WHAT IS A VACCINE?

When germs enter the body, the immune system recognizes them as foreign substances (antigens). The immune system then produces the right antibodies to fight the antigens.

Vaccines contain weakened or dead versions of the antigens that cause diseases. This means that the antigens cannot produce the signs or symptoms of the disease, but they do stimulate the immune system to create antibodies. These antibodies help protect you if you are exposed to the disease in the future.

ARE VACCINES SAFE?

Vaccines are generally quite safe. The protection provided by vaccines far outweighs the very small risk of serious problems. Vaccines have made many serious childhood diseases rare today. Talk to your family doctor if you have any questions.

DO VACCINES HAVE SIDE EFFECTS?

Some vaccines may cause mild temporary side effects such as fever, or soreness or a lump under the skin where the shot was given. Your family doctor will talk to you about possible side effects with certain vaccines.

WHY IMMUNIZE?

Sometimes the messages in the media are confusing. First we are assured that, thanks to vaccines, some diseases are almost gone from the U.S. But we are also warned to immunize our children, ourselves as adults, and the elderly.

It's true; some diseases (like polio and diphtheria) are becoming very rare in the U.S. Of course, they are becoming rare largely because we have been vaccinating against them. But it is still reasonable to ask whether it's really worthwhile to keep vaccinating. It's much like bailing out a boat with a slow leak. When we started bailing, the boat was filled with water. But we have been bailing fast and hard, and now it is almost dry. We could say, “Good. The boat is dry now, so we can throw away the bucket and relax.” But the leak hasn’t stopped. Before long we’d notice a little water seeping in, and soon it might be back up to the same level as when we started.

Unless we can “stop the leak” (eliminate the disease), it is important to keep immunizing. Even if there are only a few cases of disease today, if
we take away the protection given by vaccination, more and more people will become infected and will spread disease to others. Soon we will undo the progress we have made over the years.

**WHO SHOULD BE IMMUNIZED?**

Regardless of age, we ALL need immunization to help keep us healthy. The need for immunization doesn’t end in childhood. CDC recommends vaccines throughout life to protect against serious, and sometimes deadly, diseases.

**Vaccines for Children**

Infants are particularly vulnerable to infectious diseases; that is why it is critical to protect them through immunization. Each day, nearly 12,000 babies are born in the United States who will need to be immunized before age two against 14 vaccine-preventable diseases. Immunizations help prevent the spread of disease and protect infants and toddlers against dangerous complications.

Immunization is one of the most important things a parent can do to protect their children’s health. Failure to vaccinate may mean putting children at risk for serious diseases.

**Vaccines for Teens and Young Adults**

Vaccines for teens are important because as kids get older, protection from some childhood vaccines begins to wear off and some vaccines work better when given during adolescence.

Any visit to the doctor— from an annual health checkup to a physical for sports, camp, or college—can be a good time for preteens and teens to get the recommended vaccinations. Even if your child is going to the doctor because they are sick or hurt, they still may be able to get shots that they need.

Use camp and sports physicals and back-to-school planning time as opportunities to get your preteen and teen vaccinated.

Be sure to check with the doctor to make sure that your teen has received all of the vaccines recommended for them. They may need to “catch up” on vaccines they might have missed when they were younger.

**Vaccines for Adults**

Each year thousands of adults in the United States suffer serious health problems from diseases that could be prevented by vaccines — some people are hospitalized, and some even die. Even if you were fully vaccinated as a child, the protection from some vaccines you received can wear off over time and you may also be at risk for other diseases due to your job, lifestyle, travel, or health conditions.

You can protect your health and the health of those around you by getting the recommended vaccines. Vaccinations for children, teens and adults are one of the best ways to put an end to the serious effects of certain diseases.