

TEST TYPE B

What are pathogens?

A pathogen is an organism that causes disease. Your body is naturally full of microbes. However, these microbes only cause a problem if your immune system is weakened or if they manage to enter a normally sterile part of your body. Pathogens are different and can cause disease upon entering the body.

All a pathogen needs to thrive and survive is a host. Once the pathogen sets itself up in a host's body, it manages to avoid the body's immune responses and uses the body's resources to replicate before exiting and spreading to a new host. Pathogens can be transmitted a few ways depending on the type. They can be spread through skin contact, bodily fluids, airborne particles, contact with feces, and touching a surface touched by an infected person.

Pathogens type

There are different types of pathogens, but we're going to focus on the four most common types: viruses, bacteria, fungi, and parasites.

Viruses

Viruses are made up of a piece of genetic code, such as DNA or RNA, and protected by a coating of protein. Once you're infected, viruses invade host cells within your body. They then use the components of the host cell to replicate, producing more viruses. After the replication cycle is complete, these new viruses are released from the host cell. This usually damages or destroys the infected cells. Some viruses can remain dormant for a time before multiplying again. When this happens, a person appears to have recovered from the viral infection, but gets sick again. Antibiotics do not kill viruses and therefore are ineffective as a treatment for viral infections. Antiviral medications can sometimes be used, depending on the virus.