

# CHEMOTHERAPY



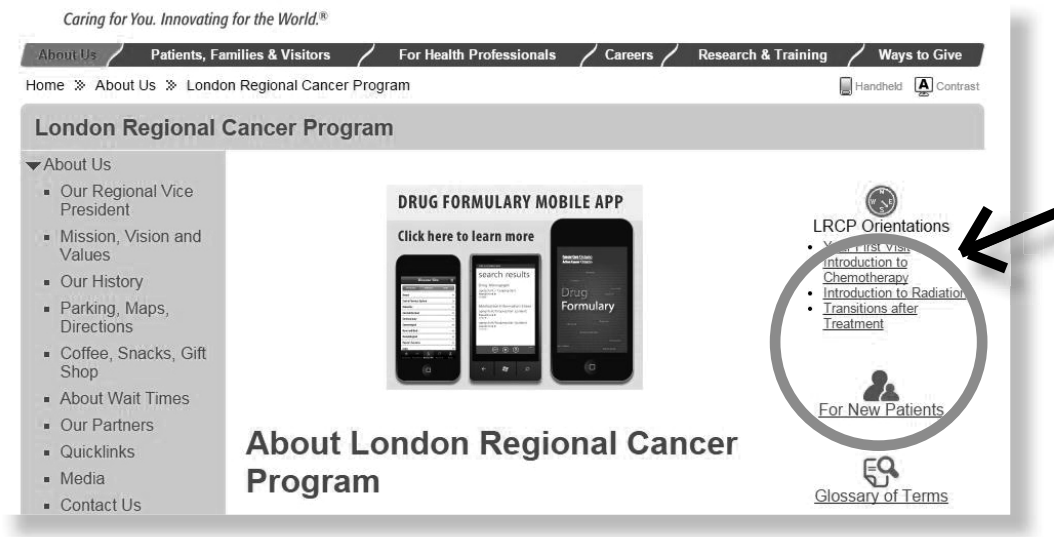
In this section, you will learn about:

- 'Introduction to Chemotherapy' video
- What is chemotherapy
- Your first chemotherapy treatment
- Understanding your blood work
- Paying for your medicine
- Complementary and alternative therapies

## Introduction to Chemotherapy

Please view the 'Introduction to Chemotherapy' video on the LRCP website. Follow along with this section of the binder and make notes as you go.

- Go to the LRCP Public Website at: [http://www.lhsc.on.ca/About\\_Us/LRCP](http://www.lhsc.on.ca/About_Us/LRCP)
- The LRCP orientation videos are listed on the right.



- You can also access the video with a direct link:  
<http://lrcp.tours.lhsc.on.ca/your-first-visit/before-you-visit>

### What is chemotherapy?

- Cancer begins when cells start to grow out of control.
- Chemotherapy uses one or more drugs to destroy or control the growth of cancer cells.
- The type of cancer you have determines the chemotherapy drugs you receive.

### How is chemotherapy given?



- Through a vein (Intravenous - IV)
- By mouth (oral)
- If you will be receiving your chemotherapy in a different way, your care provider will discuss it with you.

## Is chemotherapy painful?

- It does not hurt to get chemotherapy.
- If you feel burning or notice redness or swelling in the area of the needle, tell your Chemotherapy Nurse immediately.
- When you are home, if you feel pain or notice redness or swelling in the arm where you received chemotherapy, call the Telephone Triage Nurse immediately.

## Can I take other medications while I am on chemotherapy?

- Some medication and natural health products can affect the chemotherapy
- Some chemotherapy can affect the medication you take for other conditions.



**Remember...** Bring a list of medication you currently take to your appointments and your cancer doctor will review them. Include all vitamins, herbs and minerals (natural health products). Keep this list with you at all times in case of an emergency.

## What to Expect While in the Clinic

- Most patients get chemotherapy treatment on a separate day from their doctor's appointment.
- Check into the clinic with the receptionist.
- You will be given a pager at the clinic desk. It will allow you to walk around the cancer centre and will alert you when your nurse is ready for you.
- You will be asked to complete your symptom screen at the kiosk.
- Your doctor or nurse will request blood work when it is required. If blood work is requested, you will be given a paper requisition. Go to the lab by Clinic 4 to get your blood work done.
- If an x-ray is requested, you will be given directions to the x-ray department.
- Return to the clinic. If you do not have a pager, let the receptionist know you are back.
- There are volunteers in the chemotherapy suite to provide comfort and support to you and your family.



**1.** Check-in at reception. You will be given a pager, you may have a seat in the waiting area until your appointment time.



**2.** The nurse will greet you at the door and take you to a bed or chair where you will receive your chemotherapy treatment. A visitor may join you.



**3.** The nurse will review information about your chemotherapy treatment.



**4.** The nurse will begin your treatment. This may include putting in an IV.

### What to bring:



- A list of all the medicines, vitamins, herbs, and minerals you take
- Medicine that you normally take during the day for other conditions (e.g., pain, blood pressure, etc.)
- Insulin and snacks, if you are diabetic
- Lunch or snacks
- Books, magazines, or iPad
- Your insurance forms, including drug plan information
- Debit or credit card to pay for medicine that you will bring home



**Remember...**only one person can be with you while you are having treatment. The chemotherapy suite is not a safe place for infants and children under the age of 16.

### Make sure you...

- Dress comfortably and in layers in case you get hot or cold.
- Have a driver to take you home.

## When to Call for Help



Call the LRCP Telephone Triage Nurse at 519-685-8600 and press '3' (Monday to Friday 8:30 a.m. to 4:00 p.m.) if you have any of these changes in your condition:

- **Fever of 38° C (100.4° F) or higher**
- Nausea lasting for more than 2 days (48 hours) even after taking anti-nausea medicine
- Vomiting that lasts more than 1 day (24 hours)
- Constipation that lasts for more than 3 days (72 hours) and is not relieved by laxatives
- Diarrhea that lasts more than 2 days (48 hours)
- Cankers or sores in your mouth



**If you experience any of the following conditions, call 9-1-1:**

- Chest pain or breathing problems
- Increased pain or any unusual, strong, or new pain, especially in the spine
- Loss of feeling or movement in your arms or legs
- Bleeding that will not stop
- Confusion or increased sleepiness
- Seizures and convulsions
- Sudden swelling or pain in your arms or legs
- Arms or legs which suddenly feel hot or cold to the touch

## Side Effects

Chemotherapy can affect cancer cells as well as normal, fast growing cells, such as:

- Bone marrow (blood cells)
- Lining of the mouth, throat, stomach, intestines
- Hair follicles (roots)
- Peripheral nerves (nerve endings)



### **Important points to remember:**

- You may not have any side effects. Everyone is different.
- In most cases, you will be able to manage the side effects on your own.
- Side effects usually go away after you finish your treatment.
- Keep track of any side effects that you may have in a diary, on a calendar, or in a notebook.

## **Bone Marrow**

The bone marrow makes:

- White blood cells that fight infection
- Red blood cells (hemoglobin) that carry oxygen to your cells
- Platelets that help clot the blood and heal wounds

Blood work will be done on a regular basis to measure your blood cell counts  
Your treatment may be delayed if you have a low blood cell count.

## **Low White Blood Cell Counts**

Low white blood cell counts make the body more open to infection. It is called “Neutropenia” (new-tro-pee-nee-ah).

While on chemotherapy, infections can happen very quickly and make people very sick. Your risk of infection is greatest 5 to 14 days after each treatment.

Signs of infection can include, but are not limited to:

- Temperature of 38°C (100.4°F) or higher
- Chills or shakes
- Areas that are red or tender
- Pain, burning, or frequent urge to urinate
- Feeling unwell (e.g. the flu)
- Cough
- Sore throat



### What you can do...

- Wash your hands often with soap and water or hand sanitizer.
- Take your temperature daily or if you are feeling unwell.
- Avoid people with a cold, the flu, or any other infectious disease.

### Fever

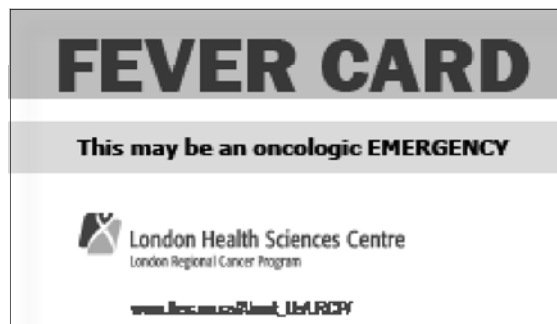


If you have a fever of 38°C (100.4°F) or higher:

The Telephone Triage Nurse is available **from Monday to Friday 8:30 a.m. to 4:00 p.m.** call (519) 685-8600, press '3' to speak with a Telephone Triage Nurse.

**After hours, holidays, and on weekends,** call your Family Doctor or go to your nearest Emergency Department.

Tell staff that you are receiving chemotherapy and that you have a fever. Show them your fever card.



**DO NOT** take acetaminophen (e.g. Tylenol®) for your fever until you speak with a doctor or nurse.

**Having a fever is a medical emergency. Have a good thermometer that you can read and understand.**

### Low Red Blood Cell Count

When your red blood cell count is low, you may:

- Feel tired
- Feel short of breath during activity
- Feel dizzy or light headed
- Have a headache
- Have chest pain



What you can do...

- Rest in between activities
- Plan healthy meals and eat food high in protein
- Get up slowly so that you do not get dizzy

## Low Platelet Count

If your platelet count is low, you may have:

- Bruises or small purple spots on your body
- Bleeding that will not stop
- Blood in your urine or stool (or black stool)



What you can do...

- Use a soft toothbrush. Check with your cancer doctor before dental work.
- Prevent constipation. Do not use suppositories or enemas.
- Do not take ASA (Aspirin®, acetylsalicylic acid) without your oncologist's (cancer doctor's) knowledge and consent.
- Avoid ASA and ASA-containing products.
- If a doctor has advised you to take ASA to prevent heart disease or stroke, please discuss this with your cancer doctor before starting treatment.
- Do not use ASA for headache, fever, or occasional aches and pains.
- Use an electric shaver if you have one.
- To stop the bleeding, apply pressure and hold for 5-10 minutes or until the bleeding stops. If you cannot stop any bleeding, **go to your local emergency department**. Make sure you have a driver.



## Why do I need blood work?



- Blood work is needed to check your blood cell counts and will be done on a regular basis.
- Your treatment may be delayed if you have a low blood count.
- Some patients are able to have blood work at an outside lab. Discuss this with your health care team.

## Nausea and Vomiting

- Nausea is a feeling of sickness in the stomach.
- Nausea and vomiting can be controlled with medicine.
- You may be given medicine to take at home to help prevent nausea.



### What you can do...

- Take the medicine you are given as directed. Read all medicine labels carefully.
- If you have questions about your medicine, call your pharmacist or the Telephone Triage Nurse.
- Eat foods that appeal to you. You may need to eat small meals, several times a day and limit spicy, fried, acidic, or strong smelling foods.
- Eating foods at room temperature may help nausea.
- Drink lots of clear fluids - water, broth, strained lemonade, orange juice, apple, grape, cranberry juice, Jello®, Popsicles®, flat pop (no bubbles or caffeine), Gatorade®, or Resource Fruit Beverage®.
- Eat before your chemotherapy treatment.
- Rest or relax after eating.



### When to call for help

- Vomiting continues for more than 1 day (24 hours) or you have vomited more than 3 times in a day.
- Nausea lasting for more than 2 days (48 hours) even after taking anti-nausea medicine.

## Mouth Sores

- Mouth sores (including cankers, blisters or lip sores) may start 5 to 7 days after treatment.
- Talk to your health care team before going to see your dentist.



### What you can do...

- Brush your teeth after meals with a soft toothbrush.
- Keep your dentures clean.
- Rinse your mouth out often with salt water, baking soda or club soda that is flat.
- Do not use mouth washes that contain alcohol.
- Avoid drinking alcohol and smoking.



### When to call for help

- You have cankers or sores in your mouth.

### Do not wait until:

- It is too painful to chew
- You have trouble swallowing food or liquid
- You have bleeding or white patches in your mouth

## Constipation

Constipation is having to strain or push hard to have a bowel movement, or not having bowel movements as often as you usually do.



### What you can do...

- Eat foods high in fibre. This includes fruits, vegetables, prune juice, and whole grain breads.

- Increase fluid intake (decaffeinated beverages e.g., tea, fruit drinks, soda, broth).
- Exercise and remain active.
- Take laxatives or stool softeners.



### **When to call for help**

- If you have not had a bowel movement for 3 days (72 hours).
- There is blood in your stool.

Talk to your oncologist (cancer doctor) or nurse before using suppositories or enemas.

## **Diarrhea**

Diarrhea is having loose or watery stools 4 or more times a day.



### **What you can do...**

- Eat low fibre foods like white bread, plain soda crackers, etc.
- Drink 8 or more glasses of water a day.
- Avoid milk and drinks with caffeine.
- Sugar can act as a laxative. Avoid large amounts of candy, chocolate, etc.
- Take anti-diarrhea medicine Loperamide (Imodium®) as directed by your doctor.



### **When to call for help**

- Diarrhea lasts more than 2 days (48 hours) or you have 6 or more bowel movements a day.
- You cannot drink fluids for more than 24 hours.
- Blood is in the stool.
- Cramps are severe.
- You have to wake up at night to have a bowel movement.

## **Hair Loss**

- Not all chemotherapy causes hair loss.
- Some people may have thinning, while others have total hair loss.
- You may lose hair from all parts of your body.
- May have temporary scalp tenderness.
- Hair loss happens 2 to 3 weeks after treatment.
- Some people find hair loss less distressing if they cut their hair shorter before treatment.
- If you want a wig that is similar to your hairstyle, ask a boutique or your own hair stylist before starting treatment.
- Your hair should grow back once the treatment is finished.



### What you can do...

- Women can take the “Look Good, Feel Better” workshop. To register, call 1-800-914-LOOK (5665).
- Wear a hat, scarf or wig.
- Wigs are covered by most private medical plans. You will need a prescription from your physician.
- There is a Wig and Turban Boutique in the LRCP where you can borrow a wig free of charge.
- Take care of your scalp by using mild shampoo and using sunscreen (SPF 30+).
- Avoid harsh chemicals (perms, colouring, relaxers) until after your final chemotherapy treatment.
- Avoid hot rollers, curling irons, hair dryers and excessive brushing.

## **Pain and Other Side Effects**

Some chemotherapy may cause:

- Flu-like aches and pains
- Burning, numbness, tingling in the hands or feet
- Ringing in the ears
- Sensitivity to cold
- Neuropathy (nerve pain) can cause numbness in the hands and feet. It may not

allow you to feel extreme temperatures or when you have a cut or blister. Use gloves, pot holders, or oven mitts to protect your hands. Check your feet regularly.

- Tylenol® is most commonly used to manage pain. Make sure you check your temperature before taking any medicine that has acetaminophen (e.g. Percocet, cold medications). Read your labels.

## **Skin and Nail Changes**

Some treatments may cause:

- Rashes
- Dry, cracked skin
- Thin and red skin on your hands and feet
- Changes to the colour and texture of your fingers and toenails
- An increased sensitivity (increased risk of skin burning over a much shorter time) after treatment that requires lifelong protection



What you can do...

- Report any skin changes to your nurse or cancer doctor during your treatment.
- Use moisturizers or scent-free creams.
- Use sunscreen with an SPF 30 or greater.
- Keep covered while outdoors and wear a hat.
- Avoid having manicures, pedicures or artificial nails while on treatment
- Check your feet regularly and report any skin changes to your nurse or cancer doctor.

## **Sexuality**



You may notice a change in your sexual needs or response. A decrease in desire is common.

Pregnancy must be avoided during treatment and for several months after treatment. Discuss birth control methods with your family doctor.

Chemotherapy can cause:

- Decreased sperm count - consider sperm banking before starting chemotherapy
- Premature menopause - hot flashes, mood swings, and vaginal dryness. Use lubricants if needed.

Use condoms while either partner is receiving treatment. All bodily fluids contain chemotherapy.

## Fatigue

Fatigue means that you are very tired. This is the most common side effect. With fatigue, you may:

- Feel short of breath
- Have a total lack of energy
- Difficulty trying to focus or concentrate
- Feel depressed
- Have a lack of interest in social activities

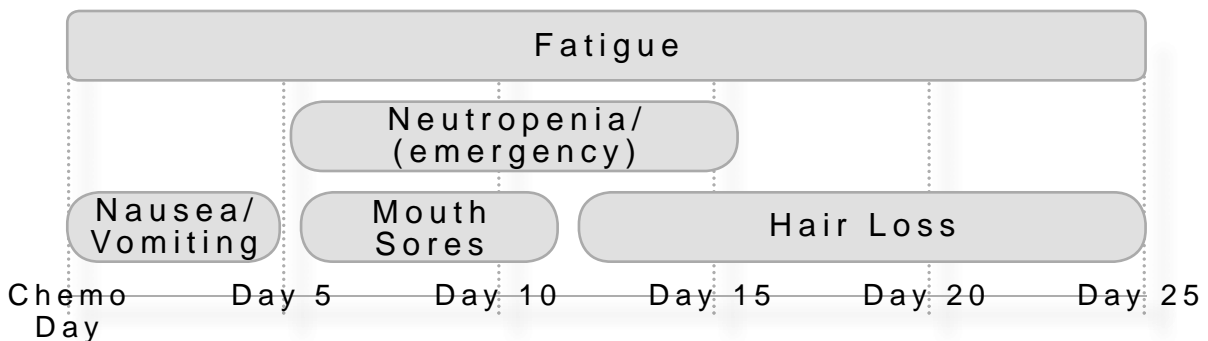


What you can do...

- Take short rest breaks.
- Ask for help around the house.
- Eat a balanced diet.

Overall, staying active can make you feel better and give you more energy to do the things that you enjoy.

## Side Effect Timeline Example



## Pharmacy - Cost of Medicine



Most medicines given in the chemotherapy suite are covered by OHIP. You are responsible to pay for chemotherapy and other medicines that you take at home. Please let a member of your care team know if you need assistance paying for your medicine.

Most of these costs are covered by the following drug plans:

- Senior Citizens Drug Plan
- CCAC (P-card, Home Care)
- Social Assistance (monthly card)
- Private Drug Plans (e.g., Green Shield, Blue Cross, Manulife, etc.)
- Trillium Drug Plan

<http://www.health.gov.on.ca/english/public/pub/drugs/trillium.html>

It is important to know:

- Your local or home pharmacy may not have the medicines you need
- Contact the LRCP Pharmacist or the Telephone Triage Nurse immediately if you have a reaction to any medicine

## Complementary and Alternative Therapies

- Complementary therapies are used with your LRCP cancer treatment plan.
- Alternative therapies are used instead of a conventional treatment.
- Some complementary and alternative therapies may be harmful while you are taking chemotherapy drugs. It is important to talk with your LRCP health care team about any therapies you are taking.

## Responsibility of Care



- Your **health care team at LRCP** (Oncologist, Primary Nurse, Chemotherapy Nurse, Pharmacist, Dietitian, etc.) is responsible for your cancer treatment and care.
- Your **Family Doctor** is responsible for all non-cancer related health care (e.g., blood pressure, etc.). If you do not have a family doctor, call 1-800-445-1822 to link with the Health Care Connect patient registry or visit the website at [www.health.gov.on.ca/ms/healthcareconnect/public/index.html](http://www.health.gov.on.ca/ms/healthcareconnect/public/index.html)

## When should I call my family doctor?

- For issues not related to cancer like a heart condition, high blood pressure, diabetes, etc.
- If you have any changes in your health between visits to LRCP such as a cold or the flu.
- If you have any questions about your cancer.
- For all non-cancer related prescriptions.

Continue regular check-ups with your family doctor. Your family doctor is an important part of your health care team.

## Clinical Trials



If you are participating in a Clinical Trial, you will need your consent forms every time you are with a health care professional (e.g., emergency doctor, check-up with your family doctor, etc.).

For more information, speak to your health care team or visit our website for more information:

[http://www.lhsc.on.ca/Research\\_Training/LRCP/Clinical\\_Trials/](http://www.lhsc.on.ca/Research_Training/LRCP/Clinical_Trials/)

You can also contact our Clinical Trial Advisor by email [clinicaltrials@lhsc.on.ca](mailto:clinicaltrials@lhsc.on.ca) or by phone 519-685-8500 ext. 55201.