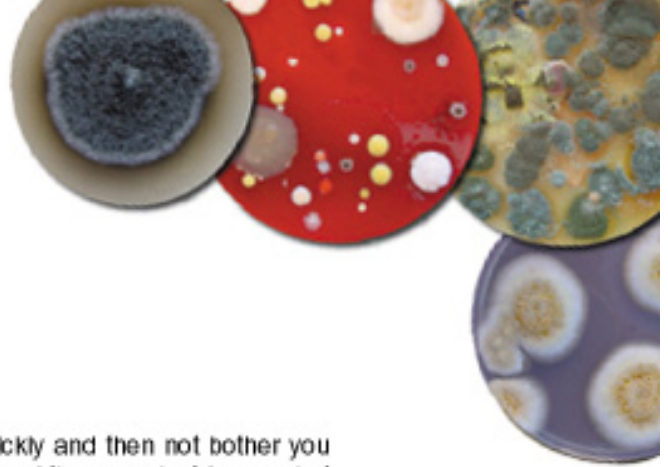


INFECTIONS

Microbes Cause Different Kinds of Infections



Some disease-causing microbes can make you very sick very quickly and then not bother you again. Some can last for a long time and continue to damage tissues. Others can last forever, but you won't feel sick any more, or you will only feel sick once in a while. Most infections caused by microbes fall into three major groups:

- Acute infections
- Chronic infections
- Latent infections

ACUTE INFECTIONS

Acute infections usually last a short time, but they can make you feel very uncomfortable, with signs and symptoms such as tiredness, achiness, coughing, and sneezing. The common cold is such an infection. The signs and symptoms of a cold can last for 2 to 24 days (but usually a week), though it may seem like a lot longer. Once your body's immune system has successfully fought off one of the many different types of rhinoviruses that caused your cold, the cold doesn't come back. If you get another cold, it's probably because you have been infected with someone else's rhinoviruses.

CHRONIC INFECTIONS

Chronic infections usually develop from acute infections and can last for days to months to a lifetime. Sometimes, people are totally unaware they are infected but still may be able to transmit the germ to others. For example, hepatitis C, which affects the liver, is a chronic viral infection. In fact, most people who have been infected with the hepatitis C virus don't know it until they have a blood test that shows antibodies to the virus. Recovery from this infection is rare - about 85 percent of infected persons become chronic carriers of the virus. In addition, serious signs of liver damage, like cirrhosis or cancer, may not appear until as long as 20 years after the infection began.

LATENT INFECTIONS

Latent infections are "hidden" or "silent" and may or may not cause symptoms again after the initial acute episode. Some infectious microbes, usually viruses, can "wake up" and become active again, sometimes off and on for months or years, and cause symptoms. When active, these microbes can be transmitted to other people. Herpes simplex viruses, which cause genital herpes and common cold sores, can remain latent in nerve cells for short or long periods of time, or forever.

DIFFERENCE BETWEEN INFECTION AND DISEASE

A disease occurs when cells or molecules in a person's body stop working properly, causing symptoms of illness. Many things can cause a disease, including altered genes, chemicals, aging, and infections. An infection occurs when another organism - such as a virus, bacterium, or parasite - enters a person's body and begins to reproduce. The invading microbe can directly damage cells, or the immune system can cause disease symptoms, such as fever, as it tries to rid the body of the invader. Some infections do not cause disease because the microbe is quickly killed or it hides out where it cannot be detected.