

What to Do for Low White Blood Cell Counts

Neutropenia is when you have a low number of neutrophils (a type of white blood cell). Neutrophils help protect you against germs and from getting sick. If you have neutropenia, you may be at higher risk of infection.



What causes neutropenia?

Low white blood cell counts can be caused by cancer, cancer treatment, or something not related to cancer. Some common causes include:

- Cancers affecting the bone marrow, such as leukemia, lymphoma, and multiple myeloma
- Cancer treatment, such as chemotherapy, targeted drug therapy, and bone marrow or stem cell transplant
- Disorders that affect the bone marrow
- Many types of infections, such as COVID-19, Epstein-Barr virus, HIV, and hepatitis
- Immune conditions, such as rheumatoid arthritis or lupus
- Nutrition problems, including low levels of vitamin B12, copper, or folate



How is neutropenia treated?

Managing neutropenia depends on the cause. If chemotherapy or other treatment is causing low white blood cell counts, your cancer care team may lower the dose or change or delay treatment until your body recovers. If you have signs of an infection and a low neutrophil count, your cancer care team might start treatment before they know what is causing the infection.

- Antibiotics, antiviral, and antifungal medicines are often given when someone has a low white blood cell count and is having a fever.
- Growth factors are medicines that help the bone marrow make more white blood cells. They are also called granulocyte colony-stimulating factors (G-CSFs). They're usually given as a shot.



What can you do to help manage neutropenia?

If you don't have enough white blood cells, there are things you can do to help protect yourself from infection.

- Wash your hands often. If you don't have clean running water, use hand sanitizer or hand wipes.
- Take a shower or bath every day.
- Use an unscented lotion to help prevent dryness.
- Wear protective gloves if you're using sharp tools.
- Keep any cuts or wounds clean and dry.
- Take care of your mouth. Brush your teeth at least twice a day. Get dental checkups every 6 months.
- Don't share toothbrushes, forks, spoons, cups, or straws.
- Ask your cancer care team which vaccines you should get and when.

Avoid common sources of infection.

- Try not to let your pets lick your face. Wash any skin that gets saliva on it.
- Avoid large crowds of people and people who are sick. Wear a mask if you go out.
- Stay away from areas where dust from the ground is being blown into the air, such as construction sites.

Practice food safety tips.

- Cook meats to a safe temperature.
- Wash all fresh fruits and vegetables.
- Avoid buffets or self-serve food stations.
- Don't eat expired foods or foods that smell strange.
- Don't eat raw or unpasteurized foods, such as milk, cheese, yogurt, and fruit and vegetable juices.



When to talk with your cancer care team

Neutropenia itself doesn't cause any signs or symptoms. But you need to watch out for infection. Talk with your cancer care team right away if you have any signs or symptoms of an infection. These include:

- Fever
- Chills or sweating
- Fast heartbeat
- Breathing problems or cough
- Dizziness or lightheadedness
- Rash, redness, swelling, or sores on your skin (especially near your genitals, rectum, or around a catheter, tube, or drain)
- Pus or yellow discharge from a wound, injury, drain, or catheter
- Pain or swelling in your joints or bones
- Pain, swelling, or sores in your gums, mouth, or throat
- Pain in your abdomen (belly) or rectum
- Pain or burning when peeing
- Sore throat
- Sores or white patches in your mouth or on the tongue



When to call 911 or go to the ER

Call 911 or go to the ER if you have:

- New or worse confusion
- Chest pain
- Trouble breathing, even at rest
- Not able to get out of bed for more than 24 hours
- Not having to pee or peeing only very little amounts that are dark orange or brown



For more information and support, visit the American Cancer Society website at cancer.org/neutropenia or call us at **1-800-227-2345**. We're here when you need us.