

Classification on Infectious Diseases

James Jacob

Finland

The microorganism uses that person's body to sustain itself, reproduce, and colonize. These infectious microscopic organisms are known as pathogens, and they can multiply quickly. Examples of pathogens include: bacteria, viruses, fungi. They can spread in several different ways, including through: skin contact, the transfer of bodily fluids, contact with feces, ingesting contaminated food or water, inhaling airborne particles or droplets, touching an object that a person carrying the pathogen has also touched. we explain the different types of infections, how to reduce the risk of infection, and what symptoms they cause. How an infection spreads and its effects on the human body depend on the type of pathogen. The immune system is an effective barrier against infectious agents. However, pathogens may sometimes overwhelm the immune system's ability to fight them off. At this stage, an infection becomes harmful. Some pathogens have little effect at all. Others produce toxins or inflammatory substances that trigger negative responses from the body. This variation means that some infections are mild and barely noticeable, while others can be severe and life threatening. Some pathogens are resistant to treatment. Infection can spread in a variety of ways. Bacteria, viruses, fungi, and parasites are different types of pathogens. They vary in several ways, including: size, shape, function, genetic content, how they act on the body

For example, viruses are smaller than bacteria. They enter a host and take over cells, whereas bacteria can survive without a host. Treatment will depend on the cause of the infection. This article will focus on the most common and deadly types of infection: bacterial, viral, fungal, and prion. Viral infections occur due to infection with a virus. Millions of different viruses may exist, but researchers have only identified about 5,000 types to date. Viruses contain a small piece of genetic code, and a coat of protein and lipid (fat) molecules protects them. Viruses invade a host and attach themselves to a cell. As they enter the cell, they release their genetic material. This material forces the cell to replicate the virus, and the virus multiplies. When

the cell dies, it releases new viruses, which infect new cells. Not all viruses destroy their host cell, however. Some of them change the function of the cell. Some viruses, such as human papillomavirus (HPV) and Epstein-Barr virus (EBV), can lead to cancer by forcing cells to replicate in an uncontrolled way. A virus can also target certain age groups, such as infants or young children. Viruses may remain dormant for a period before multiplying again. The person with the virus can appear to have fully recovered, but they may get sick again when the virus reactivates. Viral infections include: the common cold, which mainly occurs due to rhinovirus, coronavirus, and adenovirus, encephalitis and meningitis, resulting from enteroviruses and the herpes simplex virus (HSV), as well as West Nile Virus, warts and skin infections, for which HPV and HSV are responsible, gastroenteritis, which norovirus causes, COVID-19, a respiratory disease that develops after a novel coronavirus infection that is currently causing a global pandemic. Other viral conditions include: Zika virus, HIV, hepatitis C, polio, influenza (flu), including H1N1 swine flu, Dengue fever, Ebola, Middle East respiratory syndrome (MERS-CoV). Antiviral medications can help relieve the symptoms of some viruses while the disease passes. They can either prevent the virus from reproducing or boost the host's immune system to counter the effects of the virus. Antibiotics are not effective against viruses. These drugs will not stop the virus, and their use increases the risk of antibiotic resistance. Most treatment aims to relieve symptoms while the immune system combats the virus without assistance from medication.