

## Low White Blood Count/Neutropenia

Your blood is made up of many solid particles or cells and fluid. One type of cell is your white blood cells (WBC). Neutrophils are a specific type of white blood cell. White blood cells fight infection and neutrophils start the fight.

**Neutropenia** is when you do not have enough neutrophils. If you have this problem you are neutropenic. You are at a greater risk of infection when you do not have enough white blood cells and neutrophils. The lower your white blood count the higher your risk of infection. It is very important that infections are caught early and treated quickly.

A normal WBC is between 4,500 -11,000 (some describe it as 4.5-11). Your WBC may go as low as 100 (.1).

The name for the number of neutrophils you have is called an **Absolute Neutrophil Count (ANC)**. A normal ANC is about 2500-7500 (2.5-7.5).

### What causes neutropenia?

Neutrophils, like other blood cells are made in your bone marrow and released into the blood stream. Some chemotherapy, certain types of cancer or other illnesses interfere with the bone marrow and not enough neutrophils are made. Chemotherapy may lower your WBC temporarily. Usually, 10-14 days after chemotherapy your blood counts will be at their lowest. Usually, over the next 2 weeks your counts will return to normal. Your blood counts will be checked before each course of chemotherapy. Your doctor, nurse, or pharmacist can tell you how much of a problem low white blood cells are with your type of cancer and chemotherapy.

### How do I prevent infection?

- Wash your hands often, every time after you use the bathroom and before eating.
- Avoid crowds and people with an infection such as a cold or chicken pox.
- Keep your mouth moist and clean. Use a soft toothbrush and do not use commercial mouth washes.
- Keep your skin moist and clean.
- Be careful not to burn or cut your skin.
- Wear long sleeves and gloves when gardening. A mask is not needed.
- Use a clean electric shaver instead of a razor.

- Do not use nose sprays, suppositories, enemas, or rectal thermometers.
- Use a water based lubricant during sexual intercourse. Urinate before and after to prevent bladder infections.
- Do not have oral and anal intercourse.
- Women should use sanitary napkins instead of tampons. Do not douche.
- Have someone else clean up after your pets. Do not change litter boxes or birdcages.
- Follow Canada's Guidelines for Healthy Eating.
- Wash fruits and vegetables well before eating.
- Drink 6-8 glasses of fluid a day, unless told otherwise by your doctor.
- Exercise regularly.
- Humidifiers are not recommended.
- Talk to your cancer doctor or nurse before you get any vaccinations.
- Talk to your cancer doctor before you have any dental work.
- Smoking increases your risk of a lung infection. If you smoke, please discuss ways to stop smoking with your doctor or nurse.

## What if I cut or scratch myself?

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For minor cuts or scratches, clean the wound well with an antiseptic and apply a band-aid. The band-aid should be changed everyday until healed. Call your doctor or nurse if the wound does not heal or becomes red, swollen, sore, or has drainage.

## What are the signs and symptoms of an infection?

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Many times the only sign of an infection is an increase in your temperature. Make sure you have an easy to read thermometer at home. Take your temperature whenever you feel warm, chilled or unwell. Your doctor or nurse may recommend you take your temperature more often. Unless directed by your doctor or nurse, do not take acetaminophen (Tylenol®) or ASA (Aspirin®), which can prevent a fever from being noticed. An infection can occur anywhere. Most infections occur in the mouth, blood, lungs and skin.

## When should I call the doctor or nurse?

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If you have a temperature of 38°C (100°F) or higher or uncontrolled shivering go to your nearest emergency department, unless directed otherwise by your doctor or nurse. Make sure to tell the emergency room doctor when you last received chemotherapy.

If you have any of the following call your nurse or doctor:

- A new sore mouth or throat
- Pain or difficulty passing urine
- New diarrhea
- Swelling, redness, rash, or drainage on your skin
- New cough or shortness of breath
- "Flu-like" feelings

Feel free to contact your doctor or nurse with any other questions or concerns.

## Questions to ask your health care team?

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- What is my WBC?
- What is my ANC?
- Will my cancer or my cancer treatment lower my WBC?
- How often should I have my WBC checked?
- What do I do if I have a fever?