

The Common Cold

It's small. In fact, it's so small that you can't see it without a microscope. Yet, it is so powerful that it can make a grown person miserable in less than a day.

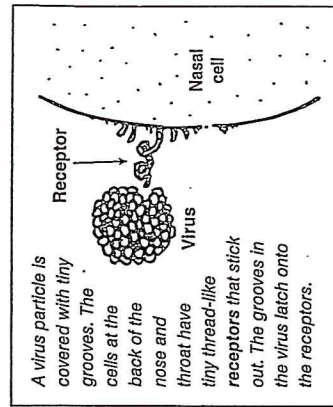
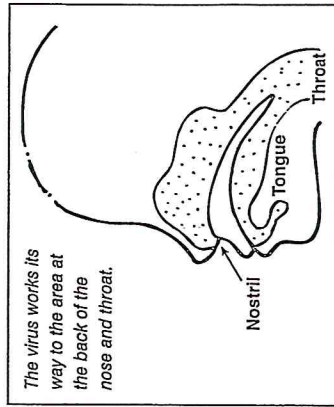
Is it alive? Hmm, that's a good question. Scientists struggle with this issue, but there is no clear answer. Certainly, it isn't alive in the sense that you are alive. It isn't made up of cells. And it can multiply only when inside a cell, such as the cells in your nose and throat.

Have you guessed what it is? Yes, that's right—it's a **virus**. Specifically, it's a common cold virus.

This cold virus is an agreeable sort. It goes where people send it. If Maria carries it on her hand, then touches your hand, it stays on your hand. It stays, that is, until you scratch your nose. Then it alights there, just inside your nostril. Uh-oh. You sniff, moving it into your nose. Oh, my. Now you are in trouble.

The virus will attach itself to a cell at the back of your nose or throat. Although it is much smaller than the cell, it will destroy the cell quickly. It will enter the cell and, once inside, it will make many more virus particles just like itself. The cell will become **infected** and die. When it does, it will release virus particles into your nose, where they will infect many more cells. Then they, in turn, will infect others. Before the day is over, your throat will feel rough, and your head will ache.

Fight back, you want to tell the cells. It is a tiny virus, much tinier than you. Don't let it beat you! Your body does fight back, by making **blood vessels** bigger. The bigger vessels release special chemicals that fight the virus. Your body also starts making extra **mucous** to help wash away the virus. The swollen blood vessels and extra mucous cause your throat and your head to hurt. When your nose senses all that stuff in there that doesn't belong, you sneeze. Then you sneeze some more.



Some of the mucous may wash into your lungs, carrying the virus with it. You cough to get rid of it. Your bones ache, too. That's your body's way of telling you that something is wrong.

So your body is fighting back. But who is it fighting—you or the virus? Everything your body does to fight the virus seems to make you feel worse. It isn't really the tiny virus that causes you to feel bad when you have a cold. It's the ways your body reacts to it.

Why doesn't your body do a better job of fighting off the cold virus? No one really knows. This is just one of many things that scientists don't understand about colds.

One thing they do know is this: You can't catch the same cold twice. There are lots of different kinds of cold viruses. Each one is just a little bit different. Every time you catch one, your body makes **antibodies** that fight the virus. If the same virus comes back, your body knows how to make the antibodies that fight that virus very quickly, so the virus doesn't make you sick a second time. This is why young children catch colds more often than adults. Their bodies don't recognize as many different kinds of viruses.

To avoid getting cold viruses, wash your hands with soap often. Avoid sharing food or drinks with people who have colds. To avoid spreading colds, cover your mouth when you cough and use a tissue when you sneeze. The best way to fight colds is to avoid getting them in the first place.



Your body makes antibodies, so you can't catch the same virus twice.