

VACCINES – ANTIBODIES THAT PROTECT US FROM DISEASES

Vaccines are **substances** that help the body fight off diseases and illnesses. In the past they have helped save millions of lives around the world.

Diseases are often **caused** by **bacteria** or **viruses** that attack the human body. A vaccine is a dead or very weak form of such a virus. When you get a **vaccination** from your doctor the body it gets used to these weaker viruses and can produce **antibodies** which stay active for a long time. When the real virus or bacteria attack, the body becomes **immune** and can **defend** itself.

People can get their vaccinations in many forms. Very often the vaccine is injected into your body, but vaccines are also taken by mouth or are **inhaled**.

Although many vaccines protect you **throughout** your life, some **provide immunity** for only a **certain** time. Vaccines against the **flu** must be **administered** every year, because the flu virus can change or may appear in a different form.

Most people already have a **certain amount** of immunity in their bodies. It is passed to them from their mother. **However**, these antibodies do not protect a baby for a long time, so that many vaccines are given to **infants** in their first years.



Woman receiving vaccination in Brazil - Sandra Rugio

Some illnesses only **occur** in certain areas. If you travel, for example, to tropical regions, you should get vaccines to protect you from **yellow fever**, malaria or **hepatitis**.

Vaccines have saved the lives of millions of people in the past and **virtually eradicated** many diseases. **Smallpox**, for example, was once one of the world's most **serious** diseases, which killed millions every year. By the end of the 1970s smallpox had **disappeared** completely because nearly everyone was vaccinated.

The first vaccines were **created** towards the end of the 18th **century**. An English **scientist**, Edward Jenner, carried out experiments with cowpox, a milder form of smallpox. He found out that people who got cowpox **rarely** got ill from smallpox. In France, Louis Pasteur **developed** a weak form of **rabies** to protect people from dog bites. In the 20th century polio has been **wiped out** completely.

Today there are vaccines for many illnesses. The most common are the flu, cholera, the **plague**, hepatitis.

Although vaccination is **widely available** and a part of the regular health program in almost all industrial countries, there are still countries, **especially** in the Third World where people die of serious diseases. About three million children each year are killed by diseases that could have been prevented. In **developing countries** almost two thirds of all children are not vaccinated. The World Health Organization is fighting to provide vaccines for these children.

Vaccines - Multiple Choice Exercise

1. Vaccines make the body

- A. produce more red blood cells
- B. produce dead bacteria
- C. produce antibodies

2. How are diseases and illnesses often caused?

- A. By bacteria and viruses that attack our body
- B. by antibodies that get into our body
- C. by vaccinations at a too early age

3. A flu vaccination must be given to a person every year because

- A. it is too strong to stay in your body forever
- B. the virus can change from one year to the next
- C. the vaccine dies after a certain period of time

4. Most vaccines are

- A. inhaled
- B. injected
- C. taken by mouth

5. A serious illness called smallpox

- A. is only existent in countries in which people travel a lot
- B. is related to dog bites
- C. has almost disappeared today

6. After getting a vaccination

- A. the body gets used to a weaker form of a virus
- B. the body never lets the same virus into it
- C. the body always becomes ill for a short time

7. Babies are born

- A. with some natural antibodies from their mother
- B. without any immunity
- C. with dead antibodies

8. An English scientist, Edward Jenner, carried out experiments with

- A. the flu
- B. smallpox
- C. malaria

antibodies attack bacteria developed flu hepatitis immunity infants injected protection smallpox survive tropical
vaccination weak

Vaccines are forms of viruses or that help produce antibodies and can save millions of lives around the world. When you get a vaccine your body can become much more immune and fight off killer diseases when they . Many illnesses, like and polio, have nearly disappeared because of vaccines.

Most vaccines are into your body, but some are inhaled or taken by mouth. Although many vaccines give you for your whole life there are some that you must get more often. Flu vaccines, for example are given to people every year because viruses can change very often.

When babies are born they have that are passed on to them by their mothers. However, this does not last very long so that babies and must get a number of vaccines at an early age.

Sometimes you must get a when you travel to a country in which a disease is very common. Vaccines protect you from diseases like yellow fever and .

Although getting vaccines is a normal process in nations, the World Health Organisation is still spending a lot of money to get vaccines to people in the Third World. Especially children in these areas do not get the medicine they need to .

Match the word to the definition

antibody	very dangerous
bacteria	infectious disease that produces high fever and swollen spots on your body
eradicate	substance that your body produces to fight off a disease
hepatitis	dangerous disease that is passed on to humans by dogs
immunity	disease of the liver
rabies	being protected from a disease
smallpox	common illness that makes you feel tired and cough a lot
serious	kill off
plague	disease that causes spots and leaves marks on your skin
flu	very small living organism that can cause a disease or illness