

Sepsis and Cancer

Cancer and cancer treatment can increase the risk of infection. When an infection grows out of control, it can turn into sepsis, which can be very serious. This fact sheet will cover:

- The causes of infection
- How infection turns into sepsis
- How cancer and treatment impact infections
- Signs of infection and sepsis
- Ways to prevent and treat infection



What Is Infection?

Infection occurs when germs enter the body through wounds, food and water or bodily fluids and cause illness. The germs involved can be bacteria, viruses, fungus or parasites.

Infections can occur throughout the body, from the bowels and urinary tract to the brain, heart or blood. The most common infections include the flu and colds or inflammations coming from cuts or rashes on the skin.

When healthy, your body's immune system can usually fight off infections on its own. Medications can also sometimes be used to help. However, when your immune system is not working well, infection can lead to sepsis.



What Is Sepsis?

Sepsis is when the body's immune system severely overreacts to an infection. This can cause serious damage to your body's tissues and more, such as organ failure, lasting complications or death.

Signs of sepsis are listed on the reverse page. If you think you have sepsis, contact your doctor or go to an emergency room as soon as possible. Treatment often requires urgent medical care. Sepsis should be treated immediately.



Cancer Treatment and Infection

Cancer treatment can increase the risk of infection, which can lead to sepsis.

For example, chemotherapy is designed to kill cancer cells, but also kills other cells in the body. These include white blood cells that fight infection, which are called 'neutrophils.' Without their protection, infections can become more dangerous.

Neutropenia is the condition of having a low count of neutrophils. Certain forms of cancer or being treated for cancer can cause neutropenia.



What Are Signs of Infection and Sepsis?

Infections can sometimes be hard to identify, depending on where it occurs. Some signs may be more obvious than others. Signs of infection can include:

- Redness, swelling or soreness, especially around any wounds in your skin
- Sore throat, cough or congestion of the nose
- Fevers, chills or sweats as your body fights the germs
- Diarrhea or vomiting can be a sign of viral infection in the bowels
- Swollen lymph nodes in the neck, armpits or groin

Sepsis has no single sign or symptom. Often the signs of a previous or ongoing infection listed above are joined with one or more of the following:

- Shivering and high temperature fevers
- Very cold or clammy skin, heavy sweating
- Extreme discomfort or pain
- Shortness of breath
- High heart rates, pounding, or skipping beats
- Little or no urine
- Lowered blood pressure
- Confusion or disorientation

If you experience any of the symptoms listed for sepsis, contact your doctor or go to an emergency room immediately. Sepsis can be very dangerous.



How to Prevent and Treat Infection

These ideas can help reduce your risk of infection. Preventing infection will prevent sepsis.

- Wash your hands often with plenty of soap and water
- Take a bath or shower every day
- Clean and bandage wounds and injuries
- Do not share food, drinks, utensils or other eating items
- Wash raw fruits and vegetables completely
- Cook meat and other protein thoroughly
- Brush your teeth and gums regularly
- Wear gloves and wash your hands after cleaning, including pet waste

Your health care team may have more suggestions, such as flu vaccines or other ways of preventing sickness. You should also notify them in case of severe infection. Antibiotics and other methods can be used as treatment.

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