

Lesson 9

READ THIS STORY #1, Basic

A Virus

A virus is the tiniest type of infectious agent known. A virus is nothing more than a bit of genetic material surrounded by a coat of proteins. Its sole purpose is to survive by making copies of itself. Most viruses are not considered to be living organisms. They are parasites who must use the machinery found in other living cells in order to exist.

When a virus attacks a human cell, the cell's normal activity is disrupted and it may be destroyed. When a virus invades, our immune system comes to the rescue. It sends white blood cells to surround the viral particles and produces antibodies to attack the invaders. The battle causes us to become feverish and fatigued. Sometimes an inactive virus hides in the body until it is ready to strike. We have created vaccines to prevent smallpox, yellow fever, polio, hepatitis B, rabies, and common children's diseases such as chicken pox.

Since viruses can quickly kill large numbers of people, the Centers for Disease Control act as our medical watchdog. When a new lethal virus is identified, virologists search for its origin. To avoid becoming infected, researchers wear protective suits, gloves and headgear. It is often dangerous and frustrating work.