Neutropenia (pronounced noo-troh-PEE-nee-uh), a side effect of cancer and its treatment, refers to a decrease of neutrophils, a type of infection-fighting white blood cell. Because neutrophils are short-lived, the body produces about 100 billion of these cells every day. These cells play a key role in maintaining good health by seeking out and destroying harmful bacteria.

CAUSES OF NEUTROPENIA
• Chemotherapy
• Certain radiation therapy
• Cancer that affects the bone marrow

WHAT IS NEUTROPENIA?
The goal of chemotherapy is to destroy cancer cells. But as they wipe out fast-growing cancer cells, they also can damage fast-growing healthy cells like neutrophils. This may lead to fever, as well as infections. Doctors can monitor neutropenia with a blood test. The risk of infections rises when neutropenia is more severe and long-lasting.

Neutrophil counts usually start to drop about a week after each round of chemotherapy begins. They often reach a low point about seven to 14 days after treatment. This is when infections are more likely to occur. The neutrophil count starts to rise again as the bone marrow resumes its normal production of neutrophils. It can take as long as three to four weeks to reach a normal level again.

If neutropenia develops or the neutrophil level does not return to normal quickly enough, a doctor may delay the next round of chemotherapy or recommend a lower dose. As with any treatment side effect, it’s important to talk with your health care team about neutropenia. Communication with your doctor will allow your health care team to work closely to prevent neutropenia and treat any side effects effectively.

SYMPTOMS OF NEUTROPENIA
Contact your health care team if you notice any of these symptoms:
• Fever (body temperature above 101°F)
• Sore mouth or gums
• Pain, swelling or sensitivity in the gums
• Swollen or inflamed skin sores
• Sinus or ear infections
• Cough and shortness of breath
• Irritation in and around the anus

TREATING INFECTIONS
Doctors use three main types of medications to treat the effects of neutropenia: antibiotics for bacterial infections; antifungal drugs for fungal infections found in the throat (over)
or lungs, for example; and granulocyte colony-stimulating factors (G-CSFs) to raise the number of white blood cells. Talk to your health care what treatment option is best for you

PREVENTING INFECTIONS

There are a number of practical steps you can take to lower your risk of getting an infection while on chemotherapy:

• Avoid germs. Try to stay away from people with a cold, bronchitis, pneumonia or other infectious disease.
• Wash your hands regularly. Be sure to use plenty of soap and warm water, and wash your hands for at least 20 seconds.
• Take care of your skin and avoid scratches or cuts. Skin is an important barrier to germs.
• Be careful when engaging in activities that could lead to injury or infection, such as gardening or mowing the lawn. Wear gloves when doing these chores. Gloves can be helpful even when cooking and handling meat.
• Clean cuts and scrapes right away. Use an antiseptic, and keep wounds clean and dry until they heal.
• Keep surfaces clean and avoid contact with cat litter boxes, bird cages and fish or reptile tanks.

Talk to your health care team additional steps that you can take to prevent infections.

CancerCare® Can Help

Founded in 1944, CancerCare is the leading national organization providing free support services and information to help people manage the emotional, practical and financial challenges of cancer. Our comprehensive services include counseling and support groups over the phone, online and in-person, educational workshops, publications and financial and co-payment assistance. All CancerCare services are provided by professional oncology social workers and world-leading cancer experts.

To learn more, visit www.cancercare.org or call 800-813-HOPE (4673).

Facebook: facebook.com/cancercare
Twitter: @cancercare