Viruses vs. Bacteria

Microbiology as a basic science explores microscopic organisms including viruses, bacteria, protozoa, parasites, and some fungi and algae. These organisms lack tissue differentiation, are unicellular, and exhibit diversity of form and size. Viruses, bacteria, fungi and parasites may infect the human body and interfere with normal body functions. A person can catch a cold many times because there are many varieties of cold viruses that cause similar symptoms. Viruses are not considered to be alive but they affect living things. Viruses need a host cell. AIDS, influenza, the common cold, polo, chicken pox, small pox, yellow fever, viral meningitis, West Nile and Ebola are caused by viruses. Rabies, Lyme Disease, bacterial meningitis, and Leprosy are caused by bacteria. Bacteria are very small organisms, usually consisting of one cell, that lack chlorophyll. Except for viruses, they are the smallest living things on Earth. Bacteria are found everywhere, in the air, soil, water, and inside of your body and on your skin. They tend to multiply very rapidly under favorable conditions, forming colonies of millions or even billions of organisms within a space as small as a drop of water. Bacteria are generally classified into three groups based on their shape: spherical, rodlike, spiral or corkscrew. We have antibiotics to help with bacterial infections and vaccines to help with taking care of viruses that cause infections.