



CARING FOR YOURSELF
THROUGH CANCER

SANFORD[®]
CANCER CENTER

CARING FOR YOURSELF THROUGH CANCER

This guide will provide you and your family with some basic information about your cancer treatment. You will receive more resources as you meet the rest of the health care team. You can always ask questions.

Who and when to call if you have any problems or questions:

Weekdays from 8 a.m. to 5 p.m., call: _____

All other times, call the oncologist on-call at: _____

Know when to call your doctor. You and the person you choose to be with you will receive more specifics about your treatment plan and possible side effects. In general, call if you have:

- Fever of 100.5 or greater, chills, sweats, or any sign of infection
- New onset of cough, shortness of breath, or chest pressure
- Diarrhea
- Nausea or vomiting (especially if you cannot eat or drink for more than 24 hours)
- Skin rash, itching, or changes in sensation
- Headache not improved with normal care
- Changes in eyesight or more sensitive to light
- Feelings of anxiety, depression, or problems sleeping
- Extreme fatigue or weakness
- Problems passing urine or stool
- Any new or increased pain
- Pain in the mouth or mouth sores
- New or increased swelling
- Problems eating or drinking
- Unusual bruising or bleeding

Knowing how you are feeling is **very important** in order to take care of symptoms. Calling early may prevent you from having severe side effects or feeling worse.

TABLE OF CONTENTS

Tips for receiving cancer treatment	4
Fertility	5
Clinical trials	5
Common testing	6
Cancer treatments	7
Support and Looking ahead	8
Nutrition and exercise	9
Appetite loss	10
Fatigue	11
Infection and low white blood counts (neutropenia)	12
Home cares	14
Immunotherapy side effects	15
Chemotherapy side effects	16
Anemia	16
Bleeding and bruising (thrombocytopenia)	17
Mouth or throat problems and mouth care	18
Nausea and vomiting	20
Constipation	21
Diarrhea	22
Eye problems	23
Hair loss (alopecia)	24
Nerve problems (peripheral neuropathy)	25
Skin and nail changes	26
Urinary and bladder problems	28

TIPS FOR RECEIVING CANCER TREATMENT



All your appointments are important for the treatment of your cancer. If you are unable to make your appointment, please contact your oncologist's office right away.

As you start cancer treatment, there is a large team willing and able to answer your questions and help ease your fears. Here are some tips for receiving cancer treatment:

- Bring a trusted friend or family member to your appointments.
- Use this book or carry a notebook to write your questions and notes.
- Keep asking questions!
- If you seek information on the web, use only reliable sources such as:
 - The NCCN (National Comprehensive Cancer Network)
 - <https://www.nccn.org/patients/guidelines/cancers.aspx>
 - The American Cancer Society
 - <https://www.cancer.org/>
 - The National Cancer Institute
 - <https://www.cancer.gov/>

Learning as much as you want about your cancer and taking part in your healthcare decisions is vital. Your doctor will discuss treatment intent with you. Some cancers can be cured and some cannot. With advances in treatments, people can live longer and with better quality by considering all their choices.

FERTILITY

Part of planning treatment may include thinking about the children you hope to have in the future. Fertility is the word used to describe the ability for a woman to get pregnant or a man to father a child.

Cancer treatment may affect your ability to have a child. It is important to talk to the healthcare team before treatment. You may ask for a referral to a reproductive health provider if you would like to discuss these options further.

CLINICAL TRIALS

Clinical trials help to find out if new cancer treatments are safe and effective or better than the standard treatment.

People who take part in a clinical trial may receive:

- The standard treatment alone or
- The standard treatment plus the new treatment being studied

Taking part in a clinical trial helps improve cancer treatment in the future. Even when clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward.

Some clinical trials only include people who have not yet received treatment. Other trials test treatments for those whose cancer has not gotten better. There are also clinical trials that test new ways to stop cancer from coming back or reduce the side effects of cancer treatment.

Many of today's standard treatments for cancer are based on earlier clinical trials. **Ask if there is a clinical trial right for you.**

COMMON TESTING

Pathology is the study of disease. Your pathology report will reveal what type of cancer you have. In addition, your pathology report will provide input for how your cancer should be treated.

Genetics is the study of genes and traits that you were born with. This information may help you make decisions for your own care; and may help family members know their own risks as well.

Radiology is a general term for tests that will provide images of the cancer or area of concern.

Lab testing, usually blood tests, help to show how you are tolerating treatment. Lab tests can show the need to delay or stop treatments, or if you need to receive further care. Common types of blood tests include:

- **Complete Blood Count (CBC)** measures the amounts of the different types of cells in your blood. This includes the white blood cells (WBCs), red blood cells (RBCs) and platelets (plts).
- **White Blood Cells** protect the body from infection by attacking harmful bacteria, viruses, and other foreign substances. In addition, some WBCs attack cancer cells. The WBC count can be broken down further to find the number of neutrophils that fight infection. This is called an absolute neutrophil count (ANC). A decrease in the ANC count can make you neutropenic, which increases the chances of developing an infection.
- **Red Blood Cells** carry oxygen throughout the body. A low level of RBCs or hemoglobin (Hgb), an iron-containing protein, is called anemia.
- **Platelets** form clots and plug damaged blood vessels to stop bleeding. Low platelets can increase the risk of serious bleeding or bruising.



CANCER TREATMENTS



There are many ways to treat cancer. Your cancer doctors will determine the best treatment for you. You will receive education on the specific treatments you are getting before your treatment starts.

Surgery

Surgery is used to obtain tissue for biopsies, determine extent of disease, remove all or part of a tumor, or control symptoms such as pain. Surgery can also be used to place or remove devices used to give treatment.

Drug therapy

Immunotherapy is a treatment that uses your immune system to fight cancer. Immunotherapy is made to boost, direct, or restore the body's natural defenses against cancer.

Chemotherapy is a treatment that causes rapidly growing cells including cancer cells to die.

Targeted therapy works by targeting genes or proteins to help stop cancer from growing or spreading.

Hormone therapy blocks or removes hormones that cause cancer cells to grow.

Radiation therapy

Radiation therapy is the use of high doses of radiation to destroy or shrink cancer. There are different types of radiation therapy. Some are delivered from outside the body. Another way to deliver radiation is with the use of implants or "seeds." Careful treatment planning decreases the amount of damage to surrounding tissue.

SUPPORT

There are many resources to help during your cancer treatment. There are registered dietitian nutritionists, social workers, financial assistants, and psychologists who specialize in caring for people with cancer. Questions and concerns about jobs, money, fertility, sexuality, getting to treatment, and others are normal.

Throughout your care, you will complete screenings for distress. At any time, let your providers or nurses know if you would like to talk with a professional about any stressors or questions you have.

Integrative therapies can help with relaxation and lessen stress. You may be interested in massage, aromatherapy, art, or yoga during your treatment. These should be offered by those who have received special training, or approved by your cancer doctor.

LOOKING AHEAD

Completing treatment does not remove all worry. Some people may deal with cancer the remainder of their life. Depending on your own needs, there are programs for survivorship, palliative care, or hospice.

Survivorship is the process of living with, through, and beyond cancer. Cancer survivorship begins at diagnosis and includes people who continue to receive treatment either to reduce the risk of cancer coming back or to manage chronic disease.

Palliative care focuses on relief of pain, shortness of breath, fatigue, constipation, nausea, loss of appetite, or problems with sleep. Palliative care experts help you and your provider make treatment goals along with advance care planning and referrals for other services.

Hospice is a program that provides comfort and support during an end-of-life illness. Medicare and insurance companies often cover hospice care.

NUTRITION AND EXERCISE

Good nutrition, adequate fluid intake, and exercise are important to maintain strength and restore health. Cancer and cancer treatments may affect taste, smell, appetite, and the ability to eat enough food or absorb the nutrients from food. This can cause malnutrition, a lack of key nutrients. Alcohol abuse and obesity may increase the risk of malnutrition.

Cancer treatment may cause you to lose or gain weight. It is important that you try to maintain your current weight throughout treatment.

Eating the right amount of protein and calories is important for healing, fighting infection, and having enough energy.

Research has shown that exercise is not only safe and possible during cancer treatment, but can improve your quality of life. Too much rest can lead to loss of body function, muscle weakness, and reduced range of motion. Talk to your provider before starting any new exercise programs.

Tell your nurse if you would like to know more about exercise or eating hints.



APPETITE LOSS

Cancer treatments may lower your appetite or change the way food tastes or smells. Side effects such as mouth and throat problems, or nausea and vomiting can also make eating difficult. Cancer-related fatigue can also lower your appetite.

Talk with your health care team if you are not hungry or if you find it difficult to eat. Do not wait until you feel weak, have lost too much weight, or are low on fluids, to talk with your doctor or nurse. It is important to eat and drink well during treatment for cancer.

Ways to manage appetite loss

Take these steps to get the nutrition you need to stay strong during treatment:

- Drink plenty of liquids. Losing fluid can lead to dehydration, a dangerous condition. You may become weak or dizzy and have dark yellow urine if you are not drinking enough liquids. You should try to drink 64 ounces of decaffeinated liquid daily, unless you have been told to limit your fluids.
- Choose healthy and high-nutrient foods. Eat a little, even if you are not hungry. It may help to have five or six small meals throughout the day instead of three large meals. Your diet may have special requirements. In general, most people need to eat a variety of nutrient-dense foods that are high in protein and calories:
 - Meat, poultry, and fish
 - Eggs
 - Dairy products (milk, yogurt, cheese, cottage cheese)
 - Beans
 - Nuts
 - Nutrition supplements (Ensure, Boost, Carnation Instant Breakfast)
 - Protein bars
- Add extra protein and calories to food, such as using protein-fortified milk.
 - Add 4 cups whole milk to 1-cup nonfat instant dry milk, beat slowly with a mixer, serve cold. Add more or less dry milk to taste.
- Avoid low fat and low-carbohydrate (diet) foods.
- Eat high-protein foods first in your meal when your appetite is strongest.
- Drink milkshakes, smoothies, juices, or soups if you do not feel like eating solid foods. Try blended drinks that are high in nutrients.

- Eat foods that smell good. Try new spices, foods, and recipes.
- Be active. Being active can actually increase your appetite. Your appetite may increase when you take a short walk each day.
- Make and store small amounts of favorite foods so they are ready to eat when you are hungry.
- Brush your teeth and rinse your mouth to relieve symptoms and aftertastes.

FATIGUE

Fatigue is a common side effect of cancer and cancer treatment. People often describe cancer-related fatigue as feeling extremely tired, weak, heavy, run down, and having no energy. Tell your health care team if you feel extremely tired and are not able to do your normal activities or are very tired even after resting or sleeping.

Ways to manage fatigue

You may be advised to take these and other steps to feel better:

- **Make a plan that balances rest and activity.** Choose the activities that are most important to you and do them when you have the most energy. Ask for help with important tasks such as making meals or driving. Light exercise may be advised by your doctor to give you more energy and help you feel better.
- **Plan time to rest.** However, too much sleep during the day can make it hard to sleep at night. Never nap for more than 2 hours during the day.
- **Eat and drink well.**
- **Meet with a specialist.** It may help to meet with an integrated health specialist, mental health counselor, psychologist, or psychiatrist. These experts help people to cope with difficult thoughts and feelings. Lowering stress may give you more energy. Since pain that is not controlled can also be major source of fatigue, it may help to meet with a pain or palliative care specialist.
- **Sleep problems (insomnia).** Problems falling asleep or staying asleep are common in people receiving treatment for cancer. Side effects such as pain, bladder, or gastrointestinal problems can also cause problems with sleep. Talk with your health care team if you are having difficulty sleeping.

INFECTION AND LOW WHITE BLOOD COUNTS (NEUTROPENIA)

An infection is the growth of germs in the body, such as bacteria, viruses, yeast, or other fungi. An infection can begin anywhere in the body, may spread throughout the body, and can cause one or more of these signs:

- Fever of 100.5 °F (38 °C) or higher or chills
- Cough or sore throat
- Diarrhea
- Ear pain, headache or sinus pain, or a stiff or sore neck
- Skin rash
- Sores or white coating in your mouth or on your tongue
- Swelling or redness, especially where a tube enters your body
- Pain when you urinate or urine that is bloody or cloudy

Call your health care team if you have signs of an infection. Infections during cancer treatment can be life threatening and require urgent medical attention. Be sure to talk with your doctor or nurse before taking medicine—even aspirin, acetaminophen (such as Tylenol®), or ibuprofen (such as Advil®) for a fever. These medicines can lower a fever but may also mask or hide signs of a more serious problem.

Some medicines called NSAIDS (non-steroidal anti-inflammatory drugs) such as aspirin or ibuprofen can also lower the platelet count **and should not be taken** during cancer treatment unless approved by your provider.

Ways to prevent infection

Your health care team will talk with you about these and other ways to prevent infection:

Wash your hands often and well. Hand washing is the most important thing you can do to prevent infection! Use soap and warm water to wash your hands well, especially before eating. Have people around you wash their hands well also.

General hygiene – Along with regularly washing your hands, you should:

- Shower daily, washing areas that could hold bacteria (feet, groin, armpits, and other moist areas). If you have a central line, you may be told to cover it with a waterproof dressing such as clear kitchen wrap.

- Gently brush your teeth 3 to 4 times per day with a soft toothbrush. The mouth is a common place for infections.
- Avoid sharing towels and personal items with others.
- Clean well after passing urine or stool. Females wipe from front to back.
- Do not use tampons, douches or rectal suppositories, thermometers, or enemas.

Stay away from people who are sick or have a cold. Avoid crowds and people who have just had a live vaccine, such as one for chicken pox, polio, or measles.

Sexual intercourse – You should ask your nurse or doctor if you have questions about having sexual intercourse. When having intercourse an over-the-counter lubricant such as water-soluble (Astroglide), or silicone-based (Astroglide X), using a condom, and avoiding oral and anal sex can limit the chance of infection.

Food safety guidelines

Choosing and preparing safe foods can help protect you from foodborne illness. These guidelines can help make sure your foods are safe.

- Wash your hands before and while you prepare food.
- Scrub all raw fruits and vegetables with a brush before eating, including washing the peeling or rough surfaces. Soak berries and other foods that are not easily scrubbed in water, then rinse.
- Cook all raw meats to the proper cooking temperatures.
- Place fresh or left over food in the refrigerator within 2 hours of purchase or eating.
- Refrigerate or freeze food immediately after purchase.
- Defrost food in the refrigerator, in cold water, or by microwaving followed by immediate cooking.
- Follow ‘Use By’ and expiration dates on fresh and packaged foods.
- Avoid salad bars, buffets and potlucks to reduce your risk of foodborne illness.

HOME CARES



It is safe for family to have contact with you during therapy. Eating together, enjoying favorite activities, hugging and kissing are all safe. Chemotherapy can be found in body fluids after treatment.

For at least 48 hours after chemotherapy or longer if advised:

- Use the toilet and flush completely with the lid closed.
 - Encourage men to sit on toilet seats rather than standing to reduce the risk of droplet contamination.
 - If any splashing occurs, it should be cleaned before the toilet is used by others.
 - If family members must handle body fluids such as urine or stool, care should be taken to protect themselves with gloves. Women who are pregnant or attempting to become pregnant should avoid handling body fluids.
- Wash clothes normally unless they become soiled with chemotherapy. Soiled clothes should be handled carefully with gloves and placed in the washer separately from other items right away.

It is usually safe to have sex during cancer treatment unless your doctor tells you not to. If you are having sex during chemotherapy, you should use barrier protection such as a condom for a week after treatment, since chemotherapy can be found in semen or vaginal fluid.

IMMUNOTHERAPY SIDE EFFECTS

Immunotherapy is a way of treating disease using the body's immune system. The side effects of immunotherapy occur differently than chemotherapy or radiation therapy. Most side effects can be managed. Less often they can be severe and even life threatening. Side effects can start at any time during treatment and even months after treatment has been stopped. It is important to report all new symptoms such as those listed below to your cancer doctor right away:

- Fever, confusion, changes in mood, neck stiffness, seizures, light sensitivity
- Vision changes such as blurring or double vision
- Eye pain or redness
- Headaches that last
- Feeling very, very tired (fatigue)
- Dizziness or fainting
- Weight loss or weight gain
- Hair loss
- Rapid heartbeat with or without chest pain
- Increased sweating
- New or worsened cough, shortness of breath
- Chest pain
- Decreased urine output or blood in urine; pain with urination
- Yellowing of the skin or whites of the eyes, right sided pain, dark urine
- Bleeding or bruising
- Nausea or vomiting
- Constipation, diarrhea, dark tarry stools, stomach-area pain
- Rashes, itching, blisters
- Numbness or tinging of hands and feet; weakness in arms, legs, or face
- Weakness, muscle or joint pain

CHEMOTHERAPY SIDE EFFECTS

Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. Chemotherapy can also damage normal cells that divide quickly and cause likely side effects. Common chemotherapy side effects are listed below:

- Decreased lab values
 - White blood cells (WBCs) help protect the body from infection
 - Red blood cells (RBCs) carry oxygen throughout your body
 - Platelets (plts) are structures in the blood that help stop bleeding
- Hair loss
- Mouth sores, nausea, vomiting
- Diarrhea, constipation, heartburn
- Numbness or tingling in your hands or feet

Most side effects can be managed and are temporary. There can be long-term side effects to some chemotherapies that do not go away. These include damage to the heart, lung, nerves, or kidneys. Some chemotherapies cause infertility or may cause a second cancer years later.

On the following pages, there are common side effects of treatment and some tips to help manage the effects. You or your caregiver may want to highlight, under-line, or tab pages most likely to be helpful.

Anemia

Anemia is a condition that can make you feel very tired, short of breath, and lightheaded. Other signs of anemia may include feeling dizzy or faint, headaches, a fast heartbeat, and/or pale skin.

When you are anemic, your body does not have enough red blood cells. You will have blood tests to check for anemia.

Ways to manage anemia

Here are some steps you can take if you have fatigue caused by anemia:

- Save your energy and ask for help.
- Balance rest with activity.
- Eat and drink well, especially iron-rich foods such as spinach, chicken, turkey, red meat, broccoli, lentils, and beans. Vitamin C sources such as orange juice, oranges, strawberries, and tomato help absorb iron.

Bleeding and bruising (thrombocytopenia)

Some cancer treatments can lower the number of platelets in the blood and put you at risk for bleeding and bruising. Platelets are the cells that help your blood to clot and stop bleeding. When your platelet count is low, you may bruise or bleed a lot or very easily and have tiny purple or red spots on your skin. This condition is called thrombocytopenia.

Call your doctor or nurse if you have any of these signs or symptoms such as:

- Bleeding that does not stop after a few minutes; bleeding from your mouth, nose, or when you vomit; bleeding from your vagina when you are not having your period (menstruation); urine that is red or pink (except if from a known drug effect such as with adriamycin); stools that are black or bloody; or bleeding during your period that is heavier or lasts longer than normal.
- Head or vision changes such as bad headaches or changes in how well you see, or if you feel confused or very sleepy.

Ways to manage bleeding and bruising

Steps to take if you are at increased risk of bleeding and bruising:

- Avoid certain medicines. Many over-the-counter medicines contain aspirin or ibuprofen, which can increase your risk of bleeding
- Take extra care to prevent bleeding. Brush your teeth gently, with a very soft toothbrush. Wear shoes, even when you are inside. Be extra careful when using sharp objects. Use an electric shaver, not a razor. Use lotion and a lip balm to prevent dry, chapped skin and lips. Try keeping bowel movements regular and soft. Tell your doctor or nurse if you are constipated or notice bleeding from your rectum.
- Care for bleeding or bruising. If you start to bleed, press down firmly on the area with a clean cloth. Keep pressing until the bleeding stops. If you bruise, put ice on the area.





Mouth or throat problems and mouth care

Cancer treatments may cause dental, mouth, and throat problems. Radiation therapy to the head and neck may harm the salivary glands and tissues in your mouth and/or make it hard to chew and swallow safely. Drugs used to treat cancer and certain bone problems may also cause oral complications.

Mouth and throat problems may include:

- Changes in taste or smell
- Dry mouth
- Infections and mouth sores
- Pain or swelling in your mouth
- Sensitivity to hot or cold foods
- Swallowing problems
- Tooth decay

Mouth problems are more serious if they interfere with eating and drinking because they can lead to dehydration and/or malnutrition. It is important to call your doctor or nurse if you have pain in your mouth, lips, or throat that makes it difficult to eat, drink, or sleep or if you have a fever of 100.5 °F (38 °C) or higher.

Ways to prevent mouth and dental problems

Your doctor or nurse may advise you to take these and other steps:

- **Get a dental check-up before starting treatment.** Before you start treatment, visit your dentist for a cleaning and check-up. Tell the dentist about your cancer treatment and try to get any dental work completed before starting treatment.
- **Check and clean your mouth daily.** Check your mouth every day for sores or white spots. Tell your doctor or nurse as soon as you notice any changes, such as pain or sensitivity. Rinse with a glass of this mixture: 1/4 tsp salt, 1/4 tsp baking soda with 1-quart room temperature water every 1 to 2 hours then rinse with plain water. Gently brush your teeth, gums, and tongue after each meal and before going to bed at night. Use a very soft toothbrush or cotton swabs. If you are at risk of bleeding, ask if you should floss.

Ways to manage mouth problems and changes in taste

Your health care team may suggest that you take these and other steps to manage these problems:

- **For a sore mouth or throat:** Choose foods that are soft, wet, and easy to swallow. Soften dry foods with gravy, sauce, or other liquids. Use a blender to make milkshakes or blend your food to make it easier to swallow. Ask about pain medicine, such as lozenges or sprays that numb your mouth and make eating less painful. **Do not use** commercial mouthwashes that contain a large amount of salt or alcohol. Avoid foods and drinks that can irritate your mouth; foods that are crunchy, salty, spicy, or sugary; and alcoholic drinks. Do not smoke or use tobacco products.
- **For a dry mouth:** Drink plenty of liquids because a dry mouth can increase the risk of tooth decay and mouth infections. Keep water handy and sip it often to keep your mouth wet. As long as you do not have mouth sores, add washed sliced citrus fruit to your water to help stimulate salivary glands. Replace fruit at least once per day. Suck on ice chips or sugar-free hard candy, have frozen desserts, or chew sugar-free gum. Use a lip balm. Ask about medicines such as saliva substitutes that can coat, protect, and moisten your mouth and throat. Acupuncture may also help with dry mouth.
- **For changes to your sense of taste:** Cancer treatments may cause a change in how foods taste or may cause an unpleasant chemical or metallic taste in your mouth. If your sense of taste changes, try different foods to find ones that taste best to you. Trying cold foods may also help. Here are some more tips to consider:
 - If food tastes bland, marinate foods to improve their flavor or add spices to foods.
 - If red meat tastes strange, switch to other high-protein foods such as chicken, eggs, fish, peanut butter, turkey, beans, or dairy products.
 - If foods taste salty, bitter, or acidic, try sweetening them.
 - If foods taste sweet, try adding salt.
 - If foods taste metallic, switch to plastic utensils and non-metal cooking dishes.
 - If you have a bad taste in your mouth, try sugar-free lemon drops, gum, or mints.

Nausea and vomiting

Nausea is when you feel sick to your stomach, as if you are going to throw up. Vomiting is when you throw up. Controlling nausea and vomiting will help you to feel better and prevent more serious problems such as poor nutrition and dehydration.

Ways to manage nausea and vomiting

You may be advised to take these steps to feel better:

- **Take an anti-nausea medicine.** Medicines called anti-nausea drugs (anti-emetics) are effective in preventing or reducing many types of nausea and vomiting and may be prescribed by your doctor. Talk with your doctor or nurse to learn when to take your medicine. Tell your doctor or nurse if the medicine does not help. There are different kinds of medicine and another may work better for you.
- **Drink plenty of water and fluids.** Drinking will help to prevent dehydration. Try to sip on water, fruit juices, ginger ale, tea, and/or sports drinks throughout the day.
- **Avoid certain foods.** Do not eat greasy, fried, sweet, or spicy foods if you feel sick after eating them. If the smell of food bothers you, try asking someone else to make it, eat foods that do not have strong smells, eat cold foods that do not have strong smells, or let food cool down before you eat it.
- **Try these tips on treatment days.** Some people find that it helps to eat a small snack before treatment. Others avoid eating or drinking right before or after treatment because it makes them feel sick.
- **Learn about complementary medicine practices that may help.** Acupuncture, aromatherapy, deep breathing, guided imagery, hypnosis, and other relaxation techniques (such as listening to music, reading a book, or meditating) can help relieve symptoms of nausea and vomiting.





Constipation

Constipation is stool that may be hard, dry, difficult to pass, and less frequent than normal. You may also have stomach cramps, bloating, and nausea when you are constipated.

Cancer treatments such as chemotherapy can cause constipation. Certain medicines (such as pain medicines), changes in diet, not drinking enough fluids, and being less active may also cause constipation.

Ways to prevent or treat constipation

Take these steps to prevent or treat constipation:

- **Eat high-fiber foods.** Adding bran to foods such as cereals or smoothies is an easy way to get more fiber in your diet. Ask your health care team how many grams of fiber you should have each day. If you have had an intestinal obstruction or intestinal surgery, you should not eat a high-fiber diet.
- **Drink plenty of liquids.** Most people need to drink at least 8 cups of liquid each day. You may need more or less based on your treatment, medications you are taking, or other health factors. Drinking warm or hot liquids may also help.
- **Try to be active every day.** Ask your health care team about exercises that you can do. Most people can do some light exercise.
- **Learn about medicine.** Use only medicines and treatments for constipation that are prescribed by your doctor, since some may lead to bleeding, infection, or other harmful side effects. Keep a record of your bowel movements to share with your doctor or nurse.



Diarrhea

Diarrhea means having bowel movements that are soft, loose, or watery more often than normal. If diarrhea is severe or lasts a long time, the body does not absorb enough water and nutrients and can lead to dehydration. Cancer treatments, or the cancer itself, may cause diarrhea or make it worse. Some medicines, infections, and stress can also cause diarrhea. Tell your health care team if you have diarrhea, blood in your stool, or pain in your gut.

Ways to manage diarrhea

Tell your provider if you have diarrhea. You may be advised to take steps to prevent complications from diarrhea:

- **Drink plenty of fluid each day.**
- **Eat small meals that are easy on your stomach.** Eat 6 to 8 small meals throughout the day, instead of 3 large meals. Foods high in potassium and sodium are good food choices for most people with diarrhea. Limit or avoid foods and drinks that can make your diarrhea worse such as greasy, fatty, or spicy foods.
- **Check before taking medicine.** Check with your doctor or nurse before taking medicine for diarrhea. Your doctor will prescribe the correct medicine for you. The medicine normally taken for diarrhea from chemotherapy is not to be used for diarrhea that is caused by immunotherapy.
- **Keep your anal area clean and dry.** Try using warm water and wipes to stay clean. It may help to take warm, shallow baths.

Eye problems

Some treatments for cancer can cause changes in the eye. This can include late effects such as cataracts. Report any changes you have to your provider. Eye problems could include:

- **Eye dryness.** You may try artificial tears for comfort.
- **Trouble wearing contact lenses.** Some treatments can bother your eyes and make wearing contact lenses painful.
- **Blurred or double vision.**



Hair loss (alopecia)

Some types of chemotherapy cause the hair on your head and other parts of your body to fall out. Radiation therapy can also cause hair loss on the part of the body that is being treated. Talk with your health care team to learn if the cancer treatment you will be receiving causes hair loss.

Ways to manage hair loss

- **Treat your hair gently.** You may want to use a hairbrush with soft bristles or a wide-tooth comb. Do not use hair dryers, irons, or products such as gels or clips that may hurt your scalp. Wash your hair with a mild shampoo. Wash it less often and be very gentle. Pat it dry with a soft towel.
- **You have choices.** Some people choose to cut their hair short to make it easier to deal with when it starts to fall out. Others choose to shave their head. If you choose to shave your head, use an electric shaver so you will not cut yourself. If you plan to buy a wig, get one while you still have hair so you can match it to the color of your own hair.
- **Protect and care for your scalp.** Use sunscreen or wear a hat when you are outside. Choose a comfortable scarf or hat that you enjoy and keeps your head warm. If your scalp itches or feels tender, using lotions and conditioners can help it feel better.
- **Talk about your feelings.** Many people feel angry, depressed, or embarrassed about hair loss. It can help to share these feelings with someone who understands. Some people find it helpful to talk with other people who have lost their hair during cancer treatment. Talking openly and honestly with your children and close family members can help you all. Tell them if you expect to lose your hair during treatment.
- **Ask if a cold cap would help prevent hair loss.** Cold cap treatments (also called scalp hypothermia) cool the scalp before, during, and after each chemotherapy (chemo) treatment. You can rent cold caps from different companies. Cold cap treatment narrows blood vessels in the scalp. Cold caps do not work for everyone. Many people using cold caps still have hair loss. Results may vary.

Nerve problems (peripheral neuropathy)

Some cancer treatments cause peripheral neuropathy, a result of damage to the peripheral nerves. Report any of these signs:

- Tingling, numbness, or a pins-and-needles feeling in your feet and hands that may spread to your legs and arms
- Not able to feel a hot or cold sensation, problems buttoning shirts or opening jars
- Not able to feel pain, such as from a cut or sore on your foot
- Weak or achy muscles
- Problems keeping your balance or falling, feeling dizzy or faint
- Hearing loss or ringing in the ears
- Muscles that twitch and cramp or muscle wasting
- Swallowing or breathing difficulties
- Digestive changes such as constipation or diarrhea
- Sexual problems; men may be unable to get an erection and women may not reach orgasm
- Sweating problems
- Urine problems, such as leaking urine or emptying your bladder

Ways to prevent or manage problems related to nerve changes

You may take these steps:

- **Prevent falls.** Always ask for help if you need. Have rugs out of your path so you will not trip on them. Put rails on the walls and in the bathroom, so you can hold on to them and balance yourself. Put bathmats in the shower or tub. Wear sturdy shoes with soft soles. Get up slowly after sitting or lying down, especially if you feel dizzy.
- **Take extra care in the kitchen and shower.** Use potholders in the kitchen to protect your hands from burns. Be careful when handling knives or sharp objects. Ask someone to check the water temperature, to make sure it is not too hot.
- **Protect your hands and feet.** Wear shoes, both inside and outside. Check your arms, legs, and feet for cuts or scratches every day. When it is cold, wear warm clothes to protect your hands and feet.
- **Ask for help and slow down.** Let people help you with difficult tasks. Slow down and give yourself more time to do things.
- **Ask about pain medicine and integrative medicine practices.** You may be prescribed pain medicine. Sometimes practices such as acupuncture, massage, physical therapy, yoga, and others may help your pain. Talk with your health care team to learn what is best for you.

Skin and nail changes

Cancer treatments may cause a range of skin and nail changes depending on the treatment you are receiving.

- Radiation therapy can cause the skin on the part of your body receiving radiation therapy to become dry and peel, itch (called pruritus), and turn red or darker. It may look sunburned or tan and be swollen or puffy.

Cancer treatment may damage fast growing skin and nail cells. This can cause problems such as skin that is dry, itchy, red, and/or that peels. Some people may develop a rash or sun sensitivity, causing you to sunburn easily. Nail changes may include dark, yellow, or cracked nails and/or cuticles that are red and hurt. The nails may begin to loosen from the nail bed.

These skin problems are more serious and need urgent medical attention:

- Sudden or severe itching, a rash, or hives during chemotherapy. These may be signs of an allergic reaction.
- Sores on the part of your body where you are receiving treatment that become painful, wet, and/or infected. This is called a moist reaction and may happen in areas where the skin folds, such as around your ears, breast, or bottom.

Ways to manage skin and nail changes

If your skin hurts in the area where you get treatment, tell your doctor or nurse.

Depending on what treatment you are receiving, you may take these steps to protect your skin, prevent infection, and reduce itching:

- **Use only recommended skin products.** Use mild soaps that are gentle on your skin. Use alcohol-free, fragrance-free, hypoallergenic moisturizer on your skin. Ask your nurse to recommend specific lotions and creams. Ask when and how often to use them. Ask what skin products to avoid.
- **Protect your skin.** Ask about lotions or antibiotics for dry, itchy, infected, or swollen skin. Do not use heating pads, ice packs, or bandages in an area receiving radiation therapy. Be careful not to scratch, rub or scrub your skin – for example, pat your skin dry after a shower. Shave less often and use an electric razor or stop shaving if your skin is sore. Wear sunscreen that is SPF 30 or greater and lip balm or a loose-fitting long-sleeved shirt, pants, and a hat with a wide brim when outdoors.
- **Prevent or treat dry, itchy skin (pruritus).** Take short showers or baths in lukewarm, not hot, water. Put on lotion after drying off from a shower, while your skin is still slightly damp. Avoid tight clothing. Keep your home cool and humid. Eat a healthy diet and drink plenty of fluids to help keep your skin moist

and healthy. Applying a cool washcloth or ice to the affected area may also help. Acupuncture also helps some people.

- **Prevent or treat minor nail problems.** Keep your nails clean and cut short. Wear gloves when you wash the dishes, work in the garden, or clean the house. Check with your nurse about products that can help your nails.



Urinary and bladder problems

Some urinary or bladder changes may be normal, such as it is common for your urine to change color or smell different during chemotherapy. Tell your doctor or nurse if you have any of these changes:

- A fever of 100.5 °F (38 °C) or higher, chills, and fatigue
- Blood in your urine, or you are not able to urinate
- Pain or burning when urinating
- A strong urge to urinate more often
- Urine that is cloudy, or is a different color, such as orange, red, green, or dark yellow
- Urine that has a strong smell
- Trouble urinating

Ways to prevent or manage urine problems

Here are some steps you may be told to take to feel better and to prevent problems:

- **Drink plenty of liquids.** Most people need to drink at least 8 cups of fluid each day, so your urine is light yellow or clear. You will want to stay away from things that can make bladder problems worse. These include caffeine, drinks with alcohol, spicy foods, and tobacco products.
- **Prevent urinary tract infections.** Prevent infections by going to the bathroom often, wearing cotton underwear and loose fitting pants, learning about safe and sanitary practices for self-catheterization (if needed), taking showers instead of baths, and checking with your nurse before using products such as creams or lotions near your genital area.

Some topics in this guide has been adapted from material originally published by the National Cancer Institute:

Anemia and Cancer Treatment, Bleeding and Bruising (Thrombocytopenia) and Cancer Treatment Appetite Loss and Cancer Treatment, Nutrition in Cancer Care, Nausea and Vomiting in People with Cancer, Constipation and Cancer Treatment, Diarrhea and Cancer Treatment, Eye problems, Flu-like symptoms, Fatigue and Cancer Treatment, Hair Loss (Alopecia) and Cancer Treatment, Mouth and Throat Problems during Cancer Treatment, Nerve Problems (Peripheral Neuropathy), Skin and Nail Changes during Cancer Treatment, Sleep Problems (Insomnia) and Cancer Treatment, and Urinary and bladder problems.

NOTES

NOTES

NOTES

