

The Human Body

TINY INVADERS

The human body is truly amazing. It allows us to **sense** the world around us, to do work and have fun, and to move from place to place. In fact, the human body does its work so well that most people don't think about it very much—until they get sick.

The germs that make people sick are everywhere. You can't see them, but they're there. They're sitting on your desk. They're hiding on your computer's keyboard. They're even in the air that you are breathing.



E-coli

There are two types of germs: viruses and bacteria. Viruses use the cells inside animals or plants to live and multiply. Viruses cause illnesses such as influenza, or the flu. Bacteria are tiny creatures. Some bacteria are good. They can help your stomach digest food. Other bacteria are not as good. They can cause sore throats and ear infections.

How can you stop these tiny invaders from making you sick? Your skin is the first defense against germs. One of the easiest ways to prevent some illnesses is simply by washing with soap and water. But germs can still enter the body through small cuts in the skin or through the mouth, eyes, and nose.

Once germs are inside your body, your immune system tries to protect you. It looks for and destroys germs. How does it do that? Some cells in the body actually eat germs! Other cells make antibodies. There is a different antibody for each kind of germ. Some antibodies keep germs from making you sick. Others help your body find and kill germs. After a germ is destroyed, the antibodies stay in your body. They protect you if the same kind of germ comes back. That way you will not get the same illness twice.

You can also help your immune system to fight germs by getting vaccinated. Vaccines are medicines. They contain dead or weak germs that cannot make you sick. Instead, they cause your body to make antibodies. If the same germ ever shows up again, then your antibodies attack it. You can also keep your body healthy by eating a healthy diet to make your immune system strong.



Legionella bacteria

B Circle **T** for *true* or **F** for *false*.

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| 1. Viruses can only live inside people or animals. | T | F |
| 2. All bacteria cause illnesses. | T | F |
| 3. Washing your skin can prevent some illnesses. | T | F |
| 4. Germs can enter the body through the eyes. | T | F |
| 5. After they kill germs, antibodies stay in the body. | T | F |
| 6. Vaccines kill germs in the body. | T | F |