

How Our Bodies Fight Infections

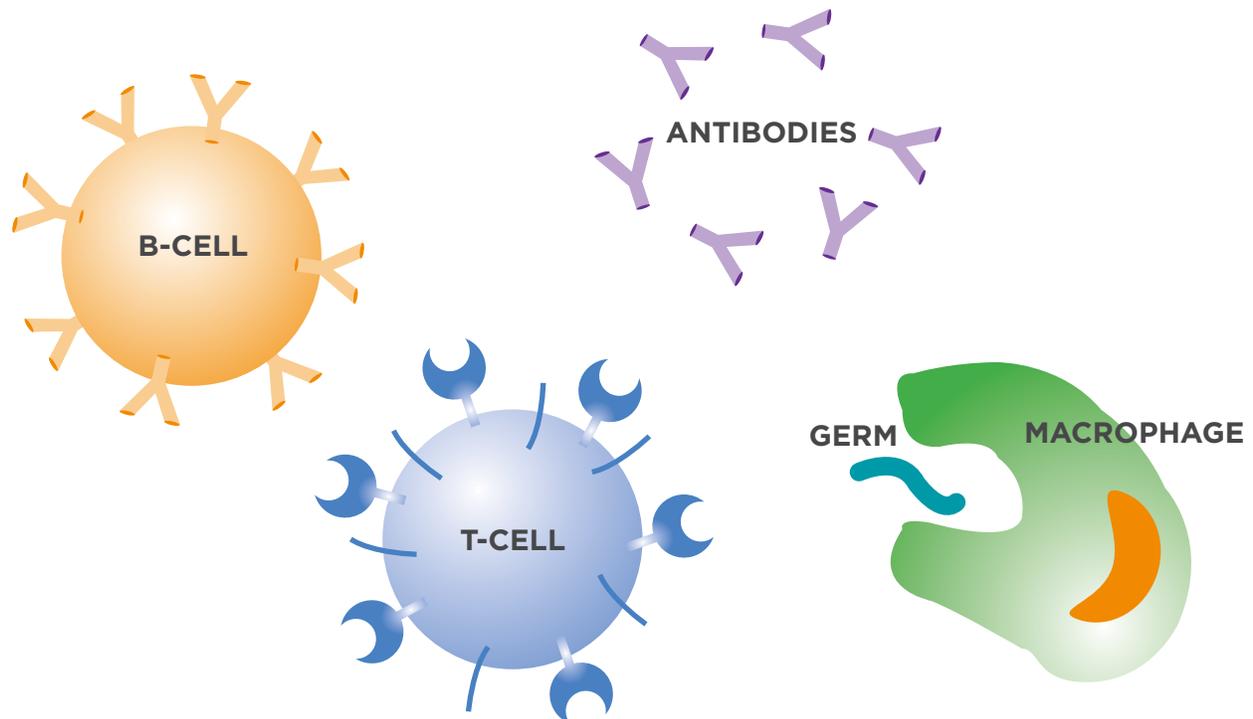
There are different types of cells in our body's immune system that are used to fight infections.

Macrophages are white blood cells that surround and kill germs, remove dead cells, and activate other immune system cells. Macrophages leave behind parts of germs (called antigens), so that your body can identify the germ as dangerous. If your body is attacked by that germ again, your body can mount a defense by activating antibodies to fight against the germ.

B-Cells are white blood cells that make antibodies to attack the pieces of the germ that are left behind by the macrophages. B-Cells play an important role in protecting your body from infection.

T-Cells are white blood cells that attack cells in your body that have already been infected by germs. T-cells are a crucial component in an immune response against infection.

Antibodies, also called immunoglobulins, are Y-shaped proteins that are part of your immune system. These antibodies are made when your body meets specific germs, either by contact exposure or vaccination. Antibodies recognize and fight against specific germs that may enter your body.





Learning to Fight the COVID-19 Virus

When SARS-COV-2, the virus that causes COVID-19 illness, enters our body, the attack on our body's cells is called an infection and causes illness. Because SARS-COV-2 is a new virus, your body does not recognize it, causing a slower response to the infection. It may take your immune system several days or even weeks for your immune system to respond and start fighting the infection.

What We Know:

- The symptoms of COVID-19 infection vary widely.
- Scientists are still trying to learn why some people become more sick than others.
- Some groups of people have an increased risk of developing severe illness from COVID-19.
- Globally, many people have lost their lives due to COVID-19 illness—more than 500,000 to date in the USA.
- With a safe and effective COVID-19 vaccine, a person can fight the virus that causes COVID-19, reducing the risk of severe symptoms and illness.

**This information was last reviewed on March 2nd, 2021 by the NephCure COVID-19 Medical Advisory Committee. NephCure will provide updated information as it becomes available.*