• students for • HERD IMMUNITY VACCINE INFORMATION

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What is a vaccine?

A **vaccine** protects you from getting very sick if you become infected with a dangerous disease. A specific vaccine will prepare your body to fight a specific disease *before* you actually get exposed to the disease.

You might have gotten a shot at the doctor's before. This shot is how a vaccine gets introduced to your body. Once you get a specific vaccine (like the flu shot), your body will be able to fight off the disease (the flu) much better the next time you get infected!



How do vaccines work?

Vaccines work by helping out your body's **immune system**, which works to fight off diseases. When you get a shot, the vaccine enters your body. The vaccine then introduces your body to something that helps your immune system recognize a specific virus or bacteria. This might be just a harmless part of the attacker or a weakened version of it.



This will not give you the disease, but it will show your immune system what to look out for when the real virus or bacteria shows up in the future.

The next time this virus or bacteria tries to invade your body, your immune system will be ready thanks to the vaccine. It will be able to recognize and fight off these invaders quickly, and keep you from getting the disease!

Q. A.

Why is it important to get vaccinated?

Vaccines train your own body's immune system to help protect you from becoming very sick from a preventable disease. Getting vaccinated is good for us individually because this means you will be better protected from getting a dangerous disease in the future.



But getting vaccinated not only helps protect you—it also helps protect the people around you, too! This is possible because vaccines help communities safely reach **herd immunity**.

Herd immunity is when a high enough percentage of a community becomes immune to a disease. At this point, further spread of the disease becomes unlikely. This helps protect everyone from the disease, especially people who are too young or too sick to get the vaccine, or people with weak immune systems.

Vaccines have allowed many communities to reach herd immunity for diseases that used to be very serious and deadly. Many of these diseases are now well controlled or mostly eradicated in certain parts of the globe. The more people are vaccinated, the closer our communities get to herd immunity. Because of this, it is important that as many people as possible get vaccinated as soon as they can.

Are vaccines safe?

Yes, vaccines are safe. Many people work hard to ensure that vaccines are safe to use before making them available to us. There are many tests and trials that must be passed by the vaccine first to make sure it is safe and effective. These trials are run by scientists and public health officials, and they follow detailed requirements. Even after a vaccine is officially approved, many people continue to keep track of its safety and effectiveness.



How do I know what vaccines I've gotten?

The easiest way to find out what vaccines you've gotten is for your parent or guardian to ask your pediatrician. Your pediatrician can share a record of all your past vaccines with you and your parent/guardian.

If you don't have a pediatrician, we highly recommend getting one. A pediatrician will help you stay up to date with your current and future vaccines on a regular basis, as well as other important aspects of your health.

Q. A.

What are **boosters**? Why do I need them?

When you get a single shot, you get one dose of the vaccine. For some diseases, just one might be enough to protect you for a long time. But for other diseases, you might need more than one dose of the vaccine to be fully protected.



A booster shot gives you another dose of the vaccine to keep your immune system as prepared as possible. This might be needed for a number of reasons:

If it's been a while since you got a dose of the vaccine, your body's immune system might have become less effective at responding to the virus or bacteria. In this case, an additional dose of the vaccine can give your immune system a boost so it can keep being effective at fighting off the disease.

Some vaccines might become less effective over time due to viral mutations. As time passes, viruses can **mutate** (change). If a virus changes too much too quickly, our immune system might not recognize this new form of the virus. A new version of the vaccine might need to be made to help our immune system quickly recognize the mutated version of the virus. This is why people get a new flu shot every year, as the viruses that cause influenza (the flu) mutate very quickly.

Where can I get vaccinated?

You can get most of the vaccines you need at your doctor's office. Certain vaccines may also be available at other locations, like local pharmacies, health clinics, health departments, and travel clinics. You can often get your annual flu shot or a COVID-19 booster shot at these sites.



Provincial or state health department websites are a great resource to find out exactly where you can get vaccinated in your area. Try looking up your province or state's vaccine resources for yourself, or share with your family or people in your community!

SOURCES

CDC, HHS, Government of Canada, WHO, History of Vaccines, Connecticut Department of Health, Nature, Medical News Today, Baylor College of Medicine, Mayo Clinic, Ottawa Citizen, Philadelphia Department of Public Health

If you have more questions about vaccines, ask a trusted adult, like a parent, guardian, or doctor.

For more information, visit: <u>studentsforherdimmunity.com</u>.