

WHAT YOU NEED TO KNOW

NEUTROPENIA AND RISK FOR INFECTION

WHAT IS NEUTROPENIA?

Neutropenia, pronounced noo-troh-PEE-nee-uh, is a decrease in the number of white blood cells. These cells are the body's main defense against infection. Neutropenia is common after receiving chemotherapy and increases your risk for infections.

Why does chemotherapy cause neutropenia?

These cancer-fighting drugs work by killing fast-growing cells in the body—both good and bad. These drugs kill cancer cells as well as healthy white blood cells.

How do I know if I have neutropenia?

Your doctor or nurse will tell you. Because neutropenia is common after receiving chemotherapy, your doctor may draw some blood to look for neutropenia.

When will I be most likely to have neutropenia?

Neutropenia often occurs between 7 and 12 days after you receive chemotherapy. This period can be different depending upon the chemotherapy you get. Your doctor or nurse will let you know exactly when your white blood cell count is likely to be at its lowest. You should carefully watch for signs and symptoms of infection during this time.

How can I prevent neutropenia?

There is not much you can do to prevent neutropenia from occurring, but you can decrease your risk for getting an infection while your white blood cell count is low.

National Center for Chronic Disease Prevention and Health Promotion

Division of Cancer Prevention and Control



What are the signs and symptoms of an infection?

For patients with neutropenia, even a minor infection can quickly become serious. Call your doctor right away if you have:

- Fever that is 100.4°F (38°C) or higher for more than one hour, or a one-time temperature of 101° F or higher.
- Chills and sweats.
- Change in cough or new cough.
- Sore throat or new mouth sore.
- Shortness of breath.
- Nasal congestion.
- Stiff neck.
- Burning or pain with urination.
- Unusual vaginal discharge or irritation.
- Increased urination.
- Redness, soreness, or swelling in any area, including surgical wounds and ports.
- Diarrhea.
- Vomiting.
- Pain in the abdomen or rectum.
- New onset of pain.
- Changes in skin, urination, or mental status.

How can I prevent an infection?

In addition to receiving treatment from your doctor, the following suggestions can help prevent infections:

- Clean your hands frequently.
- Try to avoid crowded places and contact with people who are sick.
- Do not share food, drink cups, utensils or other personal items, such as toothbrushes.
- Shower or bathe daily and use an unscented lotion to prevent your skin from becoming dry and cracked.
- Cook meat and eggs all the way through to kill any germs.
- Carefully wash raw fruits and vegetables.
- Protect your skin from direct contact with pet bodily waste (urine or feces) by wearing vinyl or household cleaning gloves when cleaning up after your pet. Wash your hands immediately afterwards.
- Use gloves for gardening.
- Clean your teeth and gums with a soft toothbrush, and if your doctor or nurse recommends one, use a mouthwash to prevent mouth sores.
- Try and keep all your household surfaces clean.
- Get the seasonal flu shot as soon as it is available.

What if I have to go to the emergency room?

Cancer patients receiving chemotherapy should not sit in a waiting room for a long time. While you are receiving chemotherapy, fever may be a sign of infection. Infections can become serious very quickly. When you check in, tell them right away that you are getting chemotherapy and have a fever. This may be an indication of an infection.



To learn more about CDC's new resources, please visit [cdc.gov/cancer/preventinfections](https://www.cdc.gov/cancer/preventinfections)