

Cancer patients, especially those undergoing chemotherapy, are more likely to get infections because of their weakened immune systems. Cancer and certain cancer therapies can damage the immune system by reducing the number of infection-fighting white blood cells. Patients with a low white blood cell count are at a higher risk of developing infections, and these infections can be more serious and harder to treat. In severe cases, infections can lead to death.

An infection occurs when germs enter a person's body and the immune system does not quickly destroy them. Germs can be bacteria, viruses, fungi or other microorganisms. Infections can begin anywhere in the body, multiply and then spread. When the body's immune system is strong, it can often fight the germs and stop the infection. However, cancer and treatment can weaken the immune system.

Take steps to reduce your risk of infection during and after cancer treatment.

TIPS FOR PREVENTING INFECTIONS

If you have cancer, it is important to try to reduce your risk of infection during and after cancer treatment. The following are steps that you can take to help prevent infections.

Hygiene and Personal Care

- Wash your hands often and thoroughly with soap and water, especially before eating or after using the bathroom. If soap and water are not available, use a liquid or gel hand sanitizer.
- Take a warm (not hot) bath, shower or sponge-bath every day. Do not rub your skin; pat it dry gently. Use unscented lotion, oil or lip balm to prevent and heal dry, cracked skin. Take care of your nails by keeping them short and dry. Avoid manicures, pedicures and artificial nails. Do not pick or pull at your cuticles.
- Use an electric shaver instead of a razor to prevent cuts.
- Use an extra-soft toothbrush to clean your teeth and gums.
- If you have a port or catheter, clean and care for it by following your healthcare team's instructions.
- Clean your rectal area gently but thoroughly after each bowel movement. Ask for medical advice if irritation or hemorrhoids are a problem. Check with the healthcare team before using enemas or suppositories.



Avoiding Illness and Injury

- Avoid crowds. If you must be in a crowd, wear a mask, especially in waiting rooms.
- Avoid all people (including family and friends) who have contagious diseases such as colds, flu, measles or chickenpox.
- Check with your doctor about getting any vaccinations. Find out if you should avoid people who have recently received immunizations with "live attenuated" organisms or viruses.
- Wear gloves when gardening or cleaning up after young children or others, especially if you are cleaning up waste or bodily fluids.
- Avoid activities that put you at risk for cuts, burns or other injuries.
- Clean cuts and scrapes immediately. Rinse the wound under running water. Wash the skin around the wound with soap. To avoid irritation, don't use soap on the wound. Remove any debris in the wound with tweezers cleaned with alcohol. For serious wounds or if you cannot remove all debris, see a doctor.
- Talk to your healthcare team about your pets. Pets in good health can usually stay by your side during cancer treatment, but you may need to take extra precautions such as asking someone else to clean a cat's litter box or to handle animal waste. Do not adopt new pets. Avoid reptiles, chickens, ducks or rodents, which can carry salmonella and other germs.

Food Safety

- Wash hands thoroughly before and after handling food.
- Disinfect all food preparation surfaces both before and after cooking.
- Wash fruits and vegetables under running water before peeling or cutting. Scrub firm produce, such as melons, with a clean produce brush. Dry with a clean towel.
- Keep raw and cooked foods separate. Do not use any utensils, cutting boards, plates or dishes once they have been touched by raw meat or eggs without washing them thoroughly first.
- Use a meat thermometer to make sure that all meats are cooked to the safe internal temperature before they are eaten. Visit www.PearlPoint.org/FoodSafety for a chart of the recommended internal temperatures for cooked meats.
- Always store food within one hour of purchase or cooking—or as soon as possible.
- Check the expiration dates on all foods. Discard leftovers or opened packages within one to four days. If you are unsure if something is safe to eat, throw it out.
- Be careful when eating at restaurants and shopping for food. Buy only from vendors with high grades in health department inspections. Avoid food buffets and salad bars.
- Avoid foods associated with foodborne illness. These foods include
 - Unpasteurized beverages and cheeses
 - Raw food, such as sushi
 - Premade foods at grocery or convenience stores
 - Unwashed fresh fruits and vegetables
 - Foods that contain raw eggs such as cookie dough
 - Water from a well, unless tested and/or boiled appropriately

Visit www.PearlPoint.org/FoodSafety for a detailed list of foods to avoid and more food safety guidelines.

Acknowledgement

The Leukemia & Lymphoma Society (LLS) appreciates the review of this material by

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Signs of Infection

Know the signs of infection. Report any signs or symptoms of infection to your doctor immediately. These include:

- Fever of 100.4°F or greater
 - Do not use aspirin, acetaminophen (such as Tylenol®) or any other medicine to reduce a fever without checking with the doctor.
- Chills
- Sweating
- Loose bowel movements or diarrhea
- A burning feeling when you urinate
- A severe cough or sore throat
- Unusual vaginal discharge or itching
- Redness, swelling or tenderness, especially around a wound, sore, pimple, intravenous (IV) catheter site or vascular access device
- Abdominal pain
- Bleeding gums or white patches in the mouth

GET ONE-ON-ONE SUPPORT.

The Leukemia & Lymphoma Society team consists of master's level oncology social workers, nurses and health educators who are available by phone Monday–Friday, 9 a.m. to 9 p.m. (ET).

INFORMATION SPECIALISTS

- Call **800.955.4572**
- Visit www.LLS.org/InformationSpecialists

CLINICAL TRIAL NURSE NAVIGATORS

- Call **800.955.4572**
- Visit www.LLS.org/CTSC