

A PATIENT'S GUIDE

to Cancer Treatment



OHC

SPECIALISTS IN CANCER
AND BLOOD DISORDERS

When you hear the word cancer, **start here.**



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Patient Name: _____

Physician Name: _____

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At OHC, the search for new treatments is relentless, the drive to provide superior care runs deep and the fight against cancer is personal. Our independent, physician-led practice is recognized for going beyond clinical excellence, providing unrestricted personal support and genuine emotional caring in familiar, neighborhood locations throughout the region. At OHC:

- Renowned experts aggressively attack your cancer with every possible strategy
- Our in-house, nationally-recognized clinical trials team is engaged in a passionate search for innovative treatment options
- Counselors and navigators help you manage finances, understand your disease and gain power over cancer's impact on your life

OHC has been fighting cancer on the front lines for more than three decades. We are one of the nation's largest independent oncology practices, as well as the region's premier source of treatment for nearly every form of cancer and complex blood disorder. At its heart, our approach to cancer care is simple—to surround you with everything you need so you can focus on what matters most: beating cancer.



My healthcare team

My OHC Doctor

Name: _____

Phone Number: _____

Fax Number: _____

My Advanced Practice Provider (APP)

Name: _____

Phone Number: _____

Fax Number: _____

My Pharmacy

Name: _____

Phone Number: _____

Fax Number: _____

My Mail Order Pharmacy

Name: _____

Phone Number: _____

Fax Number: _____

My Financial Navigator

Name: _____

Phone Number: _____

Fax Number: _____

My Nurse Navigator

Name: _____

Phone Number: _____

Fax Number: _____

My Research Nurse

Name: _____

Phone Number: _____

Fax Number: _____

My Alternate Pharmacy

Name: _____

Phone Number: _____

Fax Number: _____

My Preferred Hospital

Name: _____

Phone Number: _____

Fax Number: _____

Other Healthcare Provider

Name: _____

Phone Number: _____

Fax Number: _____

My Primary Care Doctor

Name: _____

Phone Number: _____

Fax Number: _____

Notes: _____

Your healthcare team

Doctors

You will have one doctor who will lead your care team. He or she will work with advanced practice providers and nurses to administer your care and treatment when you visit the OHC office(s). Our doctors are on-call 24 hours a day, 7 days a week, so if you call after regular office hours, our on-call doctor or nurse navigator will call you back.

Advanced Practice Providers

Advanced practice providers, also called Nurse Practitioners, are registered nurses who have advanced training in the diagnosis and treatment of problems that may arise during your care. Our advanced practice providers specialize in medical oncology/hematology, bone marrow transplant, gynecology oncology and radiation oncology. You may see an advanced practice provider at your treatment visits and follow up visits.

Nurse Navigators

Nurse Navigators are specially trained oncology nurses who work directly with you and other members of the care team to help you through the process of diagnosis, treatment and follow up. They provide patient and family education and respond to questions, problems or concerns related to your care at OHC. Nurse navigators are expert oncology nurses who have the skill and knowledge to assist patients who are navigating their way through cancer.

Triage Nurse Navigators

Triage nurses are highly-trained oncology nurses who answer your calls about your symptoms, urgent medical questions and anything else you need. They respond quickly and are available Monday – Friday, 7:00 am – 5:00 pm.

Treatment Nurses

These registered nurses administer your medication(s) in the OHC office. They are certified through the Oncology Nursing Society in administration of chemotherapy and biotherapy. The treatment nurses are skilled at starting IVs, preparing and administering the medication and providing instructions on your treatment regimen. They also make sure you are warm and comfortable during treatment.

Research Nurses

Research nurses are registered nurses who work in collaboration with doctors to provide patients with access to clinical trials. They assist in educating patients about the trial, responsibilities while on the study and what to expect from the sponsor, doctor and nurse during the course of care.

Pharmacists

OHC pharmacists are specially trained in intravenous and oral chemotherapy as well as supportive care medications. They are readily available to provide proper selection, dispensing, monitoring and administration of all drugs related to cancer and hematologic disorders. OHC's research pharmacy supplies new drug therapies offered in clinical trial protocols through our partnership with the US Oncology Research Network.

Medical Assistants

Medical assistants are medical personnel who check you in with each visit to OHC. They schedule your tests, assist with procedures and draw blood samples.

Your healthcare team (continued)

Clinical Care Coordinators

Clinical care coordinators are medical personnel who provide patient education, answer patient telephone calls, coordinate referrals to other doctors/resources and assist with medication refills.

Receptionists/Schedulers

Receptionists/schedulers are office personnel who answer telephone calls and schedule appointments at OHC. It is very important to schedule your follow-up appointments and to notify us as soon as possible if you have to cancel your appointment.

Patient Account Services Representatives

These team members file insurance forms and manage billing services for OHC. They are happy to answer any questions or concerns you may have regarding these services.

Financial Navigators

Financial navigators help patients navigate through the financial complexities related to cancer and blood disorder care. Patients can look to their financial navigator for help in understanding OHC's financial policies or to request financial assistance. They work hand-in-hand with patients to create customized financial plans and to access all available forms of financial assistance.

Call Center Representatives

Call center representatives answer incoming calls, provide information, take messages and forward calls. They also collect patient information, including insurance, and schedule follow-up appointments.

Business and Clinical Practice Management

Business and clinical managers direct and oversee all aspects of patient care provided at OHC. They are always interested in hearing your ideas, questions or concerns about your care at OHC.

Volunteers

OHC volunteers provide a level of comfort and friendship to patients while they are receiving treatment. They will bring you a warm blanket, get you a snack, listen to stories about your pet and try to beat you at checkers – whatever you need to make your visit as positive and comfortable as possible.



“helpful tips”

Regarding Your Care in Our Offices

To promote a safe and healthy environment for patients and staff, we request that people who are sick not accompany you to the office. Children under the age of 15 may not visit the treatment suite or lab area due to safety concerns. Children must remain in the reception area under supervision.



Call Us Early. Call Us First!

1. Contact us at 513-751-CARE (2273) or toll free: 1-888-649-4800 if you are experiencing:

- Fever greater than 100.5
- Nausea and vomiting
- Diarrhea
- Pain at your IV site
- Bleeding
- Any symptom concerns or questions related to your medical care

2. Triage Nurse Navigators - (highly trained oncology nurses) answer your calls Monday-Friday from 7:00 am – 5:00 pm

3. Weekend care for side effects or symptoms - that are related to treatment

4. Same day urgent office visits - 7 days a week

5. OHC Patient Portal - to be used for medical questions that will be answered the same day by your OHC oncology care team

Call 911: You should call 911 if you are experiencing: sudden onset of shortness of breathe or chest pain

Comfort and safety during treatment

For safety purposes and the comfort of our patients, we need to limit visitors in the treatment suite area to one visitor per patient. Multiple visitors may come and go to check on the patient, but only one visitor may stay chair-side in the treatment suite. Your visitor may be asked to move to a waiting area during busy times. We will always provide updates to families about a patient's progress and condition.

Temperatures vary in the treatment suite. We recommend dressing in layers that can be removed or added during your visit. We have blankets for use during your visit and you are welcome to bring your own special blanket from home if you would like.

We have a selection of complimentary snacks and drinks available or you can bring your favorite snacks or a bag lunch. Visitors are welcome to bring snacks for themselves. Your caregiver may bring lunch for you during treatment. Refrigerators and microwaves are available for your use. Many odors affect patients receiving chemotherapy so we ask that you avoid bringing in odorous, highly spiced or pungent food items.

If you need to use the restroom and don't feel steady on your feet or need help managing the IV pole, please ask for assistance. Many patients receive medications that cause drowsiness or dizziness. Our goal is to provide high quality, safe patient care and minimize the risk of accidents and falls.

Please bring all medications, including pain medications, oxygen and personal care supplies (G-tube feeding equipment, ostomy supplies, etc.) you may need during your treatment.

To give you the best care, your doctors and nurses need to know about the medications you're taking. This includes prescription medication, over the counter supplements and vitamins. Please bring any new medication bottles with you to your appointments so that we can write down the exact name, dose and schedule of your medicines.

Before your first treatment, your advance practice provider, nurse navigator and financial navigator will meet with you to review your plan of care and answer your questions. During this visit, we will review your diagnosis, treatment plan, goals of treatment and side effect management. We will also discuss community resources that offer services to help you during your treatment journey. We encourage you to bring a friend or family member with you for each of these visits. You will be asked to sign a consent form for treatment.

You may bring a computer, book, portable music player or hand-held games to help pass the time. OHC has wireless internet access for patients and family members. If you have an implanted port, please remember to wear loose or buttoned clothing that will allow us easy access to your port or external line.

Medication refills:

Please monitor your medications closely to avoid a delay in refilling your prescription medications. We recommend you check the status of your medications before each office visit so you can ask for refills while you are in the office. Between visits, you can request a refill by calling your pharmacy or our office during regular office hours at 513-751-2273.

OHC also has a retail pharmacy where you can fill your prescriptions. For your convenience, we have included information about the OHC pharmacy on this page.

Pain medication refills

Due to federal laws and pharmacy regulations, most prescriptions for narcotics or controlled substances, such as pain medication, must be written and signed by a doctor during normal business hours. We are unable to call in these types of prescriptions to the pharmacy. These prescriptions must be picked up at the doctor's office during business hours by you or an authorized family member or friend. Anyone picking up your prescriptions must be listed on your personal health information disclosure list to assure privacy and confidentiality is maintained.

Pain medications are not filled after office hours or on the weekends. Check your pain medication supply every Wednesday to assure you have enough to cover your needs through the next week. Please note, if a holiday falls on a weekday and our office is closed, we are unable to fill pain medication prescriptions.

Refills by phone

When calling the office, remember to have your pharmacy telephone number available for refills or new medications that may be prescribed for your symptoms. Please have an alternate pharmacy number available if your primary pharmacy is not open 7 days a week, 24-hours a day.

If you have not received information about your refill request by mid-afternoon on the day you call, please call us before 4 p.m. to assure your request will be addressed.



OHC Retail Pharmacy

OHC Retail Pharmacy is available exclusively for OHC patients. OHC pharmacists work directly with doctors, nurses, patients and caregivers on the proper selection, distribution, administration and clinical monitoring of medications, regardless of treatment location. Our pharmacists are specially trained in oral chemotherapy and supportive care medications with a special emphasis on supporting you through medication schedules. The pharmacy staff can also help you with insurance plan authorizations and financial assistance.

Special Services offered by OHC Retail Pharmacy

- Anti-nausea and pain medications, as well as oral chemotherapy, can be filled on site at OHC's Blue Ash office.
- Reminder phone calls to patients and direct communication with your nurse navigators and doctors for prescription refills.
- Financial assistance and free shipping provided for oral chemotherapy.

Contact Us

OHC Retail Pharmacy
4350 Malsbary Rd.
Cincinnati, OH 45242
513-936-5376

Pharmacy Hours:

Monday-Friday
8:30 a.m.-5:00 p.m.

Side effects

Below is a list of side effects commonly caused by certain drugs. Not everyone will experience every side effect— it depends on the type and dose of your treatment and whether you have other health problems, such as diabetes or heart disease.

Talk with your doctor or nurse about the side effects on this list and ask which ones may affect you.

Names of the drugs that I am receiving:

You may have multiple side effects, some or none at all. Side effects are listed below in alphabetical order — not in order of likelihood or severity.

SIDE EFFECTS THAT MAY AFFECT YOU

- | | | |
|--|---|--|
| ☐ Anemia | ☐ Fluid retention | ☐ Nervous system changes |
| ☐ Appetite changes | ☐ Hair loss | ☐ Pain |
| ☐ Bleeding | ☐ Infection | ☐ Sexual changes |
| ☐ Constipation | ☐ Infertility | ☐ Skin and nail changes |
| ☐ Diarrhea | ☐ Mouth and throat changes | ☐ Taste changes |
| ☐ Eye changes | ☐ Nausea and vomiting | ☐ Urinary, kidney and bladder changes |
| ☐ Fatigue | | |
| ☐ Flu-like symptoms | | |

The following side effects will be discussed in more detail on upcoming pages of this booklet:

- | | | |
|--------------------------------|------------------------|--------------------------|
| • Appetite changes, page 21 | • Fatigue, page 12 | • Nail changes, page 25 |
| • Bleeding, page 11 | • Hair loss, page 26 | • Nerve changes, page 24 |
| • Constipation, page 19 | • Infection, page 14 | • Skin changes, page 23 |
| • Diarrhea, page 20 | • Infertility, page 28 | |
| • Nausea and vomiting, page 18 | • Mouth care, page 17 | |

Description of complete **blood count (CBC)**



WBC (White Blood Cell) – A blood cell that helps protect your body from infection. Increased WBC count may indicate infection or other stress to the body and decreased WBC count may indicate an increased risk of infection, depending on the results of your lab test.

RBC (Red Blood Cell) – A blood cell that carries oxygen around the body through the blood stream.

LYM (Lymphocyte) – A type of WBC that plays a key role in immunity and helps protect your body from infection.

GRAN (Granulocyte) – A type of WBC that plays a key role in infection.

MID – Indicates the combined value of the other types of white blood cells not classified as lymphocytes or granulocytes.

HGB (Hemoglobin) – The oxygen-carrying component of the red blood cell.

HCT (Hematocrit) – The amount of red blood cells in the blood sample. The hemoglobin and hematocrit values are used simultaneously to determine certain conditions. Depending on the value, increased levels may indicate more than normal amounts of blood or dehydration. Decreased levels may indicate anemia.

MCV (Mean Cell Volume) – The average size of the red blood cell.

MCH (Mean Cell Hemoglobin) – The average amount of hemoglobin in an average red blood cell.

MCHC (Mean Cell Hemoglobin Concentration) – The concentration of hemoglobin in an average red blood cell that helps to distinguish normal-colored red cells from pale red blood cells.

RDW (Red Cell Distribution Width) – Reports whether the red cells are the same in width, size and shape. This value may assist in determining certain types of anemia. It is expected that the RDW increases in almost everyone who is receiving chemotherapy because of the effect chemotherapy has on the blood cells.

PLT (Platelet) – Blood cells that help your blood clot and avoid excess bleeding. Depending on the value, increased levels of platelets increase the risk for clotting. Decreased levels increase the risk for bruising and bleeding.

Your medication(s) and your blood counts



The treatment you receive may cause a change in your body's normal blood cell production and measurements. Fortunately, your body is capable of repairing the changes, but you may experience a period of time during treatment when your blood counts may be lower than normal. For these reasons, we stress frequent hand-washing, avoiding exposure to anyone with known illnesses and reporting any signs and symptoms of infection to us immediately. The following is a brief explanation of how your blood cells work, signs and symptoms of lower than normal measurements, and things to do to help yourself during this period of time.

WHITE BLOOD CELLS (WBC):

- Blood cells that help protect your body from infection.
- White Blood Cell Count (WBC) and the Absolute Granulocyte Count (AGC) are the values to monitor.

Signs and symptoms of a **low white blood cell count:**

- Oral temperature of 100.5 or greater
- Chills, shakiness
- Burning with urination
- Cough
- Sore throat
- Flu-like symptoms

What to do to prevent an infection when your white blood cell count is low:

- Frequent hand-washing
- Inspection of your skin for areas of dryness and breakdown
- Inspection of your body for areas of infection, such as the mouth and skin

RED BLOOD CELLS (RBC):

- Blood cells that carry oxygen to the tissues of your body.
- Hemoglobin (Hgb) and Hematocrit (Hct) are the blood tests used to evaluate the red blood cell function.

Signs and symptoms of a **low red blood cell count:**

- Unusual weak/fatigue feelings
- Dizziness
- Shortness of breath (usually not a sudden onset of shortness of breath)
- Pounding in your head or ringing in your ears

What to do when your red blood cell count is low:

- Get plenty of rest
- Rest between activities to regain energy level
- Move slowly to avoid dizziness
- Eat green, leafy vegetables to add iron to your diet

PLATELETS (PLTS):

- Blood cells that help your blood to clot to avoid excess bleeding.
- Measurement of these clotting cells is your platelet count.

Signs and symptoms of a **low platelet count:**

- Nosebleeds
- Bleeding gums
- Easy bruising
- Prolonged bleeding from a cut
- Black or bloody stools
- Brown or red urine
- Tiny red or purple spots on your skin

What to do when your platelet count is low:

- Avoid taking aspirin
- Gently brush teeth with a soft bristle toothbrush
- Avoid accidental cuts or scrapes that occur when working with knives, tools, razors, etc.
- Clean your nose by gently blowing
- Discuss with your doctor or nurse if dental work is necessary



Call your doctor or nurse *if you have any of these symptoms.*

- Bruises, especially if you did not bump into anything
- Small, red spots on your skin
- Red- or pink-colored urine
- Black or bloody bowel movements
- Bleeding from your gums or nose
- Heavy bleeding during your menstrual period or a prolonged period
- Vaginal bleeding not caused by your period
- Headaches or changes in your vision
- A warm or hot feeling in your arm or leg
- Feeling very sleepy or confused

Bleeding

What is it and why does it occur?

Platelets are cells that make your blood clot when you bleed. Certain treatments like chemotherapy can lower your number of platelets because it affects your bone marrow's ability to make them. A low platelet count is called thrombocytopenia. This condition may cause bruises (even when you have not been hit or have not bumped into anything), bleeding from your nose or in your mouth or a rash of tiny, red dots.

Ways to manage bleeding:

Do:

- Brush your teeth with a very soft toothbrush.
- Soften the bristles of your toothbrush by running hot water over them before you brush.
- Blow your nose gently.
- Be careful when using scissors, knives or other sharp objects.
- Use an electric shaver instead of a razor.
- Apply gentle but firm pressure to any cuts you get until the bleeding stops.
- Wear shoes all the time, even inside the house or hospital.

Do not:

- Use toothpicks or start using dental floss if this was not part of your normal routine prior to starting treatment.
- Play sports or do other activities during which you could get hurt.
- Use tampons, enemas, suppositories or rectal thermometers.
- Wear clothes with tight collars, wrists or waistbands.

Check with your doctor or nurse before:

- Drinking beer, wine or other types of alcohol.
- Having any dental procedure, including cleanings.
- Taking vitamins, herbs, minerals, dietary supplements, aspirin or other over-the-counter medicines. Some of these products can change how chemotherapy works.

Let your doctor know if you are constipated.

Your doctor may prescribe a stool softener to prevent straining and rectal bleeding when you go to the bathroom. For more information, refer to the section on constipation on page 13 of this booklet.

Your doctor or nurse will check your platelet count often.

You may need medication, a platelet transfusion or a delay in your chemotherapy treatment if your platelet count is too low.

Fatigue: What is it and why does it occur?



Fatigue is one of the most commonly reported side effects during and after treatment.

Fatigue from treatment can range from a mild to extreme feeling of being tired. Many people describe fatigue as feeling weak, weary, worn out, heavy or slow. You may notice that you have less desire to do normal activities like eating and shopping. Some report difficulty with concentrating or thinking clearly. Resting does not always help fatigue.

Some patients report feeling fatigue during and after treatment for several weeks or months. If you receive radiation therapy along with chemotherapy, your fatigue may be more severe.

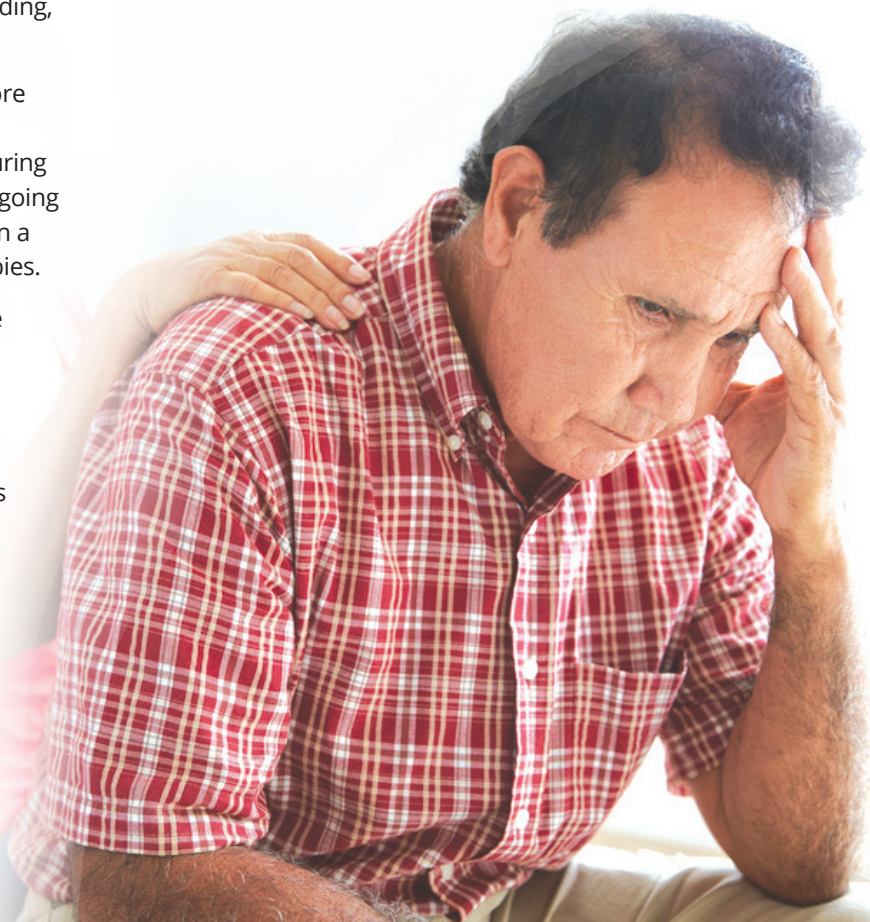
Fatigue may be caused by:

- Appetite changes
- Anemia
- Doing too much at one time
- Effort of making frequent visits to the doctor
- Feelings, such as stress, anxiety or depression
- Infection
- Lack of activity
- Medications
- Other medical problems
- Pain
- Trouble breathing
- Trouble sleeping
- Type of chemotherapy

Fatigue can happen all at once or little by little. People feel fatigue in different ways. You may feel more or less fatigue than someone else receiving the same type of treatment.

Ways to manage Fatigue:

- **Relax.** You may want to try meditation, prayer, yoga, guided imagery, visualization or other ways to relax and decrease stress.
- **Eat and drink well.** Often, this means 5 to 6 small meals and snacks rather than 3 large meals. Keep foods around that are easy to fix, such as canned soups, frozen meals, yogurt and cottage cheese. Drink plenty of fluids each day, about 8 to 10 cups of water or juice.
- **Plan time to rest.** You may feel better when you rest or take a short nap during the day. Many people say that it helps to rest for just 10 to 15 minutes rather than nap for a long time. If you nap, try to sleep for less than one hour. Keeping naps short will help you sleep better at night.
- **Be active.** Research shows that exercise can ease fatigue and help you sleep better at night. Try going for a 15-minute walk, doing yoga or riding an exercise bike. Plan to be active when you have the most energy. Talk with your doctor or nurse about ways you can be active while receiving chemotherapy.
- **Try not to do too much.** With fatigue, you may not have enough energy to do all the things you want to do. Choose the activities you want to do and let someone else help with the others. Try quiet activities, such as reading, knitting or learning a new language online.
- **Sleep at least 8 hours each night.** This may be more sleep than you needed before treatment. You are likely to sleep better at night when you are active during the day. You may also find it helpful to relax before going to bed. For instance, you might read a book, work on a jigsaw puzzle, listen to music or do other quiet hobbies.
- **Plan a work schedule that works for you.** Fatigue may affect the amount of energy you have for your job. You may feel well enough to work your full schedule, or you may need to work less — maybe just a few hours a day or a few days each week. If your job allows, you may want to talk with your boss about ways to work from home. Or you may want to go on medical leave (stop working for a while) while getting treatment. Your doctor and nurse can help you with this.
- **Let others help.** Ask family members and friends to help when you feel fatigue. Perhaps they can help with household chores or drive you to and from doctor's visits. They might also help by shopping for food and cooking meals for you to eat now or freeze for later.
- **Learn from others who have cancer.** People who have cancer can help by sharing ways that they manage fatigue. One way to meet others is by joining a support group — either in person or online. Talk with your doctor or nurse to learn more.
- **Keep a diary of how you feel each day.** This will help you plan how to best use your time. Share your diary with your nurse. Let your doctor or nurse know if you notice changes in your energy level, whether you have lots of energy or are very tired.
- **Talk with your doctor or nurse.** Your doctor may prescribe medication that can help decrease fatigue, give you a sense of well-being and increase your appetite. He or she may also suggest treatment if your fatigue is from anemia.



Infection What is it and why does it occur?



Some types of chemotherapy make it harder for your bone marrow to produce new white blood cells. White blood cells help your body fight infection.

It's important to avoid infections since chemotherapy decreases the number of your white blood cells. It's also important to watch for signs of infection when you have neutropenia (an abnormally low level of neutrophils, a type of white blood cell).

IMPORTANT: CALL THE OFFICE AT 513-751-2273 (CARE) IF YOU HAVE A FEVER OF 100.5°F DAY OR NIGHT. Do not take medicines that reduce fever without first talking with your doctor or nurse.

Ways to manage infection:



- **Your doctor or nurse will check your white blood cell count throughout your treatment.** If chemotherapy is likely to make your white blood cell count very low, you may get medicine to raise your white blood cell count and lower your risk of infection.
- **Wash your hands often with soap and water.** Be sure to wash your hands before cooking and eating, and after you use the bathroom, blow your nose, cough, sneeze or touch animals. Carry hand sanitizer for times when you are not near soap and water.
- **Use sanitizing wipes to clean surfaces and items that you touch.** This includes public telephones, ATM machines, doorknobs and other common items.
- **Be gentle and thorough when you wipe yourself after a bowel movement.** Instead of toilet paper, use a baby wipe or squirt of water from a spray bottle to clean yourself. Let your doctor or nurse know if your rectal area is sore, bleeds or if you have hemorrhoids.
- **Stay away from people who are sick.** This includes people with colds, flu, measles or chicken pox. You also need to stay away from children who just had a live virus vaccine for chicken pox or polio. Call your doctor, nurse or local health department if you have any questions.
- **Stay away from crowds.** Try not to be around a lot of people. For instance, plan to go shopping or to the movies when the stores and theaters are less crowded.
- **Be careful not to cut or nick yourself.** Do not cut or tear your nail cuticles. Use an electric shaver instead of a razor. Be extra careful when using scissors, needles or knives.
- **Watch for signs of infection.** Signs include drainage, redness, swelling or soreness. Let your doctor or nurse know about any changes you notice.
- **Take good care of your skin.** Do not squeeze or scratch pimples. Use lotion to soften and heal dry, cracked skin. Dry yourself after a bath or shower by gently patting (not rubbing) your skin.
- **Clean cuts right away.** Use warm water, soap and an antiseptic to clean your cuts. Do this every day until your cut has a scab over it.
- **Be careful around animals.** Do not clean your cat's litter box, pick up dog waste or clean birdcages or fish tanks. Be sure to wash your hands after touching pets and other animals.
- **Do not get a flu shot or other type of vaccine without first asking your doctor or nurse.** Some vaccines contain a live virus, which you should not be exposed to.
- **Keep hot foods hot and cold foods cold.** Do not leave leftovers sitting out. Put them in the refrigerator as soon as you are done eating.
- **Wash raw vegetables and fruits well before eating them.**
- **Do not eat raw or undercooked fish, seafood, meat, chicken or eggs.** These may have bacteria that can cause infection.
- **Do not have food or drinks that are moldy, spoiled or past the freshness date.**



Neutropenic Precautions

The following precautions are for when you are at risk for infection, which is defined by an absolute neutrophil count (ANC) below 1000. If you have any questions or concerns, please ask your doctor or nurse.

Activity	Do	Do Not	Comments
Dishes, laundry, other housework	X		Use a good moisturizer to keep hands from drying out.
Mechanical repairs, changing engine oil, etc.		X	Too high risk for cuts and scrapes that could possibly become infected.
Caring for household plants and gardening		X	Working in the soil could put you at high risk for infection.
Working in or near construction sites		X	Remodeling is especially dangerous because many germs may be hiding in old spaces.
Shopping and social activities	X		Try to avoid busy times when you will be exposed to large crowds.
Pet care	X		Wash your hands after holding, petting or brushing any animal. Avoid cleaning litter boxes or picking up waste.
Hand-washing	X		Do this frequently, especially before meals and after using the bathroom.
Sexual intercourse		X	This may put you at risk for infection or bleeding complications. Please speak with your doctor or nurse.
Feminine hygiene	X		We recommend using pads rather than tampons. It is also very important to wash from front to back with soap and water daily.
Enemas		X	The skin of the rectal area can easily become infected or bleed. A diet high in fiber will help.

Mouth care

Mouth tenderness and sores are fairly common problems in patients receiving certain drugs and/or therapy to the head and neck. The lining of your mouth is replaced about every week; therefore it is very sensitive to changes. Mouth problems can cause pain, become infected and/or cause you to have problems eating and drinking. We would like to try to prevent these problems by taking the following precautions.

Dental care

See your dentist for an exam and cleaning before you start your treatment or soon after. While you are on treatment, you will need to check with your cancer doctor before going to the dentist, as your blood counts may be too low to have dental work done. Please notify us of any dental procedure as certain prescribed medications may cause complications.

Mouth care

- Brush teeth with a soft toothbrush and fluoride toothpaste at least two times a day.
- Floss your teeth daily only if this has been part of your routine before you started receiving treatment. Do not floss if pain or bleeding occurs or if your platelet count is less than 50,000 or your white count is low.
- Apply lip moisturizer to your outer lips regularly.
- Drink at least 8 to 10, 8-ounce glasses of fluid a day and try to eat a balanced diet.
- Rinse your mouth four times a day, after meals and at bedtime. Do not use commercial mouthwashes since they usually contain alcohol, which may be irritating to your mouth. Instead, use one of the mouth rinse recipes included below:
 - o 1/4 - 1/2 teaspoon of salt in 1 cup of water or,
 - o 1/2 - 1 teaspoon of baking soda in 1 cup of water or,
 - o A mixture of the above two solutions

These recipes are some that other patients have tried. You may experiment with the amount of salt and baking soda to find the right combination for you to suit your taste and comfort. Mix fresh mouth rinse at least once a day.

If mouth tenderness occurs:

- Brush teeth every 4 hours. Leave dentures out as much as possible.
- Rinse your mouth every 2 hours while awake and every 4 to 6 hours during the sleeping hours.
- Look inside your mouth to see whether you have any ulcers, blisters or white patches. Call your doctor or nurse if you notice these.
- Avoid alcohol and tobacco. Avoid extremely hot, spicy, acidic and/or crunchy foods. These can all be irritating to your mouth.



Nausea and vomiting

What are they and why do they occur?

Nausea is an unpleasant feeling in your throat or stomach that may lead to vomiting. Some medications can cause nausea because of stimulation to a certain area of your brain. Nausea and vomiting can be triggered by smell, taste, anxiety, pain, motion or certain thoughts. Nausea can also be brought on by changes in the cells that line your stomach and intestines.

Nausea and/or vomiting can occur while you are receiving chemotherapy, right after the treatment or many hours or days later. You will most likely feel better on days that you do not receive chemotherapy.

There are medications that can help prevent nausea and vomiting. You may need to take these medications before each treatment and for a few days after treatment. How long you will need them after your treatment depends on the type of drug you are receiving and how your body reacts to the treatment. If one anti-nausea medication does not work well for you, please contact us so we can prescribe a different one to you. You may need to take more than one medication to help control your nausea.

Ways to manage nausea and vomiting:

- Prevent nausea. Try having bland, easy-to-digest foods and drinks that do not upset your stomach. These include plain crackers, toast, clear broth, clear liquids, rice, bananas, popsicles and gelatin.
- You can determine when it's best to eat and drink. Some people feel better when they eat a light meal or snack before treatment. Others feel better when they receive treatment on an empty stomach (nothing to eat or drink 2 to 3 hours before treatment).
- Eat small meals and snacks. Instead of eating 3 large meals each day, you may feel better if you eat 5 to 6 small meals and snacks. Avoid lying down immediately after eating.
- Control the temperature of your food. Give hot foods and drinks time to cool down. You can warm up cold foods by taking them out of the refrigerator one hour before eating or warming them slightly in the microwave. Drink carbonated beverages when they are warm and have lost the fizz.
- Stay away from foods and drinks with strong smells. Strong smells may upset your stomach. These may include coffee, fish, onions, garlic and foods that are being cooked.
- Relax before your treatment. You may experience less nausea if you relax before your scheduled treatment. Meditate, exercise, deep breathing or imagine peaceful scenery. You can also do quiet hobbies while you are receiving treatment such as reading, listening to music or knitting.
- Avoid certain foods. Greasy, fried, salty, sweet and spicy foods can be more irritating.



Constipation

What is it and why does it occur?

Constipation is a decrease in the usual number or frequency of bowel movements. You may also experience increased straining, bloating, gas, cramping, abdominal pain or inability to empty. Many people have problems with constipation. Pain medications, especially narcotics such as codeine, hydrocodone, morphine, hydromorphone, oxycodone and fentanyl cause constipation in many people. Some chemotherapy medication also cause constipation. These include vincristine, vinblastine, and Navelbine®, medications such as iron, anti-nausea medications (Zofran®, Kytril®), anti-inflammatories (Naprosyn®, Clinoril®, Voltaren®), anti-spasmodics (Donnatal®, Lomotil®), anti-anxiety medications or anti-depressants (Xanax®, Elavil®, Prozac®), as well as other medications. Other people who may be troubled by constipation include those not eating and drinking normally, those getting little exercise, elderly people or those with a variety of other conditions or situations. If you are taking a pain medication, your doctor may prescribe a laxative.

What can I do to help?

- Increase fluid intake if possible. Try to drink 8 to 10 glasses of fluid per day. Limit your caffeine (it's a diuretic and causes you to lose fluid).
- Increase the fiber in your diet, including whole grain products, wheat bran, beans, broccoli, fresh raw fruits with skins and seeds, fresh raw vegetables, nuts, corn, sweet potatoes, popcorn, coconut, dates, prunes and raisins. Some people have trouble getting fiber in their diet and consider using bulk products such as Metamucil® or Fibercon®. Please ask your doctor or nurse before starting these products, as they are not suitable for everyone.
- Avoid cheese products.
- Increase activity and exercise if possible, as activities such as walking stimulate your bowels as well as providing other benefits.
- Relax regularly and enjoy your meals leisurely on a regular schedule.
- Maintain routine regarding bowel movements. If you have the urge to have a bowel movement, try to act on it promptly. Privacy and plenty of time are important. Many people find that morning, after breakfast, is a good time to establish a routine. Contractions in the intestine are strongest at that time. A hot drink often helps stimulate the bowel.

What if I still have problems?

Your doctor or nurse may recommend you start a stool softener and/or laxative as soon as you start any medications that may put you at risk for constipation or at the first sign of trouble. Examples of combination stool softeners/laxatives which many find helpful include Senokot-S® or Miralax®. Milk of Magnesia® is a gentle laxative which you may use if you have an occasional problem with constipation. **Always ask your doctor or nurse if you are unsure what to take or use. Always tell your doctor or nurse if you are still having problems with constipation. This is especially important if you are also vomiting.**

Stay away from

- Drinks that are very hot or very cold
- Beer, wine and other types of alcohol
- Milk or milk products, such as ice cream, milkshakes, sour cream and cheese
- Spicy foods, such as hot sauce, salsa, chili and curry dishes
- Greasy and fried foods, such as french fries and hamburgers





Diarrhea

What is it and why does it occur?

Diarrhea is frequent bowel movements that may be soft, loose or watery. Treatment may cause diarrhea because it harms healthy cells that line your large and small bowel. It may also speed up your bowels. Diarrhea can also be caused by infections or drugs used to treat constipation.

Why is it important to report diarrhea to my doctor during therapy?

- It can prevent the intestines from absorbing necessary nutrients and fluids.
- It can be mild to severe, even life threatening.
- Diarrhea may not go away if left untreated, it may get much worse.
- Early treatment of diarrhea gives better results and may prevent hospitalization.
- Early treatment will help you to receive the best benefit from your chemotherapy or radiation.

Ways to manage diarrhea:

- Eat 5 or 6 small meals and snacks each day instead of 3 large meals.
- Ask your doctor or nurse about foods that are high in salts, such as sodium and potassium. Your body can lose these salts when you have diarrhea and it is important to replace them. Foods that are high in sodium or potassium include bananas, oranges, peach and apricot nectar, and boiled or mashed potatoes.
- Drink 8 to 12 cups of clear liquids each day. These include water, clear broth, ginger ale or sports drinks, such as Gatorade® or Propel®. Drink slowly and choose drinks that are at room temperature. Let carbonated drinks lose their fizz before you drink them. Add extra water if drinks make you thirsty or nauseous (feeling like you are going to throw up).
- Try the BRAT (Bananas, Rice, Applesauce, and Toast) diet. This is a good choice for an upset stomach. Bananas help replace lost nutrients. Rice is easily digested and binding because it is a starch. Applesauce provides sugars for energy. Toast (dry) is easy to tolerate and will also cause binding.
- Let your doctor or nurse know if your diarrhea lasts for more than 24 hours or if you have pain and cramping along with diarrhea. Your doctor may prescribe a medicine to control the diarrhea. You may also need IV fluids to replace the water and nutrients you have lost.
- Be gentle when you wipe yourself after a bowel movement. Instead of toilet paper, use a baby wipe or squirt of water from a spray bottle to clean yourself after bowel movements. Let your doctor or nurse know if your rectal area is sore, bleeds or if you have hemorrhoids.

- Your doctor may recommend the use of over the counter Imodium® or generic Loperamide. Take 2 antidiarrhea tablets with first loose stool then take 1 tablet after each loose stool. You may take up to 8 pills per day. This is different from the package directions but is the correct dose for the treatment of your diarrhea that our physicians recommend.
- Your doctor may also prescribe LOMOTIL.®
- Please contact us if your diarrhea symptoms are not controlled within 24 hours and, or sooner and if you are experiencing signs of dehydration (dry mouth, decreased urination).

- Foods or drinks with caffeine, such as regular coffee, black tea, cola and chocolate
- Foods or drinks that cause gas, such as cooked dried beans, cabbage, broccoli, soy milk and other soy products
- Foods that are high in fiber, such as cooked dried beans, raw fruits and vegetables, nuts and whole-wheat breads and cereals

Appetite changes

What are they and why do they occur?



Some treatments may cause appetite changes. You may lose your appetite because of nausea (feeling like you are going to throw up), mouth and throat problems that make it painful to eat or drugs that cause you to lose your taste for food. Appetite changes can also come from feeling depressed or tired. Appetite loss may last for a day, a few weeks or even months.

It is important to eat well, even when you have no appetite. Healthy eating habits promote healing. This means eating and drinking foods that have plenty of protein, vitamins and calories. Eating well helps your body fight infection and repair tissues that are damaged by chemotherapy. Not eating well can lead to weight loss, weakness and fatigue. Some cancer treatments cause weight gain or an increase in your appetite. Be sure to ask your doctor, nurse or dietitian what types of appetite changes you might expect and how to manage them.

Ways to manage appetite changes:

- Eat 5 to 6 small meals or snacks each day instead of 3 big meals. Choose foods and drinks that are high in calories and protein.
- Set a daily schedule for eating your meals and snacks. Eat when it is time to eat, rather than when you feel hungry. You may not feel hungry while you are receiving treatment, but you still need to eat.
- Drink milkshakes, smoothies, juice or soup if you do not feel like eating solid foods. Liquids like these can help provide the protein, vitamins and calories your body needs.
- Use plastic forks and spoons. Some types of treatment may give you a metal taste in your mouth. Eating with plastic can help decrease the metal taste. Cooking in glass pots and pans can also help.
- Be prepared for taste changes during treatment
- Increase your appetite by doing something active. For instance, you might have more of an appetite if you take a short walk before lunch. Also, be careful not to decrease your appetite by drinking too much liquid before or during meals.
- Change your routine. This may mean eating in a different place, such as the dining room rather than the kitchen. It can also mean eating with other people instead of eating alone. If you eat alone, you may want to listen to the radio or watch TV. You may also want to vary your diet by trying new foods and recipes.
- Talk with your doctor, nurse or dietitian. He or she may want you to take extra vitamins or nutritional supplements (such as high protein drinks). If you cannot eat for a long time and are losing weight, you may need to take medications that increase your appetite or receive nutrition through an IV or feeding tube.



Hand-Foot Syndrome

What is it and why does it occur?

Hand-foot syndrome, also called Palmar-Plantar Erythrodysesthesia (PPE), is a skin reaction and common side effect of certain medications such as Doxil, continuous infusion of Fluorouracil (5FU), Xeloda®, Sutent®, Nexavar® and Taxotere® therapy. It usually occurs on the hands and feet, but can also occur on other parts of the body where clothes may be tight or where friction, rubbing or sweating occurs.

Symptoms of hand-foot syndrome include:

- Flaking or peeling of the skin
- Redness, pain or tenderness
- Rash or small blisters or sores on the palms of hands or soles of feet
- Swelling
- Tingling, burning or itching



Hand-foot syndrome can occur at anytime after the first treatment up to the sixth treatment. In most patients, the reaction is mild and improves in one to two weeks. However, for some patients, it may be necessary to change the dose or delay therapy for a period of time. Hand-foot syndrome can be severe in some patients and may require stopping therapy.

Notify your doctor or nurse if you experience any skin reactions or tingling.

Ways to manage hand-foot syndrome:

Do:

- Avoid heat
- Wear loose-fitting clothing
- Wear comfortable, well-ventilated, low-heeled shoes
- Elevate feet when possible.
- Wear sunblock (SPF 30 or higher)
- Take cool, short showers or baths

Do not:

- Get direct sunlight. For example, don't sit near sunny windows in buildings or cars and don't sit or walk in the sun when you go outside.
- Put tape on your skin.
- Wear restrictive undergarments such as bras, girdles, or pantyhose.
- Put pressure on your skin, such as kneeling, leaning on your elbows, wearing tight jewelry or clothing, chopping hard foods or engaging in excessive exercise.
- Have contact with hot water.

Some patients find relief by using the following products:

- Aquaphor®
- Udderly Smooth® or Udder Cream®
- Bag Balm® or petroleum jelly applied at bedtime, use with cotton socks and/or gloves
- Vitamin B6 (Pyridoxine)

Talk with your doctor or nurse regarding the use of these products.



Skin changes

What are they and why do they occur?

Some patients may experience minor skin problem, such as increased sensitivity to the sun, acne, redness, peeling and/or dryness. This may be due to some of the medications you are receiving. Some of the medications that may cause skin reactions include Erbitux®, Nexavar®, Sutent®, Tarceva®, Tykerb®, Vectibix®, Capecitabine, Cyclophosphamide, Doxorubicin, Bleomycin and Fluorouracil.



Ways to manage skin changes:

- Your doctor may recommend a prescription medication or over-the-counter medication to help your skin
- Drink plenty of fluids
- Eat a balanced diet
- Avoid extreme temperatures
- Wear loose clothing
- Apply a moisturizer frequently
- Avoid sun exposure
- Apply sunscreen if in the sun
- Use gentle skin cleansers
- Avoid fragrant lotions and soaps

Notes: _____

Nerve changes

What is it and why does it occur?

Peripheral neuropathy is a condition resulting from damage to the nerves outside of the brain and spinal cord. Peripheral neuropathy affects the arms, legs, hands and feet. It is often described as pain, tingling, burning, numbness or weakness. Some people have trouble with coordination and movement. Others may experience increased pain sensitivity to non-painful stimuli or an electric-shock-like sensation. Sometimes the symptoms are temporary and gradually decrease after cancer treatments are complete. Other times, the symptoms continue and require ongoing medical attention and care. Peripheral neuropathy may be a side effect of other conditions, such as diabetes. **It is very important to inform your doctor of any of these symptoms that you may have before starting treatment.**

Chemotherapy agents that can cause peripheral neuropathy:

- Eloxatin® (oxaliplatin), Platinol® (cisplatin), Paraplatin® (carboplatin)
- Velban® (vinblastine), Oncovin® (vincristine), Navelbine® (vinorelbine), Vepesid® (etoposide)
- Taxol® (paclitaxel), Taxotere® (docetaxel), Jevtana® (cabazitaxel)
- Ixempra® (ixabepilone)
- Velcade® (bortezomib), Kyprolis® (carfilzomib)
- Halaven® (eribulin)
- Thalomid® (thalidomide), Revlimid® (lenalidomide), Pomalyst® (pomalidomide)

Neuropathy brought on by chemotherapy can be made worse by such factors as a person's age, genetic disposition to neuropathy, the amount of each dose of chemotherapy, the total dose received and the combination of different drugs received. If you already have neuropathy, you are at a greater risk of your neuropathy becoming more severe with chemotherapy treatments.

Ways to manage nerve changes:

- Adjust the water temperature in your home to less than 110 degrees.
- Use protective gloves for household chores/activities.
- Wear gloves and warm socks in the winter.
- Keep rooms well lit and walkways clutter-free.
- Use caution while driving if feet are affected.
- Avoid swallowing food and drinks that are very cold or very hot.
- Avoid alcohol.
- Sit down, when possible, if neuropathy in your feet is severe.
- Control your blood sugars if you have diabetes.
- Walking is good exercise for health and muscle flexibility.
- Ask your doctor about medications that may help.

DO NOT TAKE ANY OVER THE COUNTER HERBAL SUPPLEMENTS OR OTHER MEDICATIONS WITHOUT FIRST CONSULTING WITH YOUR DOCTOR. KEEP YOUR DOCTOR INFORMED OF ANY CHANGES IN YOUR CONDITION.



Nail changes

What is it and who has it?

Nail tissue is affected by chemotherapy and may stop nail growth, alter the growth pattern and cause the nail to become weak. This leads to the development of ridging or pitting (small depressions or holes) of the nail plate (Beau's lines). Beau's lines occur more commonly on the thumbs, but may occur on all fingers. Short, intensive chemotherapy is often associated with this. Nail brittleness may occur while taking hydroxyurea or fluorouracil (5-FU). Separation of the nail from the nail bed or even nail death may occur from treatment with Bleomycin, 5-FU, Adriamycin, Taxol and Taxotere®.

Ways to manage nail changes:

Remember that while there is no absolute way to prevent nail changes or loss, all nails usually return to their normal appearance over time once you complete your chemotherapy.

Be sure to:

- Keep nails short and neat.
- Prior to starting treatment, apply a nail hardener to nail and reapply every few days; discontinue if nails lift from the nail bed.
- Carefully file nails to keep edges smooth.
- Do not trim cuticles.
- Keep nails and hands meticulously clean.
- Use gloves for housecleaning and gardening.
- Avoid soaking nails and hands in water, unless you wish to speed up the inevitable loss of the nail.
- If nail lifts completely from the nail bed, consider asking for a referral to a doctor for removal of nail and appropriate care to decrease risk of infection.
- Wrap Band-Aids around nail to prevent being pulled away from nail bed.
- Oozing from nail bed may be a sign of infection. Notify your doctor if this occurs.
- Do not use nail polish or fake fingernails once your nails start to lift from the nail bed.
- Herbal remedy: Tea tree oil (an essential oil known for its antibacterial/antifungal properties). Dilute 1:1 with oil (almond, vitamin E or vegetable oil). Apply topically several times a day for as long as it seems to be helping.

Hair loss

What is it and why does it occur?

Hair loss (also called alopecia) is when some or all of your hair falls out. This can happen anywhere on your body: Head, face, arms, legs, underarms or the pubic area between your legs. Many people are upset by the loss of their hair and find it the most difficult part of chemotherapy.

Some types of chemotherapy damage the cells that cause hair growth. Hair loss often starts two to three weeks after chemotherapy begins. Your scalp may hurt at first. Then you may lose your hair, either a little at a time or in clumps. It takes about one week for all your hair to fall out. You may also notice that your hair starts growing back even while you are receiving chemotherapy.

Your hair will be very fine when it starts growing back. Also, your new hair may not look or feel the same as it did before. For instance, your hair may be thin instead of thick, curly instead of straight or a different color.

Hair often grows back 2 to 3 months after chemotherapy is over.

Ways to manage hair loss before hair loss:

- **Talk with your doctor or nurse.** He or she will know if you are likely to have hair loss. Ask your provider for a prescription if considering a wig purchase.
- **Cut your hair short or shave your head.** You might feel more in control of hair loss if you first cut your hair or shave your head. This often makes hair loss easier to manage. If you shave your head, use an electric shaver instead of a razor.
- **If you plan to buy a wig, do so while you still have hair.** The best time to choose your wig is before chemotherapy starts. This way, you can match the wig to the color and style of your hair. You may also take it to your hairdresser, who can style the wig to look like your own hair. Make sure to choose a wig that feels comfortable and does not hurt your scalp.
- **Ask if your insurance company will pay for a wig.** If it will not, you can deduct the cost of your wig as a medical expense on your income tax. Some groups also have free “wig banks.” Your doctor, nurse or social worker will know if there is a wig bank near you.
- **Be gentle when you wash your hair.** Use a mild shampoo, such as a baby shampoo. Dry your hair by patting (not rubbing) it with a soft towel.



Do not use items that can hurt your scalp. *These include:*

- Straightening or curling irons
- Brush rollers or curlers
- Electric hair dryers
- Hair bands and clips
- Hairsprays
- Hair dyes
- Products to perm or relax your hair

Contact these organizations for new and gently used wigs:

- American Cancer Society (cancer.org)
- Cancer Family Care (cancerfamily.org)

After hair loss:

- Protect your scalp. Your scalp may hurt during and after hair loss. Protect it by wearing a hat, turban or scarf when you are outside. Try to avoid places that are very hot or very cold. This includes tanning beds and outside in the sun or cold air. Always apply sunscreen or sunblock to protect your scalp.
- Stay warm. You may feel colder once you lose your hair. Wear a hat, turban, scarf or wig to help you stay warm.
- Sleep on a satin pillowcase. Satin creates less friction than cotton when you sleep on it. Therefore, you may find satin pillowcases more comfortable.
- Talk about your feelings. Many people feel angry, depressed or embarrassed about hair loss. If you are very worried or upset, you might want to talk about these feelings with a doctor, nurse, family member, close friend or someone who has had hair loss caused by cancer treatment.

Lymphedema

What is lymphedema?



Lymphedema is an excessive and chronic accumulation of lymph fluid that causes swelling — most often in the arms and legs, and sometimes in other parts of the body. This condition occurs due to an impairment of the lymphatic system.

What are the potential causes of lymphedema?

- Breast cancer with removal of lymph nodes or radiation treatment
- Ovarian cancer
- Prostate cancer
- Abdominal cavity surgery
- Trauma to, or removal of, lymph nodes
- Congenital disorder

What are the symptoms of lymphedema?

Lymphedema can develop in any part of the body and in a number of stages, from mild to severe.

Symptoms may include:

- A “full” sensation in the limb(s)
- A feeling of tightness of the skin
- Decreased flexibility in the hand, wrist or ankle
- Tightness of clothing
- Tightness of a ring, wristwatch or bracelet

What are some potential complications resulting from lymphedema?

- Poor posture
- Pain in the low back, trunk, hip, neck, shoulder, arm or hand
- Problems with walking
- Skin infections/fungus
- Tendency to develop cellulitis due to impaired circulation
- Skin breakdown because of decreased blood flow

Infertility

What is it and why does it occur?

Some types of chemotherapy can cause infertility. For a woman, this means that you may not be able to get pregnant. For a man, this means you may not be able to get a woman pregnant.

In women, chemotherapy may damage the ovaries. This damage can lower the number of healthy eggs in the ovaries. It can also lower the hormones produced by the ovaries. The drop in hormones can lead to early menopause. Early menopause and fewer healthy eggs can cause infertility.

In men, chemotherapy may damage sperm cells, which grow and divide quickly. Infertility may occur because chemotherapy can lower the number of sperm, or make sperm less mobile, unable to reach the egg.

Whether or not infertility may affect you depends on the type of chemotherapy you get, your age and whether you have other health problems. Infertility can last the rest of your life.

Ways to manage infertility:

For WOMEN, talk with your doctor or nurse about:

- Whether you want to have children. Before you start chemotherapy, let your doctor or nurse know if you might want to get pregnant in the future. He or she may talk with you about ways to preserve your eggs to use after treatment ends or refer you to a fertility specialist.
- Birth control. It is very important that you do not get pregnant while receiving chemotherapy. These drugs can hurt the fetus, especially in the first three months of pregnancy. If you have not yet gone through menopause, talk with your doctor or nurse about birth control and ways to keep from getting pregnant.

- Pregnancy. If you still have menstrual periods, your doctor or nurse may ask you to have a pregnancy test before you start chemotherapy. If you are pregnant, your doctor or nurse will talk with you about other treatment options.

Before treatment starts, tell your doctor or nurse if you want to have children in the future. Do not get pregnant while you are getting treatment.

For MEN, talk with your doctor or nurse about:

- Whether you want to have children. Before you start chemotherapy, let your doctor or nurse know if you might want to father children in the future. He or she may talk with you about ways to preserve your sperm to use in the future or refer you to a fertility specialist.
- Birth control. It is very important that your spouse or partner not get pregnant while you are getting chemotherapy. Chemotherapy can damage your sperm and cause birth defects. Talk with your doctor or nurse about birth control and ways to keep from getting your spouse or partner pregnant.

Safety issues in the home

You may be receiving your chemotherapy treatments in one or many of the following settings: hospital, doctor's office, hospital clinic and/or at home. Regardless of where you receive chemotherapy, special precautions need to be taken at home to minimize or prevent contact with hazardous waste associated with chemotherapy. This guide teaches you and your family how to avoid exposure to hazardous waste.

What is hazardous waste? All equipment used in the administration of the chemotherapy (syringes, needles, IV tubing) is considered hazardous waste. In addition, small amounts of chemotherapy can be excreted from body wastes or secretions (urine, stool or vomit) for up to 72 hours after drug administration.

What precautions do I need to take? Wash your hands well with soap after using the toilet. If using a bedpan, urinal or bedside commode for body wastes, wear disposable gloves and avoid splashing when emptying into the toilet. Rinse the pan with soap and water and flush immediately down the toilet.

What do I do if I vomit? Wash hands thoroughly with soap and water after vomiting. For caregivers who have contact with vomit, wear disposable gloves and rinse basin well after each use. If any bed linens or clothing become soiled, wear gloves to avoid skin contact. Place soiled items immediately in the wash and clean separately from other laundry. ***Wash affected garments twice.***

Can my family and I share the same toilet? YES. Sharing is safe as long as any body wastes are cleaned from the toilet. We recommend flushing the toilet twice after each use.

What precautions do I need to take if I have a colostomy or ostomy?

You and/or your caregivers should wear gloves when emptying or changing appliances. The used ostomy supplies must be handled as hazardous waste. Wash hands thoroughly with soap and water after disposal of supplies and removal of gloves.

What if I cannot control my bowels or bladder? Use a disposable, plastic-backed pad to absorb the urine or stool. Wear disposable gloves when handling and wash hands well after contact.

Is it safe to be sexually active during chemotherapy? YES, but special precautions need to be taken. It is possible that traces of chemotherapy are present in vaginal fluid and semen for up to 72 hours after administration of the chemotherapy. A condom should be worn during sexual intercourse if either partner is receiving chemotherapy. Ask your doctor or nurse about special precautions for low blood counts.

Is it possible to become pregnant or father a child while I am receiving chemotherapy?

YES. A reliable method of birth control should be used if you are receiving chemotherapy, as it can cause birth defects. For women, menstrual periods may or may not stop during treatment, either temporarily or permanently. Likewise, sperm production may be altered depending on the type and dosage of chemotherapy received.

What precautions does my pregnant caregiver need to take?

Pregnant caregivers should avoid contact with body wastes if possible. If not, she should always wear gloves when handling hazardous waste, and always wash hands thoroughly with soap and water afterwards.



Cognitive Changes are sometimes called "ChemoBrain"



What is it and why does it occur?

Many patients complain of having trouble with attention span, memory and concentration after receiving chemotherapy. This is sometimes referred to as "chemobrain." The true cause of this is unclear.

Please inform your doctor or nurse if you are experiencing any memory changes.

Ways to manage chemobrain:

- Avoid distractions as much as possible
- Ask information to be repeated if necessary
- Write things down you want to remember
- Keep a calendar to write down important dates and events
- Use a pill box to keep track of your medications
- If you are confused, ask a friend or family member to stay with you
- Keep a journal
- Try to stay organized
- Ask a friend or family member for help when you need it
- Exercise regularly
- Try to get adequate sleep
- Try doing crossword puzzles

Experiencing and Managing Hot Flashes

What are they and why do they occur?

Hot flashes are something patients receiving treatment may experience. They cause temporary sensations of heat and sometimes cause facial flushing and/or sweating. Hot flashes can occur due to the hormonal changes you experience due to your cancer or the medications you are taking.

Ways to manage hot flashes:

- Try lowering the thermostat in your home. Keep temperatures cooler if needed.
- Avoid highly seasoned foods, coffee, tea and alcohol, as they may trigger hot flashes.
- Dress in layers. A jacket or sweater can easily be removed when a hot flash strikes.
- Wear cool, cotton clothing and use cotton sheets on your bed.
- REMEMBER that while hot flashes are uncomfortable and can make those few minutes miserable, they are not harmful to your health. Over time, hot flashes decrease in their intensity and occur less often.

There are several over-the-counter and prescription medications that may help in dealing with hot flashes. Family members and friends may suggest herbal therapy that helped “cure” their hot flashes, but beware as many of these herbal supplements contain plant estrogens and soy. Please talk with your doctor before starting any new medication or supplement.



At some point during treatment

you may feel

- **Afraid**
- **Angry**
- **Anxious**
- **Depressed**
- **Frustrated**
- **Helpless**
- **Lonely**

It is normal to have a wide range of feelings while going through treatment. After all, living with cancer and getting treatment can be stressful. You may also feel fatigue, which can make it harder to cope with your feelings.



Talk to your doctor or nurse about things that worry or upset you. Your doctor or nurse may refer you to a counselor. Your doctor may also suggest that you take medication if you find it very hard to cope with your feelings.

How can I cope with my feelings during treatment?

- **Relax.** Find some quiet time and think of yourself in a favorite place. Breathe slowly or listen to soothing music. This may help you feel calmer and less stressed.
- **Exercise.** Many people find that light exercise helps them feel better. There are many ways for you to exercise, such as walking, riding a bike and doing yoga. Talk with your doctor or nurse about ways you can exercise.
- **Talk with others.** Talk about your feelings with someone you trust. Choose someone who can focus on you, such as a close friend, family member, chaplain, nurse or social worker. You may also find it helpful to talk with someone else who is getting chemotherapy.
- **Join a support group.** Cancer support groups provide support for people with cancer. These groups allow you to meet others with the same problems. You will have a chance to talk about your feelings and listen to other people talk about theirs. You can find out how others cope with cancer, chemotherapy and side effects. Your doctor, nurse or social worker may know about support groups near where you live. Some support groups also meet online (via the Internet), which can be helpful if you cannot travel.

Ways to Learn More

To learn more about coping with your feelings and relationships during cancer treatment, we suggest reading *Taking Time: Support for People With Cancer*, a book from the National Cancer Institute. **You can get a free copy at www.cancer.gov/publications or 1-800-4-CANCER.**

National Cancer Institute
Cancer Information Service
Toll-free: 1-800-4-CANCER (1-800-422-6237)
TTY: 1-800-332-8615
website: www.cancer.gov
Chat online: www.cancer.gov/help

Other education and support groups:

American Cancer Society
Provides free information, support, and host events to help people with cancer and their loved ones.
Toll free: 1-800-227-2345
website: www.cancer.org

Cancer Family Care
Provides free support to children and adults coping with the effects of a cancer diagnosis in the family.
Phone: 513-731-3346
website: www.cancerfamilycare.org

Cancer Support Community
Provides free education, psychological and emotional support to people with cancer and their families.
Phone: 513-791-4060
website: www.cancer-support.org

The Leukemia and Lymphoma Society
Provides patients with support, information, and direction for their cancer diagnosis.
Phone: 1-800-955-4572
Email: infocenter@lls.org
website: www.lls.org



Questions and Answers about Chemotherapy and Immunotherapy

What is chemotherapy?

Chemotherapy (also called chemo) is a type of cancer treatment that uses drugs to destroy cancer cells.

How does chemotherapy work?

Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. However, chemotherapy can also harm healthy cells that divide quickly, such as those that line your mouth and intestines or cause your hair to grow. Damage to healthy cells may cause side effects. Often, side effects get better or go away after chemotherapy is over.

What does chemotherapy do?

Depending on your type of cancer and how advanced it is, treatment can be given for several different reasons.

Adjuvant treatment:

Additional treatment used after the main treatment. Usually refers to hormone therapy, chemotherapy, radiation therapy or immunotherapy to improve the chances of curing the disease.

Curative treatment:

Treatment aimed at producing a cure, which means eradicating the disease.

Neo-adjuvant treatment:

Additional treatment used before the main treatment, usually chemotherapy, hormonal therapy and/or targeted therapy used in select cases, before surgery or radiation therapy. For example, in men, neo-adjuvant hormone therapy is sometimes used to shrink a prostate tumor before brachytherapy to make the brachytherapy more effective. In women, chemotherapy may be used before surgery in patients with breast cancer in order for the surgeon to perform a lumpectomy versus a mastectomy.

Palliative treatment:

Any treatment that relieves symptoms, such as pain, but is not expected to cure disease. The main purpose of palliative care is to improve the patient's quality of life, alleviate symptoms to improve quality of life or prolong quality of life. Palliative treatments may go on for weeks, months or sometimes years, but at some point the disease state progresses and further treatment is not helpful. At that time, you and your doctor will further discuss the role of hospice care.

How does my doctor decide what treatment drugs to use?

The choice depends on:

- The type of cancer you have. Some types of chemotherapy drugs are used for many types of cancer. Other drugs are used for just one or two types of cancer.
- If you have had chemotherapy before.
- If you have other health problems, such as diabetes or heart disease.

What is immunotherapy?

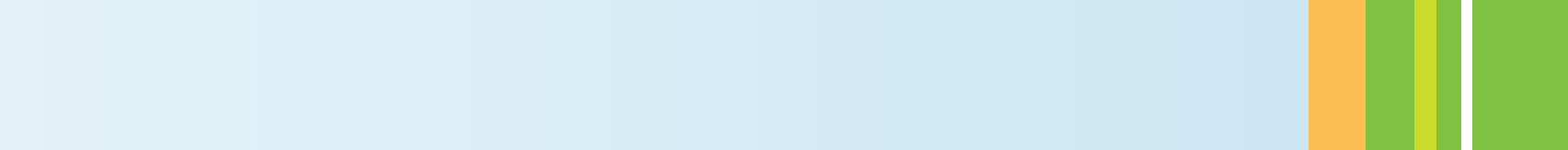
It is a type of treatment that helps your immune system fight cancer. Immunotherapy is made from substances from living organisms.

How does immunotherapy work?

Your immune system protects you from infections and some diseases. Immune cells travel all over your body to protect you from germs. The immune system tracks all the substances in your body and if something is foreign the immune system will attack and destroy it. Your immune system does NOT always recognize cancer cells as foreign and sometimes it isn't strong enough to fight the cancer.

What does immunotherapy do?

Immunotherapy can help your immune system fight cancer cells in one of two ways. Cancer cells try to hide from your immune system, however some immunotherapies mark the cancer cells so the immune system can find and destroy the cancer cells. Some immunotherapies give your immune system an extra boost so it can fight the cancer cells even better.



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We hope the information in this booklet is helpful for you and your family. If you have additional questions, please feel free to contact our office.

Notes: _____

**For more information about OHC, call 513-751-CARE (2273) or 888-649-4800
or visit www.ohcare.com**



Recognition & Accreditations

OHC is accredited as an Oncology Medical Home by the Commission on Cancer

OHC is one of only six community oncology practices in the country recognized by the Conquer Cancer Foundation of the American Society of Clinical Oncology for its commitment to high quality clinical trial programs

OHC is one of only 179 cancer practices nationally to be accepted to participate in the Oncology Care Model (OCM), part of The Center for Medicare & Medicaid Innovation

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