Staying healthy, preventing disease: The importance of vaccines

In the battle to prevent disease, there are few things as important and effective as vaccines. Vaccines have greatly reduced and, in some cases, eliminated infectious disease threats that once caused major suffering and illness. But maintaining the progress made so far is up to us: Educating yourself about vaccines and getting vaccinated will not only protect the health of you and your loved ones, but the health of your community.

What’s a vaccine?

A vaccine contains a weakened or killed microorganism that causes your body to boost its immunity to a certain disease. In other words, a vaccine tricks your body into thinking it’s being invaded by a disease-causing agent so that your body will build up its defenses. As a result, your immune system will remember the disease-causing agent and promptly attack and neutralize it if it reappears.

There are many types of vaccines. Some vaccines contain a live, weakened version of the disease-causing agent, while others contain a killed or “detoxified” version of the agent. Vaccines can be administered via injection, orally or with nasal spray. Many vaccines are given in multiple doses over time. In some cases, a booster shot is needed many years after the first vaccination to maintain your body’s immunity to a disease.
Why is vaccination important?

Thanks to vaccines, many disease threats have been eliminated or greatly reduced in the United States. But while the threat of infection has diminished, the diseases remain. This is especially important considering the ease of modern travel and the fact that many other countries have low vaccination rates. If we are not careful, vaccine-preventable diseases can make a comeback. For example, in 2000, health officials declared that measles was eliminated in the United States. However, people traveling from other areas of the world can still bring measles into the country and spread the disease among people who have not been vaccinated.

Are vaccines safe?

The simple answer is yes. Vaccines are created using the highest safety standards, and years of testing are required before a vaccine is put into use. According to the Centers for Disease Control and Prevention, the “United States currently has the safest, most effective vaccine supply in history.” Once a vaccine is in use, it’s continually monitored for any negative health effects.

Like most medical procedures and treatments, vaccines can have side effects. In most cases, there are either no side effects or a mild reaction, such as a fever or soreness at the injection site. Serious reactions to vaccines are rare. If you believe you are having a reaction to a vaccine, call your health care provider immediately.

Who should get vaccinated?

Vaccines are important for everyone, regardless of age. While vaccines are often associated with children and required by many school districts, they are also important for the health of adolescents, adults and seniors. Your doctor or health provider can give you a list and tell you which are right for you.

If you’re traveling abroad, it’s a good idea to see your doctor about four weeks to six weeks before you leave to discuss vaccines and booster shots.

If you don’t have a health care provider, contact your local health department about programs that provide vaccines for children at no cost. Many health departments and pharmaceutical companies offer vaccine assistance for adults as well.

See our website for extensive information under the Emergency Preparedness link.