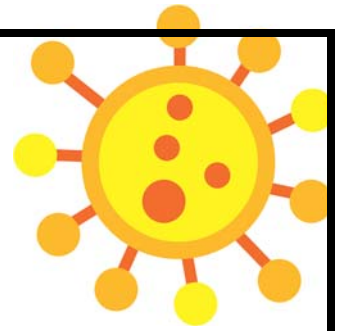




Viruses

Viruses are a kind of microorganism. They contain several strands of genetic material (DNA or RNA) and are surrounded by a layer of protein called the CAPSID. A virus does not have a nucleus.

Viruses are able to make animals and plants sick because when they enter a living system, they inject their DNA directly into their host's cells and begin to replicate. The more copies of itself the virus is able to make, the more of its hosts cells it takes over.

Scientists disagree on whether or not viruses are themselves living things. Some argue that they are not living creatures because they don't metabolize food into energy or have organized cells. They are also not generally able to reproduce outside of a host and are inactive when not inside a living cell.

Viruses can cause all different kinds of diseases. Some, like the common cold, can be fairly mild. Others can be very serious and even deadly. Ebola, HIV, and smallpox are all caused by different kinds of viruses. In many cases, there is no medicine to fight a virus. It is up to our body's immune system to fight the virus off.

Viruses are so tiny and so lightweight that they are able to spread very easily through the air, through the water, or even through skin contact. Many viruses are usually spread through the respiratory droplets that leave a person's body when they cough or sneeze. Viruses can also move from person to person when you shake hands with someone, or when you touch something that someone with a virus has touched. Some viruses are passed from host to host by insect bites (like Zika, which is passed through mosquitoes or the bubonic plague, which was spread through the fleas living on rats), animal bites (like rabies), or through bad food.