

HEALTH TIP SHEET



UNDERSTANDING YOUR RISK FOR INFECTION DURING CHEMOTHERAPY

What Is an Infection?

It's important for you to understand what an infection is before you learn about the things that might put a person at a higher risk for getting one. An infection occurs when germs enter a person's body and multiply, causing illness, organ and tissue damage, or disease. Some common germs and infections include the following:

Bacteria: Very small microorganisms. Some types of bacteria enter the human body from the air, water, soil, or food, and can cause infections and disease. Common bacterial infections include pneumonia, bronchitis, and ear infections.

Virus: A very simple microorganism that may cause illness or disease. Viral infections are passed on from other people. Common viral infections include the common cold, herpes, and flu.

Your immune system helps your body protect against these germs. Cancer and chemotherapy can damage this system, reducing your number of infection-fighting white blood cells and making it harder for your body to fight infection from germs

Who Is at Risk?

People receiving chemotherapy may be at risk for getting infections. You are likely to be at higher risk between 7 and 12 days after you have received each chemotherapy treatment – and possibly lasting up to one week, when your white blood cells are at their lowest numbers. This period of time is often called your nadir, meaning “lowest point.” This period varies slightly depending upon the chemotherapy drug, or combination of drugs, used. Your doctor and/or nurse will let you know exactly when your white blood cell count is likely to be at its lowest.

There are certain risk factors that may make it more likely for you to develop serious infections while your white blood cell count is low:

- You are 65 years or older.
- You are female.
- You are unable to take care of yourself without assistance and are bed-bound.
- You have lost a lot of weight in a short time (unintentional weight loss).
- You have another condition that makes it more difficult to fight off infections (i.e., diabetes, kidney disease, high blood pressure, congestive heart failure, an autoimmune disease, liver disease, chronic bronchitis, or emphysema).
- You have a type of cancer that affects the blood or lymph nodes (for example, leukemia).
- Your cancer has spread to other parts of the body.
- You have had chemotherapy or radiation in the past.
- You are receiving more than one chemotherapy drug.
- The chemotherapy that you are receiving is strong.
- Your doctor or nurse has told you that you have a low white blood cell count in the past.

The stronger the chemotherapy, the more of your white blood cells will be killed, making your immune system weaker. Strong chemotherapy may also make your immune system weaker for longer, which also increases your risk for getting an infection

What is Nadir?

Chemotherapy treatment will usually involve a number of chemotherapy doses (sometimes called cycles). The period of time beginning 7–12 days after you finish each chemotherapy dose—and possibly lasting up to one week—is when you have the fewest white blood cells in your body. Because of this, it will be extra hard for your body to fight off germs during this time.

If you are receiving chemotherapy, you may be at risk for getting an infection. Take the right steps toward preventing infections during cancer treatment by visiting www.PreventCancerInfections.org



Scan And Learn More

This period of time is sometimes referred to as nadir, which means “lowest point”. For example, if you have chemotherapy on August 7, you are at highest risk of picking up an infection between August 14 and August 19. This period varies slightly depending upon the chemotherapy drug, or combination of drugs, used.

What Can You Do During Your Nadir?

- Find out from your doctor and/or nurse exactly when your white blood cell count will be at its lowest.
- Be extra careful during this time.
- Try to remember to take your temperature every evening, and call your doctor if you have a temperature of 100.4°F or higher for more than 1 hour, or a one-time temperature of 101°F or higher.

Talking to Your Doctor or Nurse About Your Risk

Remember, although following these infection prevention steps will help you from picking up germs, no matter how careful you are, you may still get an infection. If you do develop an infection during your chemotherapy treatment, it is important to know that it is not your fault!

To find out more about the risks for getting an infection during your chemotherapy treatment, speak with your doctor or nurse. Below are some questions that you can ask:

- Will the cancer treatment I am receiving make me more likely to develop a low white blood cell count?
- Am I at increased risk for getting an infection because of my medical history or other things?
- If I get an infection, how severe is it likely to be, and how long might it last?
- Will you do anything special to help keep me from getting infections?
- What can I do to lower my risk for infection?
- How will I know if I have an infection?
- What should I do if I think I have an infection?
- If I get a fever (increase in body temperature), does that mean I have an infection?
- How will you decide how to treat my infection?
- What will you do if the treatment does not get rid of my infection?
- What are the likely side effects of the proposed treatments for infection?
- What other factors might increase my chances of getting an infection?