

Neutropenia and Neutropenic Precautions

What is neutropenia?

Neutropenia (noo-troh-PEE-nee-uh) is a condition where you have a low number of neutrophils in your blood. **Neutrophils** are a special type of white blood cell that are important for fighting infections, so neutropenia can put you at risk for serious infections. Stress, poor nutrition, and not getting enough sleep can also weaken your immune system, making infection more likely.

We will check your blood for neutropenia. We measure the number of neutrophils in your blood by using the **ANC** (absolute neutrophil count) reported on your **CBC** (complete blood count). We will ask you to follow **neutropenic precautions** (the instructions listed in this handout that can help reduce your risk of infection) when your ANC is less than 1.

What is an infection?

An **infection** is the invasion and growth of germs in the body, such as bacteria, viruses, yeast, or other fungi. An infection can start anywhere in your body and may spread throughout your body.

Infections during cancer treatment can be life-threatening, and they need urgent medical attention. Ask your doctor or nurse before taking any new medications that are not prescribed by your doctor - even aspirin, acetaminophen (such as Tylenol®), or ibuprofen (such as Advil®). These medications can lower a fever, but they may also mask or hide signs of a more serious problem like infection.

What precautions should I take to prevent infection?

- Wash your hands often and well. Use soap and warm water to wash your hands, especially before eating and before touching your face. Have people around you wash their hands well too.
- Shower daily using soap and water. If you have a central line, keep the area around it clean and dry.
- Brush your teeth well using a soft-bristled toothbrush, and check your mouth for sores or other signs of an infection every day.
- If you get a scrape or cut, clean it well with soap and water.
- Avoid germs as much as possible. Stay away from crowds and people who are sick or have a cold. Do not share eating utensils, cups, or towels. Wear a mask as directed.
- Avoid getting live vaccines (vaccines that use a weakened form of the germ that causes the disease, like chicken pox, polio, or measles vaccines). Also avoid being around people who have just had a live vaccine. Please call your clinic with questions about vaccines.
- Follow food safety guidelines. Make sure the meat, fish, and eggs you eat are cooked completely. Keep foods refrigerated until you're ready to cook them. Refrigerate leftover food as soon as possible and eat within 1-2 days. Wash all raw fruits and vegetables very well. Avoid eating shared foods, such as potlucks and buffets.
- Avoid areas where there is loose dirt, such as around construction sites or during gardening, mowing grass, or raking leaves.



- Avoid sexual activity with other people. Also avoid kissing anyone who has any mouth sores or anyone who is sick.
- Do not put anything into your rectum or vagina (such as tampons, sex toys, suppositories, douches, etc.).
- Let your doctor or nurse know if your butt is sore or bleeding, as this could increase your risk of infection.
- Avoid contact with animal feces (poop), cages, litter boxes. Avoid handling raw pet food. Do not handle reptiles. Ask a family member or caregiver to help you with these tasks while you are neutropenic.
- Your doctor may prescribe medications (such as antiviral, antifungal, and antibiotic medications) to help prevent infection. They may also prescribe medications called growth factors to increase your number of white blood cells. Take your medications as prescribed.

What are signs of infection?

Call the clinic at (734) 647-8902 if you have any of these signs of infection:

- Fever greater than 100.4 degrees Fahrenheit
- Chills, sweats, or shakes
- Unusual fatigue, feeling unwell, or confusion
- Change in your cough or a new cough
- Shortness of breath
- Runny nose, sniffles, or congestion (stuffy nose)
- Ear pain, headache, sinus pain, or a stiff or sore neck
- Sore throat, mouth pain, a white coating in your mouth or on your tongue, or painful swallowing
- Nausea, vomiting, or diarrhea
- New belly pain or belly pain that gets worse
- Skin rash, redness, or swelling near your central line site
- Joint pain, swelling, or redness
- Pain with urination (pain when you pee) or bowel movements

- Urine that is bloody or cloudy

What is a neutropenic fever?

This is when a person develops a fever greater than 100.4 degrees Fahrenheit when they have a low neutrophil count.

What do I do if I think I have a fever or signs of an infection?

Immediately call the clinic or on-call doctor at (734) 647-8902. Find out where your local emergency department is, as they will likely ask you to go there to get care.

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