

WHAT IS CHEMOTHERAPY?

Chemotherapy is the treatment of cancer with medications. It is one of the methods of treating cancer and it may be used alone or together with surgery, radiation therapy, hormonal or biologic therapy.

There are many different chemotherapy medications, which may be given alone or in combinations depending on the type of cancer. There are many different types of cancer: some may not respond to chemotherapy while others may be kept under control for months or even years. Chemotherapy may help relieve symptoms caused by your cancer.

Key Terms:

Immunotherapy drugs stimulate the immune system to fight cancer cells

Targeted therapy drugs interfere with the function of specific cells

Chemotherapy drugs stop the growth of cancer cells by killing them or stopping them from

Your chemotherapy dose is calculated based on your height and weight. Chemotherapy doses and schedules may need to be altered during therapy. Your doctor will discuss your specific chemotherapy plan with you, reviewing the progress of treatment with you at regular intervals.

Immunotherapy Therapy (sometimes called targeted therapy, biotherapy, or biological response therapy) **is a broad category of anti-cancer therapies that use the body's immune system to fight cancer cells.** Immunotherapies are a relatively new addition to the family of cancer treatments.

Clinical Trials

New cancer treatment, including new forms of chemotherapy and medicines used to treat adverse effects of chemotherapy, undergo *clinical trials* to see if they are safe and effective. Approval of a drug by the Food and Drug Administration depends on the results of these clinical trials. Your oncology team will discuss available research opportunities with you. When studying experimental treatments, researchers want to know:

- Does the specific treatment work better than other treatments already available?
- What side effects does the treatment cause?
- Do the benefits outweigh the risks, including side effects?
- Which patients will the treatment most likely help?

During your treatment for cancer, your doctor may suggest that you take part in a clinical trial of a new treatment. You should know that scientists only conduct clinical trials when they have reason to believe that the treatment under study may indeed be better (or at least no worse) than other treatments. You will not receive a placebo (sugar pill) if a standard treatment is already available.

HOW CHEMOTHERAPY MIGHT AFFECT YOU

Chemotherapy medications affect the rapidly dividing cells in the body. In addition to cancer cells, rapidly dividing cells are present in the hair follicles, mouth, skin, the lining of the intestines and in the bone marrow where blood cells are made. Because chemotherapy medications affect normal cells, as well as cancer cells, some of the results may include unpleasant side effects. An absence of side effects has no bearing on the effectiveness of the chemotherapy.

Refer to your specific medication information sheets for a detailed description of the common and uncommon side effects of each of the medications you are receiving.

Effects Of Chemotherapy On Your Bone Marrow

Bone marrow is found at the center of bones, especially the skull, sternum, ribs, backbone, and pelvis. Bone marrow produces red and white blood cells and platelets, which are all rapidly dividing cells. They are held there until they mature. They are then released into the bloodstream to perform their vital functions. Because chemotherapy acts on these rapidly dividing cells, their production may be interrupted when chemotherapy is given. Therefore, the number of circulating cells in the bloodstream can become reduced over time, resulting in anemia (decreased red blood cell count), neutropenia (decreased white blood cell count), and thrombocytopenia (decreased platelet count).

During treatment, the term **nadir** may be used. This refers to the point when the cells in the body are at their lowest number. This is a predictable time, depending on the chemotherapy agent used. For example, one drug may have a nadir of 7-10 days. This means that 7-10 days after beginning chemotherapy, the red cells, white cells, and platelets will be at their lowest number in the bloodstream. After a period, the blood counts will begin to rise back to normal.

White Blood Cells And Infection

The *white blood cells* (WBC) help the body to fight infections. Chemotherapy kills both the cancer-producing cells and healthy, infection-fighting cells, which decreases your body's ability to fight infection. When the white blood cell count begins to drop below normal, this is called neutropenia. This is the time when chances of infection are the highest.

The following hints will help prevent and detect an infection:

- Avoid exposure to large groups of people and to people who are ill.
- Maintain good personal hygiene, including mouth care. If possible, take care of any needed dental work before you start chemotherapy.
- Wash your hands often during the day and especially before eating and after using the bathroom. Good hand washing is one of the first steps for avoiding infection.
 - This begins with soap and warm water.
 - Be sure to lather well and use friction to clean the surfaces.
 - This is best achieved by rubbing the hands together in a back-and-forth motion.
 - Include the nail beds and the webbed portions between the fingers.
- Try to keep the skin intact, since small cuts and bruises during the period of low white blood cells can harbor germs and be a good place for infection to start. Use gloves, potholders, sunscreen, etc., to protect your skin while performing necessary chores. If cuts and abrasions occur, clean the area well with soap and water. If cuts are not very deep, clean them with hydrogen peroxide and cover with a sterile bandage. Call your doctor's office for further directions.
- Food safety is important: wash fruits and vegetables, eggs should be cooked, meat should be well-done, and milk and juices should be pasteurized.

In most cases, the lowered WBC count will be mild and will correct itself as the bone marrow heals. Healing occurs between each chemotherapy course in most cases. In some instances, your doctor may recommend a medication called Zarxio™ to stimulate your bone marrow to make more white cells. You will be taught to administer this medication so that you can give it in the comfort of your home.

Remember, during your nadir you will want to avoid exposure to large groups of people and to people who are ill. Otherwise, continue your normal activities such as shopping, going to movie theaters, etc., unless otherwise instructed by a doctor or nurse in the clinic.

Important to Remember

Keep a thermometer at home and know how to use it
Report any fever of 100.5°F or more to your doctor

Early signs of infection may include

- *Fever above 100.5°F
- * Chills, shaking chills
- * New cough
- * Sore throat*
- *More than three loose stools in a day
- * Pain or burning with urination*

Be alert to these signs and notify your doctor if they occur

Platelets And Bleeding

Platelets are the blood cells which facilitate the clotting of blood to stop bleeding from an injury. Chemotherapy also destroys these clotting cells.

Some of the first signs of a low platelet count (thrombocytopenia) are constant bleeding from a cut and easy bruising. Some people notice bleeding from the gums after eating a meal or brushing their teeth. Heavy or prolonged menstrual bleeding, or blood in the urine or stool may also occur. You may notice small, pinpoint spots, often in clusters, known as *petechiae* inside the mouth or elsewhere on the body, such as the arms and legs.

Nosebleeds may occur. Apply pressure to the nostrils while remaining in an upright position. Apply ice to the nose, if necessary. If bleeding continues for longer than 15 minutes, contact your physician immediately.

Medications

Aspirin and some non-aspirin pain relievers such as ibuprofen (Motrin™, Advil™), naproxen (Aleve™), or celecoxib (Celebrex™), also called NSAIDs, make platelets less able to do their job. These medications should be avoided unless prescribed by your doctor. Many over the counter medications contain NSAIDs. Read the labels of any nonprescription medication prior to taking it to make sure it does not contain an NSAID. If you are unsure of the ingredients in any product you take, call your pharmacy.

Important to Remember: To Prevent Bleeding

- Avoid injury to the skin during the time when your platelets are low. Do not use a blade razor. An electric razor is best.
- Take care of your mouth. Use a soft bristle toothbrush. Avoid using dental floss until counts are back to normal.
- Be sure dentures fit properly to decrease irritation to gums. Rinse your mouth with a salt water solution to help keep it clean and promote healing.
- Bleeding can also be found in the stool when platelets are low. It is important to keep the stool soft and to refrain from straining. Straining can rupture tiny blood vessels in the rectal area and cause hemorrhoids. You may take a laxative or stool softener to keep your bowels soft and regular.

Red Blood Cells And Anemia

Chemotherapy may lower the red blood cells (RBC), causing anemia (low red blood cell count). Anemia occurs when the blood has too little hemoglobin. Hemoglobin is the part of the red blood cell that carries the oxygen needed by your body. A test of your complete blood count (CBC) will show a drop in hemoglobin if you have anemia.

When your red blood count is low, try to get more rest. Pace your activities.

Consult your doctor prior to taking any medications, including over the counter products, such as iron, for anemia. Eating nutrient-rich foods, taking iron and folic acid supplements can help. Specific treatments for anemia may include medications such as erythropoietin (Procrit™, Epogen™), darbepoetin (Aranesp™), blood transfusion, and iron supplements.

Anemia Symptoms you should tell your doctor about

- Chest Pain
- Dizziness, lightheadedness
- Shortness of breath
- Roaring or whooshing sounds in ears
- Weakness and decrease in energy (fatigue)
- Difficulty staying warm

Nausea And Vomiting

The foods you eat can make a big difference in how quickly you get well.

What you eat, the way you eat, and how you eat, may all cause nausea. Nausea is a common side effect of cancer treatment. Chemotherapy, radiotherapy, or cancer itself can stimulate it. Whether you have nausea and vomiting will depend on the chemotherapy you are receiving and will vary from patient to patients.

If you know someone who has received chemotherapy and had much discomfort, do not automatically think this will happen to you. Large amounts of food can make someone anxious and subsequently nauseated. The idea of sitting at a table for a large meal three times a day can be overwhelming. You may develop an aversion to certain foods and strong aromas may trigger nausea.

Fortunately, nausea can be managed through a combination of medications and behavioral changes. Medication may be prescribed by your physician to help control nausea. The medication will be chosen on an individual basis depending on your situation. Suppositories may be prescribed to take if you are vomiting. Do not take pills and suppositories together unless you have been specifically instructed to do so. Always follow the specific recommendations of your physicians when taking these medications as they may cause other side effects.

If nausea hits:

- Take deep breaths and relax.
- Chew ice chips until nausea has passed.
- Sip small quantities of water or a clear “flat” soda (such as ginger ale).
- As you feel better, gradually add other foods back into your diet.
- **You may benefit from eating some small, light meal one to two hours before chemotherapy to help prevent nausea and vomiting.**

Helpful hints during and after treatment

- Consider shakes or liquid nutritional supplements to help maintain your nutrition if you are unable to eat.
- Eat the largest meal at a time of day when you are least nauseated (morning for many people).
- Ask friends and family members to cook so you can avoid aromas in the kitchen.
- Avoid overfilling your stomach by eating small frequent meals (5-6), instead of 3 large meals each day.
- Eat and drink slowly, chew food thoroughly so it is easily digestible. Keep the room or house full of fresh air and free of offensive odors (cooking odors are a problem for many patients).
- Avoid sweet, spicy, fatty, or fried foods. Fresh vegetables should be cooked rather than eaten raw.
- Eat dry, bland food such as crackers or toast.
- Rest in a chair after eating; avoid reclining as this may trigger vomiting.

Diarrhea

Diarrhea means liquid (watery stools). It can occur after chemotherapy because of its temporary effect on the lining of the intestine.

Chemotherapy sometimes causes diarrhea as a side effect. This could be a sudden change of watery bowel movements or simply an increase in the number of loose stools you normally have.

Foods and liquid, you eat can pass too quickly through the intestine. This causes you to lose vital nutrients and fluids. You can become weak, dizzy, and lightheaded.

Call your Oncology Nurse if you are experiencing three or more diarrhea stools per day. (This would be three or more stools over what you normally pass daily).

You will need to alter your diet to help resolve this problem. A clear liquid diet works the best. This diet helps decrease the amount of work your intestine needs to do, plus it helps replenish the nutrients and fluid you need to get better.

Please use the list as a guide to what CLEAR liquids are best. Avoid carbonated beverages as they can make diarrhea worse.

CLEAR LIQUID DIET

- Apple Juice
- Water
- Tea
- Broth
- Sport Drinks (Gatorade™)
- Gelatin
- Soda pop (clear and flat)

BRAT DIET

- B: Bananas – ripe
- R: Rice – white and plain
- A: Applesauce - no cinnamon
- T: Toast – dry, no butter or jam

When you are ready to add solid food back into your diet, it is best to go slowly. A suggestion would be to start with the BRAT diet.

If you tolerate this well, without an increase in diarrhea, try adding some pasta, boiled or baked chicken and cooked vegetables. Avoid dairy products as they may make diarrhea worse.

Your doctor, nurse or pharmacist may recommend medications such as Imodium™ or Lomotil™.

TIP: Food and liquids are best tolerated if they are not too hot or too cold!

Constipation

Constipation is a symptom that has different meanings to different people. Most often, it refers to infrequent bowel movements (BM). It may also refer to a decrease in the volume or weight of stool; the need to strain to have a movement; a sense of incomplete evacuation; or the need for enemas, suppositories, or laxatives to maintain regularity.

For cancer patients, constipation is very common especially during treatment with narcotic pain medications, with certain chemotherapy drugs, with poor food/liquid intake, and with decreased exercise.

It is helpful if you try to include fiber-rich foods in your diet to help stimulate your bowel. Please see the accompanying list. Limit foods that can contribute to constipation such as cheese, meat, and white rice.

You will need to drink 6-8 glasses of liquid daily to keep your stool soft (i.e. water, soup, prune and other juices or popsicles). Drink a warm beverage about 30 minutes before the time of your usual BM.

FIBER RICH FOODS

- Whole grain breads
- Bran cereal
- Fruits
- Vegetables
- Barley
- Brown rice
- Prunes

Exercise helps stimulate bowel activity. Simple walking can be a big help. Try to establish a pattern of when you have a bowel movement. This will help train your body again. Be sure to act on any urge to have a bowel movement.

If your stool is too firm and uncomfortable to pass, you will want to consider taking a stool softener or laxative as a preventative measure. Avoid bulk laxatives such as Metamucil™ and Citrucel™ as they can make the problem worse.

Important to remember

- Simple exercise daily, such as walking, can help prevent constipation.
- Remember to drink 6-8 glasses of liquid daily.
- If you are on narcotic pain medication, you should be on a stool softener and laxative as a preventive measure.
- **AVOID BULK LAXATIVES!**

Mouth Sores

Many chemotherapy medications may cause the lining of the mouth to become dry, irritated and to form sores. These sores may also be found on your lips or in the back of the throat. This is called Stomatitis or Oral Mucositis. These may be painful and limit the kinds of foods you can eat. Mouth sores will generally heal within 3-7 days.

Simple Salt Water Rinse

- ½ teaspoon salt
- 8 oz (1 cup) of warm water

Prevent mouth sores and treat inflammation by rinsing your mouth with a salt water solution as soon as you notice mouth tenderness. It helps to clear food particles and improve circulation, which helps to keep the mouth clean. This will improve your taste and decrease bacteria. If possible, brush your teeth with a soft bristle brush after meals.

If you have sores in your mouth, burning sensations or notice more bleeding than usual when you brush or floss your teeth, you may want to just rinse your mouth 3-4 times daily. Soft toothettes (foam toothbrushes) may be helpful.

If you wear dentures, make sure they fit properly. If you develop mouth sores, you will want to leave your dentures out until they are healed.

We can prescribe a mouth rinse to coat and soothe your mouth. Ask your doctor, oncology nurse, or oncology pharmacist about this.

Helpful tips for Mouth Sores

- Running your toothbrush under hot water before brushing will soften it even more.
- Food and fluids that are lukewarm or cold or that have been pureed in a blender may be more comfortable.
- Avoid spicy, acidic and abrasive foods, caffeine, tobacco, as well as alcohol. This includes most commercial mouthwashes.
- Mix foods with gravy or sauces to make them easier to swallow.
- Supplement meals with high calorie, high protein drinks.

Fatigue

Fatigue is a feeling of being tired physically, mentally, and emotionally. It means having less energy to do the things you normally do or want to do.

Cancer-related fatigue is defined as an unusual and persistent sense of tiredness that can occur with cancer or cancer treatment. It may be chronic and interfere with usual activities. Cancer-related fatigue is more severe and more distressing than fatigue occasionally experienced by most of us under normal living circumstances. Rest may not relieve it.

Cancer-related fatigue can make being with friends and family overwhelming, and make it difficult to continue normal activities, work, or hobbies. You must use greater effort and more energy to do your usual activities. Don't get frustrated with yourself for not being able to do your normal tasks.

Education and counseling are part of treating fatigue and may help you learn how to conserve energy, reduce stress, and use the distraction to think about things other than the fatigue and the cause of the fatigue. If the cause of the fatigue is known, treatment will be directed to the cause. Some treatable causes include anemia, insomnia, or nutrition problems.

Some ideas to deal with Fatigue

- Pace yourself.
- Rest often.
- Pursue low-stress hobbies.
- Be patient with yourself.
- Seek help from your medical care team.
- Exercise helps reduce fatigue related to cancer.

Use your energy for those really important things you want to do!

Depression

Many of the effects of chemotherapy make it seem like your life is out of control. It is very common to feel angry or depressed about this. Talking about your feelings can help. Sometimes, those close to you may also benefit from counseling. Please see the section on support groups and resources.

Insomnia

Certain cancer treatments and medications may contribute to insomnia. Insomnia can make it difficult to fall asleep and stay asleep. For instance, you may awaken multiple times during the night or early in the morning and not be able to get back to sleep. This condition can lead to fatigue, memory, and concentration problems, as well as mood disturbances. Treatment for insomnia may include pharmacological, as well as non-pharmacological approaches.

Hair Loss

Hair loss is a side effect of some, but not all chemotherapy medications.

The amount of hair loss will depend upon the medications you receive and will vary from person to person. You may experience partial or complete hair loss.

With chemotherapy medicines that are most likely to produce significant hair loss, hair will begin to come out quickly in about 17-20 days after the first dose with most of the hair gone from the head in 3-4 weeks. Some people describe that their “hair hurts” just prior to the hair coming out. This is normal. There may be scalp itching or discomfort after hair loss, and this is usually temporary.

If hair loss does not happen to you it does not mean that the chemotherapy is not working. Hair may begin to regrow during chemotherapy. This doesn’t mean that the chemotherapy has stopped working against cancer.

Hair loss from chemotherapy is reversible. Your hair will begin to regrow within about a month after stopping your treatment and should be fully back after 3-4 months. At first, hair may come back darker and or curlier than your usual hair. It will eventually regain the characteristics of the hair you had before chemotherapy.

If you know that hair loss will be likely from your treatment, you may find a few of the following tips helpful.

1. Shop for a wig or head cover before the hair loss happens. You can also better match your normal hair color.
2. Hats, scarves, turbans, and caps are frequently used as head covers during the time of hair loss.
3. Cut your hair short or shave it off just before it comes out to avoid the mess of rapid hair loss.

Tips for hair and scalp care during chemotherapy

- Use a mild or gentle shampoo.
- Apply gentle moisturizing creams.
- Gently comb or brush hair.
- Use a soft bristled brush.
- Use the lowest heat possible on your blow dryer.
- Do not dye your hair or get a perm during treatment.

HOW CHEMOTHERAPY IS GIVEN

Most chemotherapy medicines are given by injections into a vein, intravenous (IV). Some are taken by mouth. A few are given by injections under the skin or into a muscle.

For IV chemotherapy, a small needle is inserted into a vein and the medication is given. The length of time for the infusion depends on the chemotherapy program your oncologist has chosen for you. A person's type of cancer determines the kind of treatment given.

Some infusions take minutes; others take several hours. You may also be receiving anti-nausea and other medicines through this IV line to prevent side effects. At the end of the treatment, the needle is taken out. Other than the discomfort of the needle being inserted, chemotherapy should not be a painful experience.

A portable infusion pump may also administer chemotherapy. The pumps are generally small and can be worn on a belt, in a pocket or in a fanny pack. They are very helpful when chemotherapy must be given continuously over a specified period, usually several days. The pump allows you to stay at home instead of being in the hospital for your chemotherapy.

VENOUS ACCESS DEVICES

Sometimes it is necessary to place an indwelling catheter for your chemotherapy. This is a tube that is surgically placed into your vein. This will stay in place for many weeks or even months to years. There are many different kinds of these catheters. Please talk to your doctor or oncology nurse about this.

These devices allow chemotherapy and other intravenous medications to be given without using a vein in the hand or arm. They often permit blood to be drawn more easily as well. The devices are usually removed when therapy is completed. If it is determined that you would benefit from such a device, a referral will be set to the appropriate department for placement.

Venous Access Devices

- PORT-A-CATH: Requires flushing every 4 weeks when not in use.
- PICC LINES: Requires flushing and dressing changed every 7 days without exception.

OTHER CONSIDERATIONS

Consult your oncology doctor or pharmacist before taking any other medications, including vitamins and herbal remedies.

REDNESS OR BRUISING

If redness or pain occurs at the chemotherapy injection site, call the doctor or nurse. Slight bruising at the site where blood was drawn or where treatment was given may occur and is usually harmless.

DENTAL HEALTH

Consult with your doctor or nurse before having any dental work or other surgical procedures done during the course of treatment. Refer to the section on mouth sores for more information on dental hygiene.

ROUTINE MEDICAL CARE

Your Primary Care Physician (PCP) will continue to take care of your routine medical needs. When seeking medical attention or advice from your PCP, remember to inform them of the care you are receiving in the Hematology/Oncology department.

SUN SENSITIVITY

Certain chemotherapy medications may cause your skin to be more sensitive to the sun. Your skin may become more likely to burn outdoors or with use of tanning beds. We recommend routine use of a sunscreen (SPF 30 or more) as well as keeping your head covered with a hat, turban, or hairpiece while outdoors. If you have questions as to the best practice for you, please check with your oncology doctor, nurse, or pharmacist.

INTIMACY AND SEXUALITY

Our sexual lives are an important part of who we are, and it is common to have concerns about chemotherapy's impact on sexual desire, fertility, and safety. It is important for you and your partner to be able to continue a sexual relationship and talking to one another about your needs and body changes is a key component to maintaining intimacy.

Chemotherapy can cause disturbances such as menstrual irregularities, decreased libido, impotence, and infertility (both male and female). Women may experience vaginal dryness. It is suggested that you refrain from unprotected intercourse for at least one year after completing chemotherapy treatments because pregnancy is not advisable. Please consult with your oncologist about sperm or egg banking prior to starting chemotherapy. Please feel free to discuss your concerns with your physician, nurse, or with a healthcare professional.

NUTRITION

Chemotherapy can affect eating in many ways. There may be nausea and vomiting, loss of appetite, diarrhea or constipation, mouth sores, weight loss (and sometimes weight gain), changes in how food tastes and smells and maybe an inability to eat more than just a few bites. These symptoms can be very stressful for you and the people who support you. A dietitian can help you explore what to eat when you don't feel like eating.

We want to help you maintain your strength and weight during treatment. Nutrition recommendations during chemotherapy can be very different than those for the general population. Contact the dietitian, especially if you have severe or ongoing trouble with eating or weight loss.

General hints about eating well during chemotherapy

- Eat food and beverages in a relaxing and comfortable environment.
- Take advantage of the times you feel well to eat.
- Keep the pantry stocked with easy to prepare meals and quick snacks.
- Eat small frequent meals and snacks (eat 5-8 times daily).
- Exercise lightly or take a short walk before mealtimes.
- It may be easier for you to drink some of your calories and protein rather than eating them. Nutrition shakes can replace snacks or small meals. (Some brand names include: NuBasics™, Ensure™Boost™, or Carnation Instant Breakfast™).
- If pain or nausea is a problem for you, be sure you have taken your pain or anti-nausea medication before mealtime so that you are comfortable when you are ready to eat.

Consult your oncology doctor or pharmacist before taking any other medications, including vitamins and herbal remedies.

COMPLETE CARE

While your focus will be on your physical health and all your test and treatments, it is important not to forget about your emotional, psychological and spiritual health. They can affect your physical health and play an important part in your recovery.

Kaiser Complete Care Services

Along with medical treatment, there are other ways in which Kaiser Permanente and the community can lend assistance.

- Social Work: Medical social workers are available to assist you when you or a loved one is faced with a serious illness. MSWs offer education, information services, support, and strategies for coping. Often, a diagnosis of cancer can create other needs such as financial, transportation, advance directives, and end of life planning. Social workers can assist or direct you to other appropriate resources within Kaiser Permanente or the community. If you would like to speak with a social worker, please feel free to contact the Oncology Social Worker with any questions or concerns.
- Counseling: Santa Rosa Oncology Department understands the many facets of complete cancer care. Along with state-of-the-art medical treatment, Kaiser Permanente aids in addressing social, emotional, and behavioral concerns through Behavioral Medicine Services.

Emotional Support

- Have family members or friends help you get your house ready before you have treatment. There are a lot of small adjustments that can make your life easier, such as:
 - Having a small step stool available to eliminate the need to reach high.
 - Using a hand-held shower hose when bathing.
 - Stocking up on supplies that you may need (thermometer, toiletries, food to settle your stomach, etc).
- Prepare a phone list of “helpers”. It can include family, friends, and neighbors or volunteers from the American Cancer Society.
- Try to find someone you can reach out and open to. It should be someone you feel safe sharing your thoughts, fears, anger, and hopes. Support groups also offer a safe place to share your thoughts and emotions. Be sure to consult with your care team for recommendations.
- Find inspiration and hope in the things that bring you joy (i.e. reading, music, family, pets, etc).

Family Support

- Family and Partner/Spouse Issues: Every person has a different way of handling news that a loved one has cancer. Many people react with shock, disbelief, and even anger when they first receive the news. Keep in mind that there is no “right way” for you or your family to feel about your

Sharing and being open with one another is one of the best ways for families to deal with their feelings.

- **Telling your children:** Many parents don't want to burden their children with worries and fears about their illness. They keep the truth from their children in hopes of sparing them some pain. But even the youngest of children can sense when something is wrong. Many parents choose to tell their children only what they feel their children really need to know. How much you tell depends on a child's age and maturity, as well as how much you feel your child can handle. Be prepared to offer your children a lot of reassurance.
- **Help from Family Members:** Asking your family members for help during this time benefits you and them.
 - Assign specific tasks to each family member. Don't hesitate to ask for help with everyday tasks like cooking, cleaning, yard work, and driving children to school and activities.
 - You might ask several people to provide different kinds of emotional support so that you always have someone to call on.

Legal Support

When you've been diagnosed with cancer, you want to concentrate on getting better and coping with your treatment. It's also a good idea to make some important decisions with your family and doctor while you are still feeling well. Kaiser Permanente encourages every member over the age of 18 to complete an Advance Health Care Directive (AHCD). Call (707) 393-4482 to get started.

Things you may want to discuss include:

- **An Advance Directive.** This legal document contains written instructions specifying the type of medical actions that should be taken in the event you become unable to speak for yourself.
- **A Durable Power of Attorney for Health Care.** This legal document authorizes another person to make healthcare decisions for you if you became physical or mentally unable to make these decisions yourself.

Suggestions for You and Your Loved Ones

- Maintain a healthy balance between optimism and reality.
- Develop trust in the skills of your care team members.
- Learn from the stories of other cancer survivors. Both you and your loved ones are encouraged to participate in support groups.
- Find creative ways to bring pleasure to each day.
- Share a sense of hope with one another.
- Appreciate the beauty and wonder present in life each day.

YOUR QUESTIONS

It helps to write your questions down instead of trying to remember them. Use this page to write your questions and concerns you want to discuss with your team.

GLOSSARY

Absolute Neutrophil Count (ANC): the total number of white cells that are mature enough to fight infection.

Alopecia: medical term used to describe hair loss.

Anemia: low red blood cell count causing weakness and fatigue.

Antiemetics: term used to describe medication used to treat nausea and vomiting.

Bone Marrow: is found at the center of bones, especially the skull, sternum, ribs, backbone, and pelvis. Bone marrow produces red and white blood cells and platelets.

Complete Blood Count (CBC): a blood test that will show your levels of white blood cells, red blood cells, and platelets.

Constipation: infrequent bowel movements. It may also refer to a decrease in the volume or weight of stool or the need to strain to have a movement.

Diarrhea: liquid or watery stools.

Fatigue: an unusual and persistent feeling of or sense of tiredness.

Hemoglobin: a component of your red blood cells that carry the oxygen.

Intravenous (IV): referring to a way medicines are administered into the body using veins.

Nadir: the point when the blood cells in the body are at their lowest number.

Nausea: an upset stomach which may lead to vomiting.

Neutropenia: decrease in white blood cells.

Petechiae: small, red pinpoint spots, often in clusters found inside the mouth or elsewhere on the body, such as the arms and legs.

Platelets (PLT): are the blood cells which assist in the clotting of blood to stop the bleeding from an injury.

Red Blood Cells (RBC): a type of blood cell that carries the oxygen your body needs.

Stomatitis: sores in your mouth (gums, tongue, lips) caused by chemotherapy. These can also occur in your esophagus and intestine.

Thrombocytopenia: a low platelet count.

White Blood Cells (WBC): the cells in your blood that help your body fight infection.