

Life Under a Microscope: Viruses

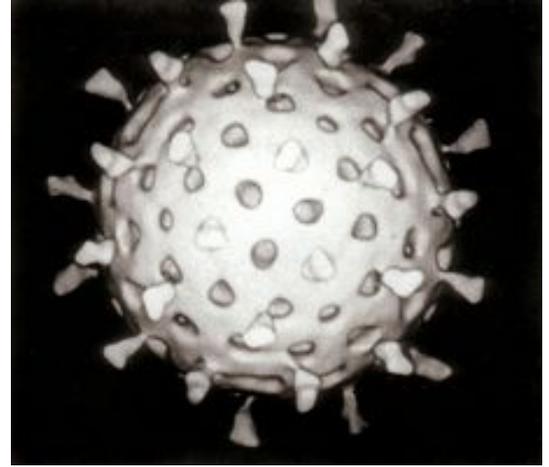
By Brandi Waters

Caption: The rotavirus, cause of 500,000 deaths of children each year

We have all been sick because of a virus. They cause colds and the flu. Viruses cause chicken pox, AIDS, and even some kinds of cancer. Humans aren't the only ones who get sick from viruses. There are viruses that infect plants and viruses that infect animals. There are even viruses that infect bacteria! Would you believe that viruses aren't even alive? A virus is so small and so simple that it cannot even be considered a living thing. A virus is not even a cell! How can something so simple be so dangerous?

Viruses can turn an organism against itself. A virus is a small package of genetic material. It cannot move on its own. It cannot reproduce on its own. A virus cannot do anything on its own! It must have a living cell to do its work. A virus attaches to a cell. It finds a way to get its genetic material into the cell. The virus's genetic material lets the virus take control of the cell. It turns the cell into a virus factory. The cell stops doing its normal work and begins making copies of the virus that infected it. At some point, the cell bursts open and releases the viruses that it has been making. These viruses can now infect more cells. Those cells will make even more viruses!

What can you do if a virus infects you? The bad news is that there isn't a lot that you can do. If you have a bacterial infection, you might take antibiotics. Those won't help if you have a virus. Your body has to fight the virus on its own. There are some drugs that you can take to help make it harder for the virus to reproduce, but they do not get rid of the virus. This is a fight your body has to finish on its own.



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Questions

- _____ 1. What can viruses cause?
- A. strep throat
 - B. the flu
 - C. tuberculosis
 - D. all of the above
- _____ 2. Viruses infect _____.
- A. plants
 - B. humans
 - C. bacteria
 - D. all of the above
3. Name one reason why viruses are not considered to be alive.
