younger you are, the more likely your regular periods will return and you can still have children.

Understanding high-grade non-Hodgkin lymphoma

Early menopause: The nearer you are to the menopause the more likely chemotherapy will stop your periods permanently. Most of the effects of the menopause can be prevented or reversed by replacing the hormones your ovaries normally make. But it will not be possible to restore your fertility.

Your doctor may prescribe hormone replacement therapy (HRT) for you. This treatment can be given in different ways. For example, in tablet form, through a device put under your skin or by a slow-release patch worn on your arm or leg. Often a simple lubricant such as KY gel, which can be bought from most pharmacies, can help to ease any discomfort during sex. Talk to your doctor if this is an ongoing problem for you.

Contraception: As periods usually stop during treatment you may not know if you are fertile or not. If you are having sex, you must use a reliable method of contraception throughout your treatment and for some time afterwards. This is because there is a risk of miscarriage or birth defects in children conceived during or just after treatment.

Getting pregnant: Many doctors believe it is better not to get pregnant for 2 years after your chemotherapy ends. This gives you a chance to recover from the effects of treatment and by then the chances of the disease coming back are much less. When you have finished treatment there are blood tests that can show if you are fertile or not. Talk to your doctor or nurse if you need more information. They will answer your questions in more detail.

Radiotherapy: Most radiotherapy treatments have no effect on your ability to have children. If the lower part of your body is being treated, special shields can be used to protect your ovaries. However, many specialists recommend that you wait for 2 years after radiotherapy before trying to get pregnant to give your body a chance to get over the effects of the lymphoma and its treatment. You should use a reliable method of contraception throughout your treatment and for some time afterwards.

This is because there is a risk of miscarriage or birth defects in children conceived during or just after treatment.

Freezing your eggs: If there is a risk that your treatment will cause long-term infertility, do discuss it with your doctor. You might have the option of freezing your eggs (oocytes) before treatment begins. The HARI Unit at the National Fertility Centre in the Rotunda Hospital, Dublin provides a service where eggs can be frozen and stored for later use. But remember for most patients with lymphoma it is not possible to delay treatment. It could take 6-8 weeks before your eggs are frozen and this timeframe is not practical. Also, there is no guarantee that egg freezing will be a success for lymphoma patients. Do ask your doctor for more information. You can also call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre.



For men

For some men the lymphoma itself can cause infertility. Sperm tests carried out before treatment starts will show if this is the case. Some types of treatment can also cause infertility. This may be temporary or permanent.

Understanding high-grade non-Hodgkin lymphoma

Thinking about infertility: The prospect of infertility can be a difficult issue to come to terms with. If you are young you may not have thought about having children. You may also want to get started on treatment straight away. At times like this having children or not may not be a priority for you.

However, as many lymphomas can be completely cured, it is most important that you give yourself some time to think about the future. It may help to talk to a family member or a close friend about your concerns. Ask your doctor or nurse for advice on what you should do.

Sperm banking: If the tests show that your sperm count is satisfactory it may be possible to store your sperm before treatment for use at a later date. Sperm banking is done in the HARI Unit at the National Fertility Centre in the Rotunda Hospital in Dublin. To do this, you will be asked to give several sperm samples. There will be a couple of days' break between each sample to make sure good samples are got. The sperm will be frozen and stored until needed.

You may worry that the process of banking sperm may cause a delay in starting treatment. This is seldom the case as it can be done while tests are being carried out and the results of tests awaited. If you wish to find out more about sperm banking, talk to your doctor or nurse. He or she will give you more information. Call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can talk to a nurse who will tell you what services are available.

Chemotherapy: Chemotherapy may cause infertility. It may be temporary or permanent. Even though doctors know that some chemotherapy drugs may cause infertility it is very difficult to say if and when this will happen. You may be on treatment 2–3 months before your sperm count is reduced.

If you are having sex, you must use a reliable method of contraception throughout your treatment and for some time afterwards. There is a risk of miscarriage or birth defects in children conceived during or just after treatment. Many doctors believe it is better for your partner not to get pregnant for 2 years after your chemotherapy ends. This gives you a chance to recover from the effects of treatment and by then the chances of the disease coming back are much less.

Radiotherapy: Most radiotherapy treatments have no effect on your ability to have children. But you might make less sperm if your testicles are near the area being treated. Nowadays it is possible to avoid giving radiotherapy to the testicles in most treatments. Special shields can also be used to protect them during treatment.

You must use a reliable method of contraception throughout your treatment and for some times afterwards. This is because there is a risk of miscarriage or birth defects in children conceived during or just after treatment. Many specialists recommend that you wait for 2 years after radiotherapy before trying to start a family or have more children. This time gives your body a chance to get over the effects of the lymphoma and its treatment.

How can I cope with fatigue?

Fatigue is a common symptom of lymphoma and is described as an overwhelming tiredness. Often it is not relieved by rest. You may find it hard to concentrate or make decisions. Fatigue may also be caused by anxiety when a diagnosis of cancer is made and the added stress caused by treatment. It can also be a side-effect of treatment or due to anaemia, or having to travel long distances for treatment.

What you can do

• Side-effects to expect: For many patients treatment may help by relieving symptoms such as fever and feeling unwell, allowing you to get back to your normal routine. Ask your doctor before you start treatment what side-effects you can expect.

- Sleep: If you are feeling worried and find it hard to sleep at night tell your doctor or nurse. He or she may be able to help. Try talking to your close family or friends about your concerns too. If you find this hard, ask to see a counsellor. He or she will help you to find ways to cope.
- Physical exercise: If your illness allows you to take part in physical exercise, try to do some regularly. For example, 30 minutes of exercise 2-3 times a week might be a realistic goal and will boost your morale when you achieve it.
- Losing weight: You may notice that you have lost weight. This may be due to the lymphoma or the treatment you are getting. Sometimes when you are feeling weak and tired you may lose interest in your food. Ask for help in preparing your meals. It can help to eat your favourite foods too. Take plenty of clear fluids such as water and fruit juice.
- Asking for help: Get others to help you around the house, with travelling to hospital, with the children or with shopping.
- Working: Whether you work or not during treatment depends on the kind of work you do and how you are feeling. It is probably better to make this decision when you have had one or two courses of treatment. Only then will you have a clearer picture of how the treatment affects you.
- Studying: If you are in full-time education, think about putting your studies on hold until your treatment is over. Use the extra free time to do something that you especially enjoy.

A useful booklet called Coping with Fatigue is available free of charge. If you would like a copy, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can also download it from www.cancer.ie

Cancer and complementary therapies

There is great interest today in complementary treatments for cancer. Some people find them very helpful during their illness. The way cancer is treated often depends on the culture of the country in which you live. In Ireland, cancer treatments are based on scientific research, which allows the response to treatment, side-effects and the general effect of treatment to be predicted. You may hear about the following types of treatments or therapies.

Conventional therapies

Conventional therapies are treatments which doctors use most often to treat people with cancer. These include surgery, radiotherapy, chemotherapy, biological therapies and hormone therapy. They are tried and trusted methods where there is a long history of use. Many of the treatments have been tested in clinical trials.

Complementary therapies

Complementary therapies are treatments that are sometimes given together with conventional treatment. They include therapies such as:

Acupuncture Nutrition therapy

Aromatherapy Reflexology Gentle massage Relaxation Hypnotherapy Shiatsu Meditation Visualisation

Music, art and dance therapy Yoga

Many people find complementary therapies helpful in a number of ways. You may feel more positive about yourself and your illness. You may be better able to cope with the physical side-effects of cancer and the distressing emotions that cancer can often bring. Some complementary therapies also focus on the spiritual dimension of a person to aid healing.

Alternative therapies

Alternative therapies are generally treatments that are used instead of conventional treatments. These therapies include diet therapy, megavitamin therapy and herbalism. The diet therapy can often be restrictive. This means it does not allow you to eat foods that could be nutritious for you. Some restrictive diets can harm your health and may even cause malnutrition. Most doctors do not believe that such treatments can cure or control cancer.



If you decide to have complementary or alternative treatments...

Before you decide to change your treatment or add any methods of your own, do talk to your doctor or nurse. Some methods can be safely used along with standard medical treatment. But others can interfere with standard treatment or cause serious side-effects. For that reason, do talk openly with your GP or cancer specialist if you are thinking of having treatment with either a complementary or alternative practitioner. Don't be afraid that your doctor will be offended by your wish for other treatments. In fact, he or she may be able to recommend therapies that could be safe and useful for you.

Be cautious in selecting a practitioner. Don't be misled by promises of cures. At present in Ireland, this area is not fully regulated. Ensure that the practitioners you plan to visit are properly qualified and have a good reputation. Check to see if they belong to a professional body or not. If you are unsure but would like to know what other patients have found helpful, contact your doctor or a patient support group. Also, it is important to make sure that the practitioner is charging a fair price for your treatment.

More information is available in a free booklet from the Irish Cancer. Society called *Understanding Cancer and Complementary Therapies: A* Guide for Cancer Patients. If you would like a copy or more advice, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can also download a copy from www.cancer.ie

Subtypes of high-grade non-Hodgkin lymphoma

What are the different subtypes?

There are many subtypes of high-grade non-Hodgkin lymphoma. The most common ones are:

- Diffuse large B-cell lymphoma
- Mantle cell lymphoma
- Burkitt lymphoma
- Peripheral T-cell lymphomas
- Anaplastic large cell lymphoma
- Angioimmunoblastic lymphoma
- Lymphoblastic lymphoma

If your subtype of lymphoma is not listed here, do talk to your doctor or nurse. They can give you more information and advice about it.

Symptoms: Along with enlarged lymph nodes in your neck, armpit or groin, you may experience B symptoms such as:

Night sweats

Fevers

Unexplained weight loss

Loss of appetite

Itchy skin

Skin rash

Fatigue

Flu-like symptoms

Infection

Aches and pains

Breathlessness

Pale skin

Bleeding and bruising

More specific symptoms are listed with each subtype.

Treatment: The main treatment is chemotherapy and antibody therapy using a number of drugs. If disease comes back (relapses) or else does not respond to treatment in the first place (refractory), it can be treated again.

Diffuse large B-cell lymphoma (DLBCL)

Why is it called diffuse large B-cell lymphoma? This lymphoma affects the B-cells. Here the cancer cells are much larger than in other lymphomas. Diffuse means the cancer cells are spread throughout the lymph node. This kind of lymphoma can occur in just the lymph nodes or outside your lymphatic system. For example, in your digestive tract, skin, brain, testicles, breast, lung, liver or bone. The cancer cells grow rapidly.

How common is it? It is the most common type of lymphoma. It occurs in about one-third of all non-Hodgkin lymphomas, and in 4 out of 5 high-grade types. It can occur between adolescence and old age but usually over the age of 60. Sometimes a low-grade lymphoma can change or transform into a DLBCL.

What other symptoms might I have? Depending on the part of your body affected by DLBCL, you might have other symptoms. For example, abdominal pain and diarrhoea if your bowel is involved.

How is it treated? Different types of chemotherapy drugs can be given together or combined with an antibody therapy. For example, R-CHOP. This stands for rituximab, cyclophosphamide, doxorubicin, vincristine and the steroid prednisolone.

Mantle cell lymphoma

Why is it called mantle cell lymphoma? In this lymphoma the cancer cells are found in the mantle zone of the lymph node. This is the outer ring of the cell. Even though the lymphoma is classed as a low-grade lymphoma, it often acts like a faster-growing one and is treated as such. Usually the cancer cells are found in one or more lymph nodes and can affect organs such as your bone marrow, bowel, stomach, liver, spleen or tonsils.

How common is it? This B-cell lymphoma is rare and occurs in about 5 in 100 cases of non-Hodgkin lymphoma. It usually affects men aged over 60.

What other symptoms might I have? An enlarged spleen. If the lymphoma affects other organs, you might have other symptoms. For example, abdominal pain, nausea and diarrhoea if your stomach or bowel is involved. Your doctors might do a gastroscopy or colonoscopy to take a closer look at your stomach or large bowel.

How is it treated? It is often diagnosed at a later stage, that is, when found in your stomach, bowel or bone marrow. This usually means stage 3 or 4. In general it is hard to treat and cure this type of lymphoma. Your doctor will consider your age, stage of disease and general health when deciding on treatment. Usually this lymphoma is treated with chemotherapy using a combination of drugs. There are no standard drugs and a lot can depend on your age and general health.

If you respond well to treatment and are young and fit, your doctors might decide to do a stem cell transplant using your own donated cells or your sibling's.

For more information on stem cell transplants, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. Ask for a copy of the booklets, Understanding Stem Cell Collection or Understanding Autologous Stem Cell Transplants. You can also download them from www.cancer.ie

Burkitt lymphoma

Why is it called Burkitt lymphoma? This lymphoma is named after the doctor, Denis Parsons Burkitt, who first described it in Africa. It is linked to the Epstein-Barr virus. Those with HIV or AIDS also have a higher risk of developing this lymphoma. It usually affects your body in many places. For example, your chest, tonsils, back of nose and throat. It can be found in other organs such as your chest, liver and bone marrow. Most people are very unwell at diagnosis and need urgent treatment, but it is highly curable.

How common is it? It is a rare lymphoma that affects the B-cells. It occurs in about 2 in 100 lymphomas, usually in young adults and children. It is more common in men than women.

What other symptoms might I have? Depending on the part of your body affected by Burkitt lymphoma, you might have other symptoms. For example, abdominal pain, nausea, vomiting and diarrhoea if your bowel is involved. If lymph nodes in your chest or throat are enlarged, you might have a sore throat or find it hard to breathe or swallow.

How is it treated? Chemotherapy is the main treatment. There are different combinations of drugs involved, known as CODOX-M and IVAC. They might be alternated during your treatment. CODOX-M stands for cyclophosphamide, vincristine (Oncovin®), doxorubicin and methotrexate. IVAC stands for ifosfamide, mesna, etoposide (VP-16) and cytarabine (Ara-C).

Peripheral T-cell lymphomas (PTCLs)

Why are they called peripheral T-cell lymphomas? Peripheral means the T-cells mature near or outside the thymus gland in your chest. In general this is a group of rare and fast-growing lymphomas that develop from mature T-cells. The three most common subtypes in the group are:

- peripheral T-cell lymphoma not otherwise specified (PTCL-NOS)
- anaplastic large cell lymphoma (ALCL)
- angioimmunoblastic T-cell lymphoma (AITL)

How common are they? They are very rare. Together they account for about 10 in 100 of all non-Hodgkin lymphomas. They are all considered separate diseases and treated in that way.

See page 47 for more about anaplastic large-cell lymphoma and page 48 for angioimmunoblastic T-cell lymphoma.

Peripheral T-cell lymphoma not otherwise specified (PTCL-NOS)

What does the name mean? It refers to a group of diseases that do not fit into any of the other subtypes of PTCL.

How common is it? It is the most common PTCL, affecting about a quarter of those diagnosed. It is also the most common T-cell lymphoma.

What other symptoms might I have? Body organs other than lymph nodes can also be affected. For example, your liver, spleen, bone marrow, stomach, bowel and skin. This can give rise to other symptoms.

How is it treated? Most patients have stage 3 or 4 disease at diagnosis and need treatment straightaway. The main treatment is chemotherapy, often CHOP or something similar. This lymphoma can be hard to treat at times. Younger patients might benefit from high-dose therapy and a stem cell transplant.

Anaplastic large cell lymphoma (ALCL)

Why is it called anaplastic large cell lymphoma? This lymphoma affects T-cells where the cells are large and grow in a disorderly way. An abnormal protein called anaplastic large-cell kinase (ALK) may be present on the cell surface or not. This protein can change the genetic makeup of the cells and is different from other lymphomas. Your doctors might say the lymphoma is ALK positive or negative. When this lymphoma affects your skin, it is called cutaneous anaplastic large cell lymphoma.

How common is it? This type of lymphoma is rare. It affects about 3 in 100 adults with non-Hodgkin lymphoma. Being ALK-positive is more common in young adults and children, particularly men and boys. ALK-negative occurs more often in older adults, aged 60 onwards, and slightly more females are affected.

What other symptoms might I have? Anaplastic large cell lymphoma can affect organs in your body other than your lymph nodes. For example, your skin, bone, soft tissues, lung, liver and bone marrow. Depending on the location, you might get other symptoms. For example, you might have red, itchy skin patches if your skin is affected.

When is it treated? Most patients have stage 3 or 4 disease when diagnosed and need treatment straightaway. But if your skin is only affected, treatment may be delayed. It often depends on the number of skin areas affected.

How is it treated? Chemotherapy is the main treatment. The group of drugs given is usually CHOP (cyclophosphamide, doxorubicin, vincristine and the steroid prednisolone). It works well for ALK positive disease but less so for ALK negative. In this case, you may need high-dose therapy and a stem cell transplant. If your lymph nodes are significantly enlarged, you may benefit from radiotherapy, especially in the early stages. If you have cutaneous ALCL, radiotherapy to the skin patches can often work well.

Understanding high-grade non-Hodgkin lymphoma

How may it be treated after relapse? You are more likely to relapse if you have ALK-negative disease. You may be given more chemotherapy or antibody therapy along with a stem cell transplant after remission. Also, you have a higher risk of relapse if you have cutaneous ALCL and many areas of skin are affected. In this case, the relapse may be treated with mild chemotherapy or radiotherapy.

Angioimmunoblastic T-cell lymphoma

Why is it called angioimmunoblastic lymphoma? In this T-cell lymphoma, there are abnormal blood vessels (angio) or lymph vessels. They make an abnormal protein which can affect your immune system. It is linked to a previous infection with the Epstein-Barr virus.

How common is it? It is a rare lymphoma found in about 2 in 100 of all non-Hodgkin lymphomas. It occurs in older people, usually aged 50 and over, and affects men and women equally.

What other symptoms might I have?

- Enlarged liver and spleen
- Fluid retention
- Inflamed joints

Immune disorders can occur with this lymphoma. For example, autoimmune haemolytic anaemia (AIHA) and immune thrombocytopenia (ITP). In these disorders your immune system does not recognise your own cells and tissues and tries to destroy them. For example, your red blood cells or platelets. The lymphoma can affect body organs such as your liver, spleen, skin and bone marrow.

How is it treated? It can be quite difficult to treat. Most patients have stage 3 or 4 disease at diagnosis. The first treatment is usually chemotherapy, using the group of drugs called CHOP. Sometimes it responds to milder therapies such as steroids and other medications. These will also improve any symptoms you have. Some patients may be suitable for an autologous stem cell transplant.

Lymphoblastic lymphoma

Other names: Precursor T-lymphoblastic lymphoma.

Why is it called lymphoblastic lymphoma? This lymphoma affects the immature cells called lymphoblasts. These cells, when healthy, grow into the white blood cells called lymphocytes. Normally the lymphoma develops from T-cells but sometimes from B-cells. It looks very like acute lymphoblastic leukaemia.

How common is it? It is very rare in adults. It usually affects young adults (under 35) and children, mostly teenage boys.

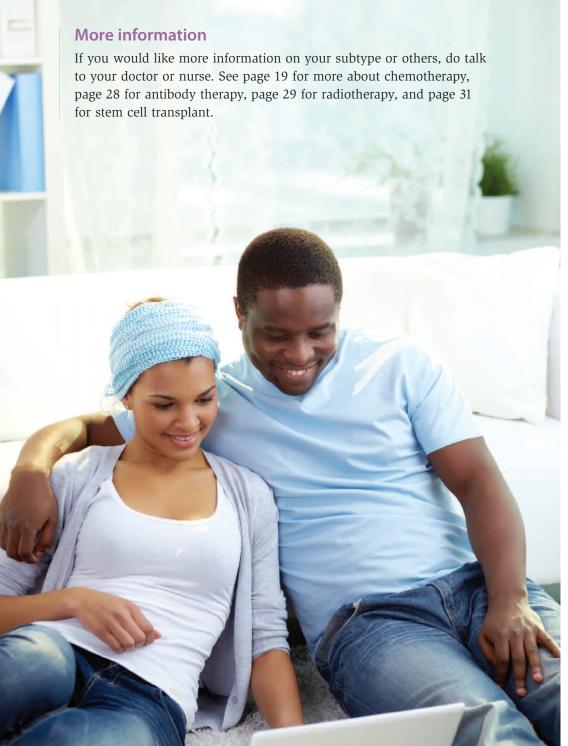
What other symptoms might I have?

- Difficulty breathing
- Swelling in chest (mediastinum)
- Fluid in lungs
- Enlarged liver or spleen

The lymphoma may affect other areas of your body, such as your liver, spleen, bone marrow, skin, testicles and brain. These can cause specific symptoms.

How is it treated? It is treated like an acute lymphoblastic leukaemia. This involves chemotherapy and other drugs given over a long period of time. Radiotherapy is sometimes given to the brain and spine if the lymphoma is advanced. If needed, chemotherapy can be given directly into the fluid that surrounds your brain and spinal cord. You might also receive a stem cell transplant.

For a free copy of the booklet, Acute Lymphoblastic Leukaemia, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can also download a copy from www.cancer.ie



Coping and emotions

How can I cope with my feelings?

There are many reactions when told you have cancer. Reactions can often differ from person to person too. In fact, there is no right or wrong way to feel. There is also no set time to have one particular emotion or not. Some reactions may occur at the time of diagnosis, while others might appear or reappear later during your treatment. Or indeed it may not be until the later stages of your illness that your emotions hit hard.

Common reactions include:

- Shock and disbelief
- Fear and uncertainty
- Loss of control
- Sorrow and sadness
- Denial

- Anger
- Resentment
- Blame and guilt
- Withdrawal and isolation

Sometimes a cancer diagnosis can bring greater distress and cause anxiety and depression. A helpful booklet that discusses them in detail is called *Understanding the Emotional Effects of Cancer* and is available from the Irish Cancer Society. Call the National Cancer Helpline on 1800 200 700 for a free copy or visit a Daffodil Centre or download a copy from **www.cancer.ie**. Your medical social worker in the hospital is also available to support you.

Shock and disbelief

'It can't be me.' 'Has there been a mistake?' 'Cancer happens to other people, not me.' Shock is often the first reaction to a cancer diagnosis. In fact, you may feel numb and the situation may seem unreal. Many people think cancer will never happen to them and are totally shocked when it does. Even if your doctor and

nurse discuss the cancer with you, the news may not sink in for a while. You may find yourself confused, asking the same questions over

and over again. Or else you may accept the news calmly and say nothing because you cannot yet believe what is happening to you.

Fear and uncertainty

'I'm going to die.'
'Will it be painful?'
'Will I become a
different person?'

There is no doubt that cancer is a scary word. Not surprisingly, you may have many fears when first told of your diagnosis. Often the first thing people think about is dying. No one knows how long anybody will live, but having cancer is likely to shorten your life. It can be

very difficult to face an uncertain future and feel you are no longer in control. One way to reduce the stress of uncertainty is to make your plans day by day. Letting go of the past and not worrying about the future allows you to live fully in the present.

You may also have fears that your experience of cancer will change who you are or that people will reject or avoid you. For example, after some cancer treatments your body image may be different, and it will take some time for you and for others to adjust to your new look. You may also have practical worries and fears about the effect of your illness on your family, finances, job, and lifestyle.

Do discuss your concerns with your doctor, nurse or medical social worker, as they can advise and help you. If living with uncertainty overwhelms you, it may help to talk to someone in a support group.

Loss of control

'I can't cope with this.' 'I'll never get through it.' After a cancer diagnosis, it is common for people to feel their life is beyond their control. All your plans may be put on hold. You may even lose some independence and freedom. Because you don't know enough about cancer

at first, you may rely totally on the advice of your doctors and nurses. You may not feel confident making any decisions about your treatment. When you experience a loss of control, it can lead to feelings of helplessness. You may also feel that you will be unable to cope with your treatment or that you will 'fall to pieces' or 'go crazy'. You may even lose hope.

It takes a while to know what is within your control and what is beyond it. Finding out as much as possible about your illness can help you regain some control. Taking an active part in making decisions about your treatment can also help you feel more in control of your illness.

Sorrow and sadness

'I used to be so healthy.' 'I had so many plans.' 'I've let my family down.' It is natural to feel sad when told you have cancer. You may feel sad for a variety of reasons: for the loss of your good health, for the plans that are put on hold, for the people you feel you've let down, and for any changes to your body due to treatment. Depending on your type

of cancer, your life may be affected by treatment to varying degrees. In this case, the sadness or sorrow can come from feeling as if a part of you has died. These feelings may not be there all the time and may come and go, but will gradually fade.

Denial

'I'm fine, really.'
'I don't have cancer.'

Sometimes after being told their diagnosis, people deny they have cancer. While this may seem unusual, it is a valid way of coping. As a result, you may not wish to mention or discuss

your illness. Or else you may talk as if your illness is nothing serious. Denial may last for a short or long time, depending on how long it takes for you to adjust to your illness. Tell your family and close friends that you would prefer not to talk about your illness, at least for the time being. Your doctors and nurses will also understand if you don't want to hear any information about your cancer until you're ready.

Anger

'Why me? I always took care of my health.' 'Why did this happen now?' It is normal too to be very upset when told you have cancer. Many aspects of your illness can result in anger and distress. Anger can often hide other feelings such as fear, sadness or frustration. You may feel angry towards the doctors and nurses who are caring for you. Or

if you have a religious belief, you may feel angry with God for allowing

cancer to occur. You may vent your anger on those closest to you. Indeed being unable to protect the ones you love may frustrate you a lot.

Your family and friends may not always be aware that your anger is really at your illness and not at them. It may be helpful to talk to them when you are calm, rather than feeling guilty or trying to bottle up your angry thoughts. Anger can sometimes affect your ability to think clearly. So if it persists and you are finding it hard to talk to your family, tell your nurse or doctor. There is also an upside to anger. You can channel its powerful energy into fighting your illness. This could be in doing something creative like writing or a physical activity like exercise.

Resentment

'How can you talk, you don't have to deal with cancer.' 'How come I'm not getting better?' It is natural that you might be resentful and unhappy – even jealous – because you have cancer while other people are well. During the course of your illness similar feelings of resentment may occur for many reasons. You may resent that another patient receiving the

same treatment as you has responded quicker than you have.

You may resent your healthy relatives or having to change your lifestyle in some way. On the other hand, sometimes relatives, especially adolescents, can resent the changes that your illness makes to their lives. It is best to admit that these feelings of resentment exist and to express them. Bottling up resentment helps no one. Instead everyone ends up feeling angry and guilty.

Blame and guilt

'I should have been more careful.' 'If only I had a more positive attitude, I wouldn't have got sick.' When diagnosed with a serious illness such as cancer, it is natural to want to know what caused it. Sometimes people blame themselves or others for their illness. As cancer experts rarely know exactly what has caused cancer, there is no good in blaming yourself. Other times, people feel guilty because they delayed

going to the doctor with their symptoms, fearing the worst. No matter what the reason, don't torture yourself at this time.

Don't feel guilty if you can't keep a positive attitude, especially when you feel unwell. Low periods are to be expected. There is no evidence at all that your attitude will affect your health or cancer. Regret and guilt serve no useful purpose. Instead focus on what you can change or do to make you feel more in control of your illness.

Withdrawal and isolation

'I just need to be on my own.'

It is true that a cancer diagnosis is stressful. It can leave you feeling confused and overwhelmed with so much information to take

in. At times during your illness you may want to be left alone and withdraw from people. It is normal to want to sort out your thoughts and feelings. You will want to take stock of things and work out how best you can cope. However, it is not a good idea to spend long hours on your own every day. Sometimes depression can make you avoid family and friends and stop you wanting to talk. If you isolate yourself, it can be hard for them, as they will want to share this difficult time with you. They may worry about you needlessly. Do let your family and friends know that you will talk to them once you are ready.

If you would like more information on how to talk about your cancer, there is a useful booklet available called *Who Can Ever Understand? Talking about Your Cancer.* If you would like a copy, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre or download it from www.cancer.ie

How can my family and friends help?

Your family and friends can support you through your cancer journey in different ways. Some family members and friends can offer a listening ear and give you advice if needed. Others may gather up-to-date information on lymphoma to know what you can expect and what you are going through. Others again may prefer to help you in a practical way with travelling to and from the hospital, with childcare, cooking, shopping or housework. It may take time to know which way suits you and your family or friends best.



How to talk to someone with cancer

When someone close to you has cancer it can be hard to know what to do. Their welfare may be a priority for you, but you might still be unsure when to visit or what to talk about. You may be afraid of upsetting them or saying the wrong thing. So it may seem best to pretend that everything is okay and carry on as normal. Sadly, by not talking to your friend or loved one, it can make them feel even more lonely and isolated. Try not to withdraw because you're afraid of their illness or what might happen in the future.

Often those with cancer do not wish to burden their family and friends with their worries and concerns. Gentle encouragement can sometimes help. But don't rush into talking about their illness – knowing that you are always ready to listen and give help may reassure them. You may think you are not doing much by just listening. In fact, it is one of the best ways to help.

Be patient

Sometimes your friend or relative may get cross or irritable for what may seem to be no good reason. These feelings are completely normal. Be as patient and understanding as you can. Give them the space and time to adjust to the changes in their life. Above all, let them know that you are there, if they want to talk or need help. In time, life will begin to be normal again.

Lost for Words: How to Talk to Someone with Cancer is a useful booklet written for relatives and friends of people with cancer. Call the National Cancer Helpline on 1800 200 700 for a free copy or visit a Daffodil Centre. You can also download it from www.cancer.ie

How can I talk to my children?

A cancer diagnosis can affect an entire family. It can bring changes of many kinds, great or small. Even so, it is best to keep family life as normal as possible. If you have young children, continue with school and other activities, with birthdays and celebrations or work commitments. It may take a while but families can learn to adjust to big changes in their lives. Every family deals with cancer in its own way. You may feel that you do not want your illness to upset family life, or feel guilty that you cannot do activities with your children or grandchildren or that you're letting them down. These are all natural feelings to have at this time.

Be honest

The main thing to remember is that being honest with your family really helps. Keeping your illness a secret may not be the best thing for your children. It can put added pressures on your family and lead to confusion. Young children are very sensitive to stress and tension and if you try to protect them by saying nothing, they may feel isolated. In fact, they may have greater fears if told nothing.

It is best that you or your partner tell your children about your cancer diagnosis. If this is not possible, then someone else close to your children should break the news. How much you tell children will depend on their age and level of maturity. Very young children do not understand illness and need a simple reason why their parent, grandparent or friend is sick and has to go to hospital regularly. A story about good cells and bad cells usually works well. Most children over 10 years of age can take in fairly full explanations of why you are sick. Adolescents can understand far more.

It is best to prepare children for the side-effects of treatment before they happen and to answer their questions simply and honestly. For example, if you get scarring or hair loss due to treatment. It is also important not to force your children to talk about your illness. If they rebel or turn quiet, it may be their way of showing their feelings.

Coping with children's emotions

During your illness, your children may experience a range of emotions from fear, guilt and anger to neglect, loneliness, isolation and embarrassment. They need to be reassured that your illness is not their fault. Whether they show it or not, young children may feel that they somehow are to blame. But by having an open honest approach, it may bring you a sense of relief too. Your family may also find new depths of love and inner strength that will boost your life together.

If you need some extra help in dealing with children, talk to your nurse or medical social worker. A useful booklet called *Talking to Children about Cancer: A Guide for Parents* gives practical advice for discussing cancer with children. If you would like a free copy, call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre, or download it from **www.cancer.ie**

How can I help myself?

Here is a list of things to help make you feel more involved and in control of your illness.

- Communicate with your family and close friends.
- Live one day at a time.
- Live well by eating well and taking exercise.
- Expect change in your life.
- Keep an open mind.
- Seek information about your cancer and treatment.
- Find what way of coping works for you.
- Build a support network.
- Seek professional help if you have low moods or strong emotions.
- Consider spiritual care.
- Express yourself through writing, music, dance or art.

Journey Journal

It can help to keep a record of your cancer journey, including both physical and emotional aspects. Call the National Cancer Helpline on 1800 200 700 for a copy of Journey Journal: Keeping Track of Your Cancer Treatment or visit a Daffodil Centre.

In this journal, you can record any of your tests like blood tests, X-rays and scans, as well as treatments, symptoms, side-effects, medications, and your general health. Write down any emotions you are feeling too, especially strong ones. It's a great way to express yourself without holding back.

Support resources

Who else can help?

There are many people ready to help you and your family throughout treatment and afterwards.

- Medical social worker
- Cancer nurse specialists
- Psycho-oncology services
- Family doctor (GP)
- Community welfare officer and community health services
- Support groups and cancer support centres
- Irish Cancer Society



Medical social worker: The medical social worker in your hospital can help in many ways. He or she can give support and counselling to you and your family and give advice on practical and financial supports and services available when you go home.

Haematology/oncology nurse specialists: Some of the major cancer treatment hospitals have haematology/oncology units where there are specially trained nurses. These are called haematology/oncology liaison nurses and/or cancer nurse co-ordinators. They can support you and your family from the time of diagnosis and throughout treatment. The nurses along with other members of your medical team work together to meet your needs.

Psycho-oncology services: In some larger hospitals there are special units that provide psycho-oncology services. This means that you can receive psychological care and support during your diagnosis, treatment and recovery by a team of experts. Usually the team consists of psychiatrists, clinical psychologists and nurses working closely together.

GP (family doctor): You may feel comfortable talking to your family doctor (GP) about your lymphoma too. He or she can discuss any of your queries and offer advice and support.

Community health services: There are various community health services available from your local health centre. These centres have public health nurses (who can visit you at home), welfare officers and home-help organisers. If you live far from your hospital, your community welfare officer can also help with practical issues such as financial problems or exceptional needs. More information on the services is available either from the medical social worker in your hospital before you go home or at your local health centre.

Understanding high-grade non-Hodgkin lymphoma

Support groups: Joining a support group can put you in touch with people who have been in a similar situation. They can give you practical advice about living with cancer. Cancer support centres are also found in most counties in Ireland and can offer a wide range of services. Some are listed at the back of this booklet. Useful websites, including patient forums, are also listed. You can also download the Irish Cancer Society's Directory of Cancer Support Services from www.cancer.ie

Irish Cancer Society: The staff of the Cancer Information Service will be happy to discuss any concerns you or your family may have, at any stage of your illness. This can range from treatment information to practical advice about your financial matters. For example, getting life insurance.

Call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre for information about any of the services outlined above or for support services in your area.

>>> Remember that there are many people ready to help you.

Health cover

Health cover falls into two groups – cover for medical card holders and cover for all other groups. Details of the following are given here:

- Hospital cover
- GP visit card
- Private healthcare cover

- Outpatient cover Medical card
- Drugs Payment Scheme (DPS)
- Benefits and allowances

At the end of this section there are also some useful telephone numbers and websites for further help.

Hospital cover

At present, everyone is entitled to hospital inpatient services in a public ward in all public hospitals. There is a €75 a night charge up to a limit of €750 in 1 year. These charges do not apply to medical card holders. Higher rates apply for semi-private or private care.

Outpatient cover

If you go to the outpatients or emergency department of a public hospital, without being referred there by a GP, you may be charged €100. There is no charge if you have a medical card or are admitted to hospital because of attending the emergency department first.

Medical card

A medical card usually allows you, your spouse and any child under 16 to free GP services, prescribed drugs and medicines, inpatient public hospital services as well as outpatient services and medical appliances. You may have to pay a prescription charge of €2.50 per item up to a limit of €25 per family per month.

To qualify for a medical card depends on a means test regardless of age. If you are over 70 and your weekly income is €500 or less (€900 for couples), you can still apply for a card. Financial guidelines are set out each year and are available from your local Health Service Executive (HSE) office.

If your means are above but close to the guidelines, you should apply for a card anyway as a card may be granted in some situations. For example, if you have a large amount of medical expenses. This is known as a discretionary medical card. But it will depend on your financial circumstances and how long your treatment is expected to last. In this case, your spouse and children will not be covered if your means are over the limit. If you wish to apply for a medical card, you can download an application form and apply online (www.medicalcard.ie) or at your local health centre. LoCall 1890 252 919.

GP visit card

If you do not qualify for a full medical card, you may be eligible for a GP visit card. This card covers visits to your doctor only and you will have to pay for drugs, outpatient/inpatient charges and medical appliances yourself. It is means tested but will take into account your after-tax income and certain expenses like childcare, rent/mortgage and travel to work. Check with the medical social worker at your hospital or your HSE office to see if you are eligible. If you wish to apply for a GP visit card, you can download an application form and apply online (www.medicalcard.ie) or at your local health centre. LoCall 1890 252 919.

Drugs Payment Scheme

Under the Drugs Payment Scheme (DPS), individuals and families, including spouses and dependent children, pay a limit of €144 each month to cover the cost of prescribed drugs, medicines and appliances. You can apply for cover under the scheme by contacting your local HSE office or local pharmacy.

Private healthcare cover

Private health insurance pays for private care in hospital or from various specialists in hospitals or in their practices. In Ireland, this is available through the VHI, Laya Healthcare, AVIVA Health, GloHealth, and other schemes. They provide cover for day care or inpatient treatment and hospital outpatient treatment. Before attending hospital, do check the level of cover provided by your insurer, both for inpatient and outpatient services.

If you have private insurance, your tests might not get done as quickly as you would like. Your health insurer has to approve some tests in advance. For example, MRI and PET scans. Sometimes it might take 24–48 hours to get approval from your health insurer.

Benefits and allowances

You or a family member may qualify for a number of benefits and allowances. For example, Illness Benefit, Disability Allowance, Invalidity Pension, Carer's Allowance, Carer's Benefit, Carer's Leave.

More information on these is available in a booklet called *Managing* the Financial Impact of Cancer: A Guide for Patients and Their Families. For a free copy, contact the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre. You can also download it from www.cancer.ie

Application forms for the benefits are available from social welfare offices or Social Welfare Services Office, Government Buildings, Ballinalee Road, Longford. Tel: (043) 334 0000 or LoCall 1890 927 770. You can also download the forms from websites such as www.welfare.ie or www.citizensinformation.ie

Appliances

If you have a medical card most appliances are free of charge or subsidised. For example, if you have hair loss due to chemotherapy, you are entitled to 1–2 free or subsidised new hairpieces every year. The subsidy will depend on the HSE area.

Travel to hospital

You can be faced with many expenses including travelling to and from hospital. If your travel costs are very expensive, discuss it with your medical social worker at the hospital. Limited help may also be available from your community welfare officer. Some HSE areas provide transport services to hospitals for outpatient appointments and day centres, usually for patients with medical cards.

See page 68 for information on the Care to Drive and Travel2Care schemes run by the Irish Cancer Society. Some local communities may also provide volunteer transport services.

Further information

Depending on your circumstances at the time of your illness, there are many other benefits and entitlements that may be relevant to you. Always have your PPS number (old RSI number) to hand when you are enquiring about entitlements and benefits. The most direct way to check your eligibility is to contact:

- Your community welfare officer in your local health centre
- The medical social worker in the hospital you are attending.

For social welfare queries, contact:

Dept of Social Protection -Tel: 1850 662 244

Information Service Leaflet line: 1890 202 325 Oisín House Email: info@welfare.ie Website: www.welfare.ie 212-213 Pearse Street

Dublin 2

If you have gueries about health and social services, contact the HSE office in your area.

HSE infoline: 1850 24 1850 Email: info@hse.ie Website: www.hse.ie

Information is also available from your local Citizens Information Centre.

A list of these centres is available from:

Citizens Information

Tel: 0761 07 4000

Email: information@citizensinformation.ie Website: www.citizensinformation.ie

If you have financial worries...

A diagnosis of cancer can sometimes bring the added burden of financial worries. You may find that you have a lot more expenses, like medication, travel, food, heating, laundry, clothing and childcare costs. If you are unable to work or unemployed, this may cause even more stress. It may be hard for you to deal with cancer if you are worried about providing for your family and keeping a roof over your head.

There is help available if you find it hard to cope with all these expenses. Contact your medical social worker in the hospital or your local health centre for advice. The Irish Cancer Society can also in certain cases give some assistance towards travel costs and other expenses because of your illness. See page 68 for more details. You can also call the National Cancer Helpline on 1800 200 700 and the nurses will suggest ways to help you manage.

If you feel you are getting into debt or are in debt, there is help available. Contact the Money Advice and Budgeting Service on the MABS Helpline 0761 07 2000. This service can help you work through any financial issues you have. They can assess your situation, work out your budget, help you deal with your debts and manage your payments. The service is free and confidential. See page 69 for contact details. A useful book for preparing low-budget nutritious meals is 101+ Square Meals. See page 75 for more information.

Irish Cancer Society services

The Irish Cancer Society funds a range of support services that provide care and support for people with cancer at home and in hospital.

- Cancer Information Service (CIS)
- Daffodil Centres
- Cancer support groups
- Survivors Supporting Survivors
- Counselling
- Night nursing

- Oncology liaison nurses
- Cancer information booklets and factsheets
- Financial support
- Care to Drive transport project

Cancer Information Service (CIS)

The Society provides a Cancer Information Service with a wide range of services. The National Cancer Helpline 1800 200 700 is a freefone service that gives confidential information, support and guidance to people concerned about cancer. It is staffed by specialist cancer nurses who have access to the most up-to-date facts on cancer-related issues. These include prevention of cancer, risk factors, screening, dealing with a cancer diagnosis, different treatments, counselling and other support services. The helpline can also put you in contact with the various support groups that are available. The helpline is open Monday to Thursday from 9am to 7pm, and every Friday from 9am to 5pm.

- The website **www.cancer.ie** provides information on all aspects of cancer.
- All queries or concerns about cancer can be emailed to the CIS at helpline@irishcancer.ie
- Message Board is a discussion space on our website to share your stories and experiences with others.
- The **CancerChat** service is a live chatroom with a link to a CIS nurse.
- The walk-in caller service allows anyone with concerns about cancer to freely visit the Society to discuss them in private.
- Find us on **Facebook** and follow us on **Twitter** (@**IrishCancerSoc**).

Daffodil Centres

Understanding high-grade non-Hodgkin lymphoma

Daffodil Centres are located in a number of Irish hospitals. They have been set up by the Irish Cancer Society in partnership with each hospital and are an extension of the Cancer Information Service. They are generally found near the main entrance of the hospital and are open during the day. Staffed by a specialist nurse and trained volunteers, they provide a range of information, advice, help and support on all aspects of cancer, free of charge.

Daffodil Centres give you a chance to talk in confidence and be listened to and heard. If you are concerned about cancer, diagnosed with cancer or caring for someone with cancer, you are welcome to visit the centre. Do check to see if there is a Daffodil Centre in your hospital.

Cancer support groups

The Irish Cancer Society funds a range of support groups set up to support you and your family at time of diagnosis, throughout treatment and afterwards. See pages 70-73 for more details.

Survivors Supporting Survivors

Being diagnosed with cancer can be one of the hardest situations to face in your lifetime. Survivors Supporting Survivors is a one-to-one support programme run by the Irish Cancer Society. It provides emotional and practical support to newly diagnosed patients. It can provide you and your relatives with information, advice and emotional support from time of diagnosis and for as long as is needed. All the volunteers have had a personal experience of cancer and understand the emotional and physical impacts of the disease. They are carefully selected after recovery and are trained to provide information and reassurance on the phone. The service is provided on a one-to-one basis and is confidential. If you would like to make contact with a volunteer, call the National Cancer Helpline on 1800 200 700.

Counselling

Coping with a diagnosis of cancer can be very stressful at times. Sometimes it can be hard for you and your family to come to terms with your illness. You might also find it difficult to talk to a close friend or relative. In this case, counselling can give you emotional support in a safe and confidential environment. Call the National Cancer Helpline on 1800 200 700 to find out about counselling services provided by the Irish Cancer Society and services available in your area.

Night nursing

The Society can provide a night nurse, free of charge, for up to 10 nights if you need end-of-life care at home. The night nurse can also give practical support and reassurance to your family. You can find out more about this service from your GP, local public health nurse, a member of the homecare team or the palliative care services at the hospital. Homecare nurses can offer advice on pain control and managing other symptoms.

Haematology/oncology liaison nurses

The Society funds some haematology or oncology liaison nurses who can give you and your family information as well as emotional and practical support. Oncology liaison nurses work as part of the hospital team in specialist cancer centres.

Cancer information booklets and factsheets

These booklets provide information on all aspects of cancer and its treatment, while the factsheets deal with very specific topics. The booklets also offer practical advice on learning how to cope with your illness. These booklets and factsheets are available free of charge from the Irish Cancer Society by calling 1800 200 700. They can also be downloaded from www.cancer.ie or picked up at a Daffodil Centre.

Financial support

A diagnosis of cancer can bring with it the added burden of financial worries. In certain circumstances, the Irish Cancer Society may be able to provide limited financial help to patients in great need. You may be suitable for schemes such as Travel2Care or Financial Aid.

Travel2Care is funded by the National Cancer Control Programme (NCCP) and managed by the Irish Cancer Society. The scheme can help with your travel costs if you have genuine financial hardship due to travelling to a designated cancer centre or approved satellite centre. It will help with the costs of public transport, such as trains or buses, private transport costs, or petrol and parking. If you are travelling over 30 km to a Rapid Access Diagnostic Clinic, you may qualify for the Travel2Care scheme.

Travel2Care: If you would like to request this kind of help, contact your oncology nurse or the Irish Cancer Society at (01) 231 6643 / 231 6619 or email **travel2care@irishcancer.ie**

Financial Aid: A special fund has been created to help families in financial hardship when faced with a cancer diagnosis. If this applies to you, contact the medical social work department in your hospital. You can also speak to your oncology liaison nurse or contact the Irish Cancer Society at (01) 231 6619.

Care to Drive transport project

Care to Drive is a scheme operated by the Irish Cancer Society. It provides free transport for patients to and from their chemotherapy using volunteer drivers. All of the volunteers are carefully selected, vetted and trained. You are collected from your home, driven to your appointment and brought back home again. Call (01) 231 0522 for more information.



If you would like more information on any of the above services, call the National Cancer Helpline on 1800 200 700. You can also visit the website www.cancer.ie or a Daffodil Centre.

Useful organisations

Irish Cancer Society

43/45 Northumberland Road

Dublin 4

Tel: 01 231 0500

National Cancer Helpline:

1800 200 700

Email: helpline@irishcancer.ie

Website: www.cancer.ie

The Carers Association

Market Square Tullamore Co Offaly

Tel: 057 932 2920

Freefone: 1800 240 724

Email: info@carersireland.com

Citizens Information

Tel: 0761 07 4000

Email: information@citizensinformation.ie Website: www.citizensinformation.ie

HARI: The National Fertility Centre

Rotunda Hospital Parnell Square Dublin 1 Tel: 01 807 2732

Email: info@hari.ie
Website: www.hari.ie

Irish Oncology and Haematology Social

Workers Group

Website: http://socialworkandcancer.com

Irish Nutrition & Dietetic Institute

Ashgrove House Kill Avenue Dún Laoghaire Co Dublin Tel: 01 280 4839 Email: info@indi.ie

Website: www.indi.ie

Money Advice and Budgeting Service (MABS)

Commercial House

Westend Commercial Village

Blanchardstown Dublin 15

Tel: 01 812 9350

Helpline: 0761 07 2000 Email: helpline@mabs.ie

Website: www.mabs.ie

Health insurers

AVIVA Health

(formerly VIVAS Health)

PO Box 764 Togher Cork

Tel: 1850 717 717

Email: info@avivahealth.ie Website: www.avivahealth.ie

GloHealth

PO Box 12218 Dublin 18

Tel: 1890 781 781

Email: findoutmore@glohealth.ie Website: www.glohealth.ie

Lava Healthcare (formerly Ouinn)

Eastgate Road

Eastgate Business Park

Little Island Co Cork

Tel: 021 202 2000

LoCall: 1890 700 890

Email: info@layahealthcare.ie Website: www.layahealthcare.ie

Voluntary Health Insurance (VHI)

IDA Business Park Purcellsinch Dublin Road Kilkenny

CallSave: 1850 44 44 44 Email: info@vhi.ie Website: www.vhi.ie

Survivors Supporting Survivors

ARC Cancer Support Centres

Dublin and Cork (see pages 71 and 72).

Brain Tumour Support Group

Medical Social Work Department

St Luke's Hospital Highfield Road Rathgar

Dublin 6

Tel: 01 406 5163

CanTeen Ireland

Young Peoples' Cancer Support Group

Carmichael Centre North Brunswick Street

Dublin 7

Tel: 01 872 2012

Freefone: 1800 200 700 Email: info@canteen.ie Website: www.canteen.net

Lakelands Area Retreat & Cancer Centre

Multyfarnham Mullingar Co Westmeath Tel: 044 937 1971 CallSave: 1850 719 719 Email: info@larcc.ie

Website: www.larcc.ie

For more details, contact the Irish Cancer Society at 1800 200 700 or email: support@irishcancer.ie

Connaught support groups & centres

Athenry Cancer Care

Social Service Centre

New Line Athenry Co Galway

Tel: 091 844 319 / 087 412 8080

Ballinasloe Cancer Support Centre

Society Street Ballinasloe Co Galway

Tel: 090 964 5574 / 087 945 2300 Email: ballinasloecancer@yahoo.co.uk

Cara Iorrais Cancer Support Centre

2 Church Street Belmullet Co Mayo Tel: 097 20590

Email: caraiorrais@gmail.com

East Galway Cancer Support Centre

The Family Centre
John Dunne Avenue
Ballinasloe
Co Galway

Tel: 087 984 5574 / 087 945 2300

Website: www.eastgalwaycancersupport.com

Gort Cancer Support Group

The Hawthorn
Ennis Road
Gort
Co Galway
Tel: 086 312 4220
Email: gcsupport@eircom.net
Website: www.gortcs.ie

Mayo Cancer Support Association

32 St Patrick's Avenue Castlebar Co Mayo Tel: 094 903 8407 Email: info@mayocancer Website: www.mayocancer.ie

Rock Rose House

Roscommon Cancer Support Group

Vita House Family Centre Abbey Street Roscommon Tel: 090 662 5898 Email: vitahouse@eircom.net

Sligo Cancer Support Centre

44 Wine Street Sligo

Tel: 071 917 0399 Email: scsc@eircom.net

Website: www.sligocancersupportcentre.ie

Tuam Cancer Care Centre

Cricket Court Dunmore Road Tuam

Co Galway Tel: 093 28522

Email: support@tuamcancercare.ie Website: www.tuamcancercare.ie

Leinster support groups & centres

ARC Cancer Support Centre

ARC House 65 Eccles Street Dublin 7 Tel: 01 830 7333

Email: info@arccancersupport.ie Website: www.arccancersupport.ie

ARC Cancer Support Centre

ARC House

559 South Circular Road

Dublin 8

Tel: 01 707 8880

Email: info@arccancersupport.ie Website: www.arccancersupport.ie

Arklow Cancer Support Group

25 Kingshill Arklow Co Wicklow Tel: 085 110 0066

Email:

arklowcancersupport@gmail.com

Balbriggan Cancer Support Group

Unit 23, Balbriggan Business Park

Balbriggan Co Dublin Tel: 087 353 2872

The Bella Rose Foundation

[Women with cancer] Merry Maid House West Park Campus Garter Lane Citywest Dublin 24 Tel: 086 879 3242

Email:

the bellar ose foundation@gmail.com

Bray Cancer Support & Information Centre

36B Main Street

Bray

Co Wicklow Tel: 01 286 6966

Email: info@braycancersupport.ie Website: www.braycancersupport.ie

Cara Cancer Support Centre

Mullavalley Louth Village Dundalk Co Louth

Tel: 042 937 4905 Mobile: 087 395 5335 Email: info@ccscdundalk.ie Website: http://ccscdundalk.ie

Cois Nore: Cancer Support Services

Kilkenny 8 Walkin Street Kilkenny Tel: 056 775 222

Tel: 056 775 2222

Email: coisnorekilkenny@gmail.com Website: www.kilkennycancersupport.ie

Cuisle Centre

Cancer Support Group

Block Road Portlaoise Co Laois Tel: 057 868 1492

Email: info@cuislecentre
Website: www.cuislecentre.com

Dóchas: Offaly Cancer Support

Teach Dóchas Offaly Street Tullamore Co Offaly Tel: 057 932 8268

Email: info@dochasoffaly.ie Website: www.dochasoffaly.ie

Éist Cancer Support Centre Carlow

The Waterfront Mill Lane Carlow

Tel: 059 913 9684 Mobile: 085 144 0510

Email: info@eistcarlowcancersupport.ie Website: www.eistcarlowcancersupport.ie

Gary Kelly Support Centre

George's Street Drogheda Co Louth

Tel: 041 980 5100 / 086 817 2473

Email: services@gkcancersupport.com Website: www.gkcancersupport.com

Greystones Cancer Support

La Touche Place Greystones Co Wicklow Tel: 01 287 1601

Email: info@greystonescancersupport

Website:

www. greystones can cersup port.com

Haven Cancer Support and Therapy Group

Haven House 68 Hazelwood Gorey

Co Wexford Tel: 053 942 0707 / 086 250 1452

Email: info@thehavengroup.ie
Website: www.thehavengroup.ie

HOPE Cancer Support Centre

22 Upper Weafer Street

Enniscorthy Co Wexford Tel: 053 923 8555

Email: mary@hopesupportcentre.ie Website: www.hopesupportcentre.ie

Kilkenny Cancer Support Services

Walkin Street Kilkenny City Tel: 085 721 9280

Email: info@kilkennycancersupport.com

Website:

www.kilkennycancersupport.com

Lakelands Area Retreat & Cancer Centre

Ballinalack Mullingar Co Westmeath Tel: 044 937 1971 CallSave: 1850 719 719 Email: info@larcc.ie Website: www.larcc.ie

Newbridge Cancer Support Group

144 Allenview Heights Newbridge

Co Kildare

Tel: 083 360 9898

Email:

newbridgecancerhealinghelp@gmail.com

Rathdrum Cancer Support Centre

34 Main Street Rathdrum Co Wicklow Tel: 087 292 8660

Email: rathcan@gmail.com

Tallaght Cancer Support Group

Millbrook Lawns
Tallaght
Dublin 24
Tel: 087 217 6486
Email: ctallaght@yahoo.ie

Wicklow Cancer Support Centre

1 Morton's Lane Wicklow Tel: 0404 32696

Email: wicklowcancersupport@gmail.com

Munster support groups & centres

Cancer Information & Support Centre

Mid-Western Regional Hospital

Dooradoyle Co Limerick Tel: 061 485 163

Website: www.midwesterncancercentre.ie

CARE Cancer Support Centre

14 Wellington Street

Clonmel Co Tipperary Tel: 052 618 2667

Email: cancersupport@eircom.net Website: www.cancercare.ie

Cork ARC Cancer Support House

Cliffdale

5 O'Donovan Rossa Road

Cork

Tel: 021 427 6688

Email: info@corkcancersupport.ie Website: www.corkcancersupport.ie

Kerry Cancer Support Group

124 Tralee Town House Apartments

Maine Street Tralee Co Kerry

Tel: 066 719 5560 / 087 230 8734 Email: kerrycancersupport@eircom.net Website: www.kerrycancersupport.com

Recovery Haven

5 Haig's Terrace

Tralee Co Kerry

Tel: 066 719 2122

Email: recoveryhaven@gmail.com Website: www.recoveryhavenkerry.org

Sláinte an Chláir: Clare Cancer Support

Tír Mhuire Kilnamona Ennis Co Clare

Tel: 1850 211 630 / 087 691 2396 Email: admin@clarecancersupport.com Website: www.clarecancersupport.com

South Eastern Cancer Foundation

Solas Centre 7 Sealy Close Earlscourt Waterford Tel: 051 876 629 Email: infosect@

Email: infosecf@eircom.net Website: www.secf.ie

Suimhneas Cancer Support Centre

2 Clonaslee Gortland Roe Nenagh Co Tipperary Tel: 067 37403 Email:

suaimhneascancersupport@eircom.net

Suir Haven Cancer Support Centre

Clongour Road Thurles Co Tipperary Tel: 0504 21197

Email: suirhaven@gmail.com

Youghal Cancer Support Group

161 North Main Street

Youghal Co Cork

Tel: 024 92353 / 087 273 1121

Ulster support groups & centres

Cancer Support and Social Club

Tiernaleague Carndonagh Co Donegal

Tel: 086 602 8993 / 087 763 4596

Coiste Scaoil Saor ó Ailse

Knockastoller Gweedore Letterkenny Co Donegal Tel: 083 121 7857

Email: coiste.scaoil.saor@icloud.com

Website: www.scaoilsaor.ie

Crocus: Monaghan Cancer Support Centre

The Wellness Centre 19 The Grange Plantation Walk Monaghan Tel: 087 368 0965

Cuan Cancer Social Support and Wellness Group

2nd Floor, Cootehill Credit Union

22-24 Market Street Cootehill

Co Cavan Tel: 086 455 6632

The Forge Cancer Support Group

The Forge Family Resource Centre

Pettigo Co Donegal Tel: 071 986 1924

Living Beyond Cancer

Oncology Day Services Letterkenny General Hospital

Letterkenny Co Donegal

Tel: 074 912 5888 (Bleep 674/734) /

074 910 4477

Support group & centres unaffiliated to Irish **Cancer Society**

Cancer Care West

Inis Aoibhinn

University Hospital Galway

Costello Road

Galway

Tel: 091 545 000

Email: info@cancercarewest.ie Website: www.cancercarewest.ie

Cúnamh: Bons Secours Cancer Support Group

Bon Secours Hospital

College Road

Cork

Tel: 021 480 1676

Website: www.cunamh.ie

Dundalk Cancer Support Group

Philipstown Hackballscross

Dundalk Co Louth

Tel: 086 107 4257

Good and New Cancer Drop In Centre

Unit 1, Portlink Business Park

Port Road

Letterkenny

Co Donegal

Tel: 074 911 3437

Killybegs Cancer Support Group

Kille

Kilcar

Co Donegal Tel: 074 973 1292

Email: riverbankdunne@eircom.net

Solace: Donegal Cancer Support Centre

St Joseph's Avenue **Donegal Town** Tel: 074 974 0837

Email: solacedonegal@eircom.net

For other support groups or centres in your area, call 1800 200 700.

Useful contacts outside Republic of Ireland

Action Cancer

Action Cancer House 1 Marlborough Park

Belfast BT9 6XS

Tel: 028 9080 3344

Email: info@actioncancer.org Website: www.actioncancer.org

American Cancer Society

Website: www.cancer.org

Cancer Focus Northern Ireland

40-44 Eglantine Avenue

Belfast BT9 6DX

Tel: 048 9066 3281

Email: hello@cancerfocusni.org

Website: www.cancerfocusni.org

Cancer Network Buddies

Website: www.cancerbuddiesnetwork.org

Cancer Research UK

Tel: 0044 20 7242 0200

Website: www.cancerhelp.org.uk

Healthtalkonline

Website: www.healthtalkonline.org

Lymphoma Association (UK)

Tel: 0044 1296 619400

Email: information@lymphoma.org.uk

Website: www.lvmhoma.org.uk

[Live chat is available on their website for

Irish patients too]

Macmillan Cancer Support (UK)

Tel: 0044 20 7840 7840

Email: cancerline@macmillan.org.uk

Website: www.macmillan.org.uk

Macmillan Support & Information Centre

Belfast City Hospital Trust

77-81 Lisburn Road

Belfast BT9 7AB

Tel: 028 9069 9202

Email: cancerinfo@belfasttrust.hscni.net

National Cancer Institute (US)

Website: www.nci.nih.gov

Helpful books

Free booklets from the Irish Cancer Society:

- Understanding Low-Grade Non-Hodgkin Lymphoma
- Understanding Acute Lymphoblastic Leukaemia
- Understanding Chemotherapy
- Understanding Radiotherapy
- Understanding Cancer and Complementary Therapies
- Diet and Cancer
- Coping with Fatigue
- Understanding the Emotional Effects of Cancer
- Lost for Words: How to Talk to Someone with Cancer
- Who Can Ever Understand? Taking about Your Cancer Talking to Children about Cancer: A Guide for Parents
- Managing the Financial Impact of Cancer: A Guide for Patients and Their Families
- Journey Journal: Keeping Track of Your Cancer Treatment

Cancer Positive: The Role of the Mind in Tacklina Cancers

Dr James Colthurst

Michael O'Mara Books, 2003

ISBN 185479860X

Challenging Cancer: Fighting Back, Taking **Control, Finding Options**

(2nd edn)

Dr Maurice Slevin & Nira Kfir

Class Publishing, 2002

ISBN 1859590683

High-Grade Non-Hodgkin Lymphoma Lymphoma Association, 2012 ISBN 978-0957004405

Lymphomas

Lymphoma Association, 2012 ISBN 978-0956475589

101+ Square Meals

[Budget and nutrition] Norah Bourke et al

MABS/HSE West/Paul

Partnership/Limerick VEC/Safefood, 1998

ISBN 187407514X

[For more details, see www.mabs.ie]

Helpful DVDs

A Guide to Chemotherapy

HSE/Mid-Western Cancer Centre/ICS. 2008

Call 1800 200 700 for a copy.

Understanding Radiation Therapy: A Patient Pathway

Call 1800 200 800 for a copy. Website: www.cancer.ie

What does that word mean?

Abdomen The part of your body that lies between your

chest and hips. Also known as your belly or

tummy.

Alopecia Loss of hair. No hair where you normally have

hair.

Allogeneic The use of someone else's tissue for a

transplant. For example, your brother or sister.

Anaemia When there are less red blood cells in your

blood. This can cause tiredness, weakness and

shortness of breath.

Antibody A protein that attacks and kills organisms,

such as bacteria and viruses, or cells that

cause disease.

The use of a person's own tissue. For example, **Autologous**

when cells are taken from your bone marrow

or blood.

Removing a small amount of tissue from your **Biopsy**

body and looking at it under a microscope to

see if lymphoma cells are present.

The building blocks that make up your body. Cells

They are tiny and can only be seen under a

microscope.

Chemotherapy Treatment that uses drugs to cure or control

cancer.

There are no visible signs of the lymphoma **Complete remission**

after treatment.

The thin muscle under your heart and lungs Diaphragm

that separates your chest from your abdomen.

Ongoing tiredness often not helped by rest. **Fatigue**

Intravenous Into a vein.

A clear watery fluid that carries material Lymph

through your lymphatic system.

Tubes carrying lymph that connect to lymph Lymphatic vessels

nodes.

A small oval or round gland found along Lymph node

lymphatic vessels that removes bacteria and

foreign particles from your body.

Medical oncologist A doctor who treats cancer with chemotherapy

and other drugs.

Treatment using a manmade antibody to fight Monoclonal antibody

disease. Also called biological therapy or

antibody therapy.

Feeling sick or wanting to be sick. Nausea

Neutropenia When there are less white blood cells called

neutrophils in your body. As a result, you

develop infections easily.

Oncology The study of cancer.

Partial remission After treatment, the lymphoma has been

reduced by at least a half but not fully.

Radiation oncologist A doctor who specialises in treating cancer

patients using radiotherapy.

Radiotherapy The treatment of cancer using high-energy

X-rays.

Refractory disease When the lymphoma does not respond to the

first course of treatment or comes back very

quickly afterwards.

Relapse When the lymphoma becomes active again

after treatment.

When the lymphoma is no longer active and is Remission

under control. See also complete remission and

partial remission.

Staging A series of tests that measure the size and

extent of cancer.

When there are less platelets in your blood. Thrombocytopaenia

This can cause you to bleed and bruise easily.

Questions to ask your doctor

Here is a list of questions that you might like to ask your doctor. There is also some space for you to write down your own questions if you wish. Never be shy about asking questions. It is always better to ask than to worry.

- What is non-Hodgkin lymphoma? Where exactly is it?
- What subtype do I have?
- What does high grade mean?
- What kind of treatment do I need?
- How successful is this treatment for my lymphoma?
- Are there other treatment options?
- How long will my treatment take?
- Do I have to stay in hospital for my treatment?
- What side-effects will I get?
- Is there anything I can do to help myself during treatment?
- Would I be suitable for a clinical trial?
- Should I eat special foods?
- What if the lymphoma comes back?

Your own questions

1			
Answer			
2			
Answer			
3			
Answer			
4			
4			
Answer			
5			
Answer			

Acknowledgements

We would like to extend a special word of thanks to the following for their invaluable contributions to this booklet and/or its previous version, *Understanding Non-Hodgkin Lymphoma*:

Dr Edgar Mocanu, Consultant Obstetrician and Gynaecologist Mark O'Dwyer, Oncology Coordinator, HARI Unit Teresa Quinn, Cancer Information Nurse Isobel Thompson, Lymphoma Support Ireland Ambrose Heaney, Lymphoma Support Ireland Jo Ballot, Clinical Trials Co-ordinator Loreto Kissane, Oncology Liaison Nurse Nicky Martin, Medical Social Worker

Would you like more information?

We hope this booklet has been of help to you. After reading it or at any time in the future, if you feel you would like more information or someone to talk to, please call the National Cancer Helpline on 1800 200 700 or visit a Daffodil Centre.

Would you like to be a patient reviewer?

If you have any suggestions as to how this booklet could be improved, we would be delighted to hear from you. The views of patients, relatives, carers and friends are all welcome. Your comments would help us greatly in the preparation of future information booklets for people with cancer and their carers. Please fill in the postcard in the pocket inside the back cover, and post it back to us for free.

If you wish to email your comments, have an idea for a new booklet or would like to review any of our booklets, please contact us at reviewers@irishcancer.ie

If you would prefer to phone or write to us, see contact details below.

Would you like to help us?

The Irish Cancer Society relies entirely on voluntary contributions from the public to fund its programmes of patient care, research and education. This includes patient information booklets. If you would like to support our work in any way – perhaps by making a donation or by organising a local fundraising event – please contact us at CallSave 1850 60 60 60 or email fundraising@irishcancer.ie

Irish Cancer Society, 43/45 Northumberland Road, Dublin 4. Tel: 01 231 0500 Email: info@irishcancer.ie Website: www.cancer.ie

Irish Cancer Society

43/45 Northumberland Road, Dublin 4

T: 01 231 0500 E: info@irishcancer.ie

W: www.cancer.ie

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